

Business Ready

Methodology Handbook

First Edition

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About the Methodology Handbook

Business Ready (B-READY) is an international benchmarking project developed by the World Bank Group. B-READY provides a quantitative assessment of the business environment for private sector development, published annually and covering most economies worldwide. B-READY data and summary report aim to advocate for policy reform, inform specific policy advice, and provide data for development policy research. Through its focus on private sector development, B-READY contributes to meeting the World Bank Group's twin goals of eliminating poverty and boosting shared prosperity.

B-READY assesses an economy's business environment by focusing on three pillars, the Regulatory Framework and the provision of related Public Services directed at firms and markets, as well as the Operational Efficiency with which regulatory framework and public services are combined in practice. B-READY seeks a balanced approach when assessing the business environment: between ease of conducting a business and broader private sector benefits, between regulatory framework and public services, between de jure laws and regulations and de facto practical implementation, and between data representativeness and data comparability. B-READY covers the areas where it can provide the most added value in the context of existing indicators: namely, the regulatory framework and related public services at the microeconomic level.

B-READY focuses on ten topics that are organized following the life cycle of the firm and its participation in the market while opening, operating (or expanding), and closing (or reorganizing) a business. The main topics include Business Entry, Business Location, Utility Services, Labor, Financial Services, International Trade, Taxation, Dispute Resolution, Market Competition, and Business Insolvency. Within each topic, considerations relevant to the business environment regarding aspects of the adoption of digital technology, environmental sustainability, and gender are captured. Based on the data collected, B-READY generates scores for each topic and pillar area. B-READY collects both de jure information and de facto measures. While de jure data are collected from expert consultations, de facto data are collected from both expert consultations and firm surveys. The latter is a major innovation and represents a significant increase in the data available to World Bank Group (WBG) teams, development practitioners, and researchers around the world. Data collection and reporting processes are governed by the highest possible standards of integrity, including sound data gathering processes, robust data safeguards, clear approval protocols, transparency and public availability of granular data, and replicability of results.

The B-READY Methodology Handbook first presents the objectives, scope, and approach of the project. It then provides a full description of the project's methodology, including motivation, indicators, questionnaires, and scoring guidelines per topic. The B-READY methodology is subject to refinements in the first three data collection and reporting cycles, as the project expands its economy coverage and moves from rollout phase to full-fledged project.

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CHAPTER 1–OVERVIEW

1. Background. On September 16, 2021, the World Bank Group (WBG) Senior Management decided [to discontinue the Doing Business \(DB\) report and data](#) and also announced that the WBG would work on a new approach for assessing the business and investment climate. The new approach is the *Business Ready* project. Its development has been informed by advice from experts in the WBG and the recommendations from qualified academics and practitioners outside the institution, including the [External Panel Review](#) on *Doing Business* methodology. Its design has also taken into consideration the views of potential users in government, the private sector, and civil society through an extensive open consultation process.

The project's [Concept Note](#), published in December 2022, describes the consultation process; presents the fundamental objectives and approach of the project; introduces a preliminary set of indicators; and presents a project implementation plan. Starting from the *Concept Note*, the *Business Ready Methodology Handbook* develops in detail the project's indicators, scoring, and data collection methods.

The project is housed in the [Development Economics Global Indicators Group](#) (DECIG). This Group designs, pilots, and implements the project, under the guidance of the WBG Chief Economist and DEC Senior Vice President. The data collection and reporting process is governed by the highest possible standards, including sound data gathering processes, robust data safeguards, clear approval protocols, transparency and public availability of granular data, and replicability of results. The accompanying [Business Ready Manual and Guide](#) presents the processes and protocols on the governance of the project.

2. Title. As indicated earlier, the title of the project is *Business Ready*, with the acronym B-READY. During the *Concept Note* phase, the working title of the project was *Business Enabling Environment* (BEE). The title has been refined and changed in due consideration for branding impact.

3. Output. The B-READY benchmarking exercise provides a quantitative assessment of the business environment for private sector development. The B-READY quantitative assessment produces granular data and a global report based on these data, published annually and covering most economies worldwide.

The global B-READY project is complemented by in-depth country studies, where regional differences and economy-specific issues are analyzed further. Using a similar methodology, they are developed in the sister *Subnational Business Ready* project.

4. Development Purpose. B-READY's granular data and summary report aims to improve the business environment for private sector development in each economy around the world. To achieve this purpose, B-READY uses a threefold strategy: (1) to advocate for policy reform; (2) to inform specific policy advice; and (3) to provide data for development policy research.

In its advocacy function, B-READY aims to promote economic reforms, opening the door for knowledge sharing and policy dialogue for governments, civil society (including the private sector), the WBG, and other development institutions. Likewise, by covering a wide spectrum of areas relevant to the behavior of firms and the functioning of markets, B-READY can inform specific policy advice, showing how and by how much economies are lagging behind good practice. By providing a rich set of data, B-READY supports social and economic research on the drivers and consequences of private sector development.

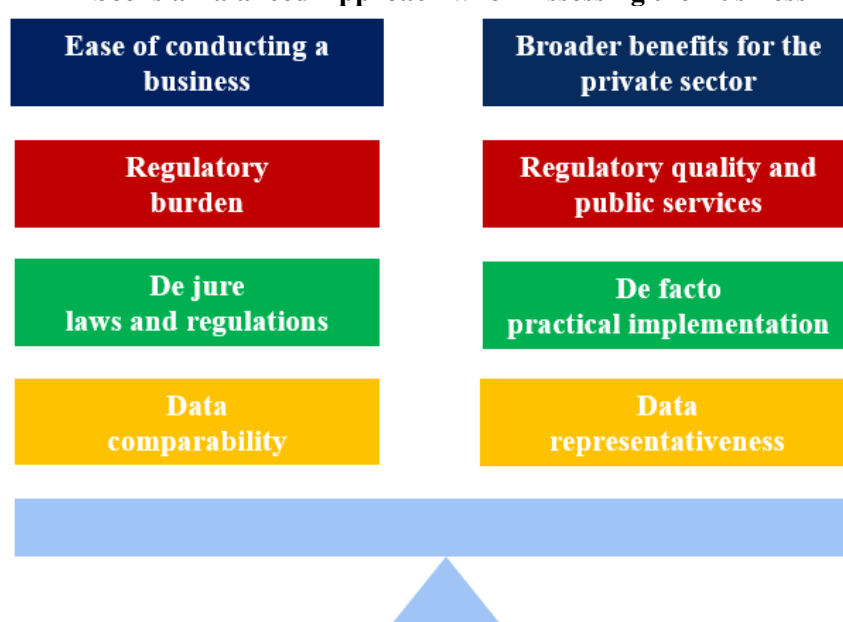
Private sector development can be defined by three characteristics: it promotes economic growth through innovation and entrepreneurship; it increases equality of opportunities among market participants; and it ensures the general sustainability of the economy in the long term. Private sector development is driven by the efforts and ingenuity of private entrepreneurs but is critically affected by a range of public policies and

regulations that create a conducive business environment. These policies and regulations incentivize the startup of new firms, the facilitation of existing businesses, the creation of good jobs, and the transition of informal to formal workers and firms.

Through its focus on private sector development, B-READY can effectively contribute to meeting the WBG's twin goals of eliminating poverty and boosting shared prosperity. The private sector is essential to successful development because it is the primary source of employment and pathway out of poverty, including in fragile and conflict-affected states.

5. Approach. B-READY's approach aims to strike a good balance on the most salient dimensions of a business environment assessment (figure 1.1), as recommended by the *External Panel Review*. Appendix 1.1 presents the key features of *Business Ready* and its predecessor, the discontinued *Doing Business*.¹

Figure 1.1. B-READY Seeks a Balanced Approach when Assessing the Business Environment



Source: B-READY team.

First, B-READY evaluates the business environment not only from the perspective of an individual firm's ease of doing business but also from the standpoint of private sector development as a whole. Recognizing that there is a tension between the costs to individual firms and social benefits and desirable standards, B-READY includes different indicators that address these different perspectives and score them accordingly.

Second, B-READY looks not only at the regulatory burden on firms but also at the quality of regulations and the provision of related public services over the course of the firms' life cycle. This balance provides a more nuanced and positive perspective on the role of governments in creating a conducive business environment.

Third, B-READY collects not only de jure information (that is, according to statutory laws and regulations) but also de facto measurements (that is, reflecting practical implementation). B-READY obtains data from both expert consultations and firm-level surveys. Relying on nationally-representative firm surveys is a

¹ The project's Concept Note expands on the similarities and differences between the B-READY project and *Doing Business*.

major innovation with respect to previous benchmarking exercises, as it considers first-hand information coming from firms' own experience facing the business regulatory environment (see Appendix 1.2).

Fourth, B-READY attempts a balance between data comparability across economies and data representativeness within a given economy. Expert consultations address this balance by using broad parameters, instead of narrow case studies, to measure the business environment that most firms face. Firm-level surveys address the balance by using nationally-representative samples of registered firms. B-READY, therefore, covers information relevant to firms of different size and location, various economic sectors, and foreign and domestic ownership.

B-READY does not favor any particular economic system or legal tradition but rather keeps a pragmatic approach, focusing on well-founded good practices and standards applicable at all levels of development. Good practices are based on internationally recognized standards established by the WBG, other multilateral organizations and specialized bodies, or relevant literature.

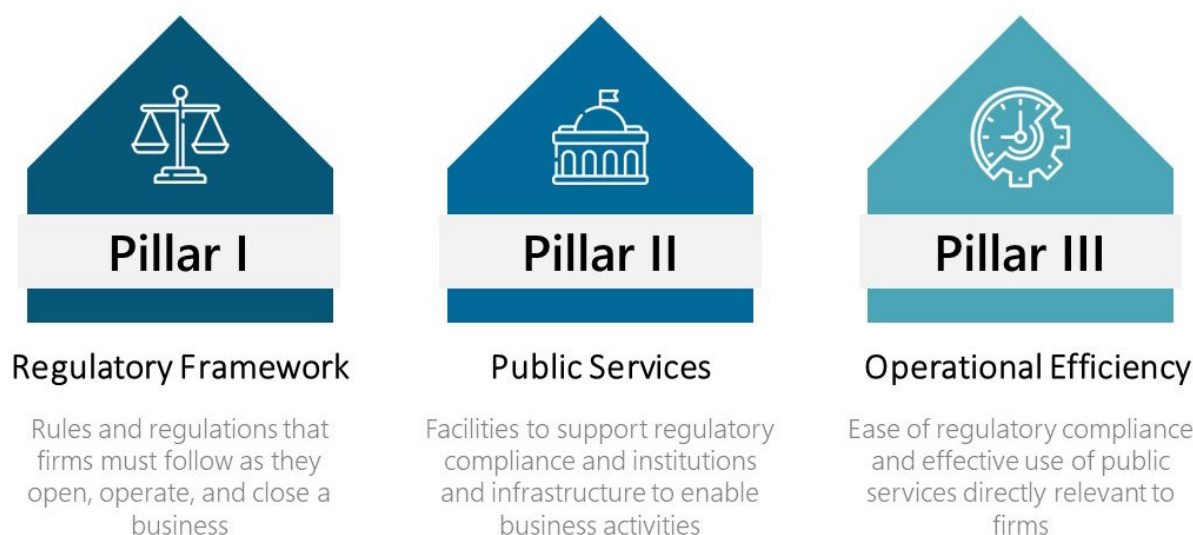
B-READY is designed for comparability across economies and over time. This requires the application of a homogeneous methodology across economies in different geographic locations, and with different income levels and development status. By proposing good practices as the measurement anchor, B-READY establishes the gaps that economies at all stages of development can aspire to close. Good practices that can be considered global standards are used to construct cardinal scores to measure absolute differences across economies and over time.

6. Scope. B-READY assesses the economy's business environment by focusing on the regulatory framework and the provision of related public services for firms and markets, as well as the operational efficiency with which they are combined in practice (figure 1.2).

The *business environment* can be defined as the set of conditions outside a firm's control that have a significant influence on how businesses behave and perform throughout their life cycle. This set of conditions can be very large, from macroeconomic policy to microeconomic rules. To differentiate the B-READY benchmarking exercise from other well-established international measures, B-READY concentrates on the regulatory framework and public service provision at the microeconomic level: that is, as enacted and implemented to directly affect firms' behavior and performance.

B-READY's three pillars—the Regulatory Framework, Public Services, and Operational Efficiency—can be defined as follows. The *Regulatory Framework* comprises the rules and regulations that firms must follow as they open, operate, and close a business. *Public Services* here refers to both the facilities that governments provide directly or through private firms to support compliance with regulations and the critical institutions and infrastructure that enable business activities. Public services considered by B-READY are limited to the scope of the business environment areas related to the life cycle of the firm, as described below. *Operational Efficiency* comprises both the ease of compliance with the regulatory framework and the effective use of public services directly relevant to firms.

Figure 1.2. B-READY Measures the Regulatory Framework, Public Services, and Operational Efficiency for Firms and Markets



Source: B-READY team.

B-READY does not cover other aspects of the business environment that are well covered by other indicators, including macroeconomic conditions (such as [Global Economic Prospects](#)), government corruption and accountability (such as the [Worldwide Governance Indicators](#)), human capital (such as the [Human Capital Index](#)), or conflict, crime, and violence (such as [United Nations Office on Drugs and Crime Statistics](#)).

7. Topics. B-READY's topics are organized following the life cycle of the firm and its participation in the market: opening, operating (or expanding), and closing (or reorganizing) a business. The 10 topics in B-READY are Business Entry, Business Location, Utility Services, Labor, Financial Services, International Trade, Taxation, Dispute Resolution, Market Competition, and Business Insolvency (figure 1.3).

Figure 1.3. B-READY Topic Areas



Source: B-READY team.

The selection of topics is guided by the threefold purpose of the B-READY project of advocating for policy reform, informing specific policy advice, and providing data for development policy research. The selection of topics meets the following criteria:

Relevance. Each selected topic has extensive economic research that demonstrates its impact on and close relationship with private sector development.

Added value. Measuring indicators within each selected topic fills an existing data gap. B-READY adds value by producing a unique primary dataset with worldwide coverage and comparability.

Complementarity. Since comprehensive reforms are more likely to succeed, B-READY considers topics that complement one another, using the life cycle of a firm as the common thread.

Within each of the ten topics, B-READY includes data on three critical themes that are increasingly important for modern economies. They are digital adoption, environmental sustainability, and gender. On digital adoption, most topics include, for instance, the assessment of electronic windows and online one-stop shops. On environmental sustainability, topics include the assessment of environmental licenses and the presence of carbon pricing instruments, among others. Finally, B-READY includes data on the gender dimension of the business environment in a way that complements the project [*Women, Business, and the Law*](#) (WBL), also housed in DEC Global Indicators Group.

8. Indicators. B-READY analyzes a set of specific indicators within each topic. The next sections of the *Methodology Handbook* present them in detail. For each topic, there are three sets of indicators, one for each pillar. Indicators on the Regulatory Framework pillar and Public Services pillar are collected through expert consultations, whereas the Operational Efficiency pillar indicators are assessed through firm-level surveys and expert consultations.

The selection of topic indicators uses the criteria for the selection of topics themselves: namely, relevance, added value, and complementarity. In addition, the indicators (1) seek to provide a balance between de jure and de facto measures within each topic; (2) are quantifiable and based on primary data collected specifically for the B-READY project; (3) produce data that balance comparability across economies and representativeness within an economy; (4) include the most salient measures regarding *firm flexibility* and desirable *social benefits* in each topic; (5) are proxies that reasonably span rather than exhaust the most relevant aspects in each topic; (6) point to areas that are actionable—that is, subject to change through policy reform; and (7) focus on issues where there is an established “good practice” when measuring regulatory and public service quality.

The operational efficiency indicators measure the proximate results of the business-enabling regulatory framework and the related public services to firms. They do not, however, attempt to measure the final outcomes of the business environment (for example, productivity, formality, equity, and sustainability). These outcomes are the complex result of variables encompassing not only the business environment but also other public policy areas and exogenous factors. As such, they are beyond the scope of the B-READY project.

9. Scoring. Quantifying business environment conditions into corresponding measurable indicators is critical for the B-READY benchmarking exercise. All data obtained from either experts or firms are collected in raw form and then converted to a score that can be combined with other scores. The objective of the scoring methodology of raw data is to allow for score aggregation that preserves absolute cardinal differences, which can be used to compare across economies and over time (rather than purely ordinal or relative scoring).

The granular data produced by the B-READY project are combined to produce a score for each of the ten B-READY topics. Every topic score is generated by averaging the scores assigned to each of the three pillars (Regulatory Framework, Public Services, and Operational Efficiency) for that topic. For nearly all indicators, the Regulatory Framework pillar captures de jure information, and the Public Services and Operational Efficiency pillars capture de facto information. The scoring approach therefore provides complementarity between de jure laws and regulations and de facto practical implementation.

For all topic areas, the scores assigned to each of the three pillars are built from points awarded at the most basic indicator level. At this level of detail, scoring considers the perspectives of entrepreneurs (*firm flexibility*) and broader public interests (*social benefits*). Considering both private and social interests is important for B-READY because the project must address not only the ease of doing business for individual firms but also the inclusive and sustainable aspects of private sector development.

The score for each indicator reflects the points awarded to that indicator under *firm flexibility* and/or *social benefits*. An indicator is scored under *firm flexibility* if it affects the benefits or costs of running a business. An indicator is scored under *social benefits* if its effects go beyond the firm and extend to socially desirable outcomes, such as environmental protection, workers' welfare, market competition, consumer protection, fiscal sustainability, equal access to business opportunities, and informational externalities.

Specifically, points are only assigned to indicators that represent a clear effect on firms (under *firm flexibility*) and/or society (under *social benefits*), based on internationally recognized and well-established good practices. Measures that have an ambiguous or contradictory impact on firm flexibility (for example, subsidies for specific exporting sectors or preferential treatment of small and medium enterprises, SMEs) are not assigned firm flexibility points. Similarly, measures that have an ambiguous or inconsistent impact on social benefits (for example, firing restrictions that may benefit incumbent formal workers but harm the prospects of the unemployed and informal workers) are not assigned *social benefits* points.

Some indicators may merit both firm flexibility and social benefits points. For example, clear tax provisions are a benefit to both individual firms (by simplifying compliance) and society more generally (by strengthening trust and social contracts). In this case, when points on firm flexibility and social benefits are allocated, they are added together.

The assignment of firm flexibility and/or social benefits points to the selected indicators is done consistently across all economies, reflects the best available evidence from the academic literature and well-founded good practices, and has been reviewed by an advisory group. The preliminary assignment of points is documented in detail in this Methodology Handbook (and summarized in Appendix 1.3).

When using B-READY data for economic analysis, their interpretation should be contextualized as needed. For instance, when an economy's shortcomings are assessed, it may be necessary to compare its data relative to economies at similar levels of income or to economies that have followed a desirable development path. Economic analysis should take into account economy-specific enforcement capacity and development priorities. However, this line of analytical work is beyond the scope of the B-READY project as a data collection exercise—it should be undertaken by practitioners and researchers, using B-READY data among other complementary data sources.

Summary of results. B-READY is designed for benchmarking across economies. This requires the application of a homogeneous methodology across economies at different income levels and in different geographic locations. It also requires quantifying the business environment conditions using indicators that can be aggregated into comparable scores.

B-READY granular data provide a wealth of information that can be used to guide specific policy reform. These data are presented in the main body of the report and, in more detail, in the [Business Ready website](#) through accessible facilities and tools, including economy profiles.

In addition, to facilitate international benchmarking, these granular data are used to obtain topic-specific pillar scores, topic scores, and overall pillar scores. A topic-specific pillar score is built from the points assigned to sets of indicators, organized in categories by subject matter. Each score can range from 0 to 100 (where 100 represents the best performance). Within each topic, there are three topic-specific pillars:

Regulatory Framework, Public Services, and Operational Efficiency. The average of the three topic-specific pillar scores, in turn, equals the *topic score*. Each *overall pillar score* is the average of the corresponding topic-specific pillar scores across the ten B-READY topics.

The way B-READY results are presented is also important to mitigate concerns about “unhealthy” competition across economies. B-READY reports are addressing these concerns by avoiding excessive hype around economy rankings. B-READY divides economies into five equal groupings (quintiles), from highest to lowest performers, based on their scores within each pillar, and presents data by quintile. A similar approach is used for presenting the performance of economies by quintiles of the topic scores. This approach enhances the understanding of the distribution of the data, facilitates the identification of patterns and trends, and improves the ease of communication. It allows readers to observe absolute performance (pillar score and topic score) and relative performance (quintile groups). It also can help policy makers readily identify the areas for improvement in their economy in terms of regulations, public services, and operational efficiency, as well as in the specific topics.

10. Data Sources. B-READY obtains data from both expert consultations and firm-level surveys. De jure data are collected from consultations with expert contributors, and de facto data are collected from consultations with expert contributors or firm-level surveys, depending on the nature of the specific indicator.

Through the expert consultation process, B-READY collects data directly by sending detailed topic questionnaires to private sector experts in all measured economies through a survey software. Private sector experts include sole practitioners (for example, a self-employed electrical contractor or a lawyer) and practitioners working in small, medium, and large firms. Expert consultations ask experts questions about groups of firms with similar characteristics, allowing for a comparison of the experience of the same stylized firm across economies (Appendix 1.4).

In exceptional cases, B-READY also collects information on features of public services from public sector experts who work for government agencies or ministries involved in the specific processes covered by each topic as only they would know the answer to some questions (such as credit registries).

The World Bank Enterprise Surveys questions are the source of the B-READY firm-level survey data (Appendix 1.2), which come from relevant variables in existing global WBES, as well as approximately 74 B-READY-specific questions, cutting across most topic areas, designed to give de facto information on the operational efficiency pillars of the B-READY project. Detailed information on the implementation of firm-level surveys, and firm sample selection, administration and management by the WBES Team can be found in the [WBES Manual and Guide](#).

Every topic chapter in this document contains a section that provides details on the data collection sources for each of its pillars. The B-READY Manual and Guide also provides detailed information on the experts’ selection process.

11. Integrity and Transparency. The B-READY data collection and reporting process is governed by the highest possible standards of data integrity, including sound data-gathering processes, robust data safeguards, and clear approval protocols. In addition, B-READY relies on transparency and replicability to build trust in its data and report. All granular data collected by the B-READY project are publicly available on its website, and all results presented in its reports are replicable using straightforward toolkits available on the same website.

The B-READY project follows the World Bank Group’s guidelines on [Accountability and Decision-Making \(ADM\)](#) framework for WBG corporate flagship products. Furthermore, the DEC Global Indicators

Group is engaging with Group Internal Audit (GIA), Ethics and Business Conduct (EBC), and Information and Technology Solutions (ITS) units at the WBG to strengthen the governance of the B-READY project. To identify and prevent process vulnerabilities, GIA is providing design and assurance reviews of the end-to-end process of data collection and reporting processes. EBC is advising on ways to protect the project from undue influence from internal and external stakeholders and providing guidance to avoid potential conflicts of interest within the B-READY team and in its relationship with the rest of the WBG. ITS is supporting B-READY to obtain a safe and reliable data management system that protects the data from cyberthreats and unforced errors, while also allowing for public data availability.

The governance of the B-READY project is presented in the companion [*Business Ready Manual and Guide*](#). There, the protocols, safeguards, processes, and resources of B-READY governance are established in writing. This *Manual and Guide* is publicly available on the B-READY website.

12. Structure of the Methodology Handbook. The B-READY Methodology Handbook is composed of a separate chapter for each of the ten topics. Each chapter contains a methodology note, a scoring annex and an annotated questionnaire (or several questionnaires). The methodology note includes (i) a brief overview of the topic, (ii) a detailed explanation of the indicators and components comprising each pillar, (iii) data collection sources, (iv) parameters used, and (v) an overview of the topic scoring (by pillar and at the topic level). The scoring annex shows detailed scoring on *firm flexibility* as well as *social benefits* for each indicator of each pillar. Finally, the annotated questionnaire provides a glossary and a detailed mapping between each indicator, its scores, and the corresponding question(s). For topics that use multiple questionnaires to collect data, the comprehensive annotated questionnaire annex contains all questionnaires.

13. What is New: Improving the Methodology After the First Round of Data Collection. B-READY aims to balance two core objectives: (1) maintaining the relevance of the methodology by updating it as necessary, and (2) preserving comparability over time by reviewing the methodology only at regular intervals once every three-year cycle. The first three-year cycle serves as the project’s rollout phase, during which geographical coverage is expanded and the methodology refined annually. Throughout this phase, the implementation of data collection and feedback from experts and users may uncover practical challenges, inconsistencies, or other methodological issues that become evident only after data collection and analysis. Consequently, methodological improvements are made to enhance the accuracy, efficiency, and effectiveness of the methodology.

After completing the first round of data collection in 2024, the methodology for each topic was reviewed and updated as needed. These updates are reflected in this version of the Methodology Handbook and are categorized as either major or minor revisions.

Major Revisions:

- **Addition of indicators:** New data collected through Enterprise Surveys has been integrated into the B-READY dataset.
- **Decision on data collection method:** The team tested both data collection methods—expert consultations and Enterprise Surveys—for certain indicators. Based on the response rate and data quality from the testing, a decision was made on the data collection approach going forward.
- **Deletion of categories and subcategories:** Some subtopics, categories, or subcategories were removed, notably the gender component from some topics.
- **Scoring approach:** The Business Insolvency topic introduced the concept of “no practice” economies.

Minor Revisions:

- **Update of terminology:** Names of pillars, categories, subcategories, indicators, and components were reviewed for clarity and consistency across topics.

- **Adjustment of structure:** The structure of the topics was adjusted to enhance the methodology, ensuring a better balance that reflects the relative importance of each category and subcategory. This included reordering, merging, or splitting elements of the topic's structure.
- **Deletion of specific indicators and questions:** Certain indicators and questions were removed due to factors such as low data variation, low informed response rate, interpretation issues, and redundancy. Some questions initially included for testing purposes or to gather additional insights were also removed, particularly those not intended for scoring from the outset.
- **Scoring:** Points and weight assignments were revised to reflect the updated structure.

Details on major revisions made to individual topics are provided below.

Business Location

In Pillar I, the questions related to gender incentives for professional participation have been dropped due to low informed response rate. In Pillar III, two subcategories for occupancy permits have been dropped due to low response rate for informed response rate. The subcategories “Major Constraints on Access to Land” and “Time to Obtain a Construction-Related Permit” have been added to measure access to land and obtaining construction permits as a proxy for the operational efficiency of property transfer and building permits for firms. The new data was collected through Enterprise Surveys.

Utility Services

The Utility Services topic tested data collection for the time to obtain new connection through both expert questionnaires and Enterprise Surveys. The data collected by Enterprise Surveys showed a better response rate than the one collected through expert questionnaires, which exhibited a low informed response rate and interpretation issues. Therefore, the data collection approach has been modified to only consider the data collected through Enterprise Surveys.

Labor

In Pillar III, the subcategories “Proportion of Vacancies Filled” and “Cost to Resolve a Labor Dispute” have been removed due to a low informed response rate. Additionally, the subcategory “On-the-Job Training” has been introduced to reflect the importance and readiness of employers to invest in the skills of their workers, thereby increasing the overall productivity of the firm. The new data was collected through Enterprise Surveys.

Financial Services

The Green Finance subtopic has been deleted due to the challenge of identifying relevant experts in the assessed economies and the lack of established international good practices. In addition, the topic has removed the gender component from the Customer Due Diligence (CDD) questionnaire due to a low informed response rate. Further, the subcategory “Cost of Loan” has been deleted from Pillar III and substituted with perception questions because firms were not able to provide the clear cost of their most recent loan. The new data was collected through Enterprise Surveys.

International Trade

In Pillar III, the category of “Perceived Major Obstacles: Business Transportation, Customs and Trade Regulations” has been added. The new data for this category was collected through Enterprise Surveys. The level of second order subcategories has been eliminated due to reduced scope and depth of the set of indicators. This resulted in the deletion of 369 datapoints. The reduction in scope included dropping all indicators on the second-order subcategory measuring express shipment programs due to a low informed response rate.

Taxation

The topic has removed the gender questions on whether women have the same rights as men in tax-related disputes due to absence of variation across economies.

Dispute Resolution

In Pillar III, a new indicator on whether courts are perceived by firms as an obstacle to business operations has been added to ensure a more solid and comprehensive assessment of the reliability of courts. The new data was collected through Enterprise Surveys.

Market Competition

Four subcategories have been removed from the Market Competition topic. In the Competition questionnaire, the subcategory measuring the impact of state-owned enterprise (SOE) presence in markets has been removed due to a low response rate. In the Procurement questionnaire, the subcategory targeting gender gap perceptions on the ease to bid has been removed because of interpretation issues. Finally, in the Innovation questionnaire, the subcategories measuring the percentage of spending dedicated to research and development and the use of foreign-licensed technology have been removed as no good practice was identified.

In Pillar III, one subcategory and one indicator have been added: (i) an indicator on government intervention in prices, as research finds that excessive price controls can be detrimental to private sector development, and (ii) a subcategory measuring the use of international quality certifications as a proxy for innovation in firms as a large body of literature indicates that firms with internationally recognized quality certifications are more innovative. The new data were collected through Enterprise Surveys.

Business Insolvency

Pillar III has introduced a new question for economies with “no practice” of business insolvency proceedings. This means that if an economy has not had any completed (closed) cases of judicial reorganization or judicial liquidation proceedings involving corporate debtors in the past three years, the economy gets marked as “no practice”. Consequently, the time and cost indicators for these proceedings are assigned a score of zero. This avoids asking irrelevant questions about procedures that are simply not used in that economy.

Appendix 1.1-Comparison of *Doing Business* (DB) and *Business Ready* (B-READY) Key Features

	DB	B-READY
Overview	Benchmark assessment of the business environment affecting <i>individual</i> small and medium enterprises (SMEs)	Benchmark assessment of business regulations and public services affecting private sector development <i>as a whole</i>
Scope	Focused on the burden of business regulations for firms, with some consideration of public services	Balanced focus, looking not only at the regulatory burden for firms but also at the quality of regulations and provision of related public services to firms
Data collection	Some indicators only covered de jure regulations, while others only looked at de facto ones; data collected through expert consultations; extensive use of case studies with strict assumptions to enhance data comparability	Balanced coverage of de jure and de facto aspects of regulatory framework and public services; de facto data collected through combination of expert consultations and firm surveys; use of case scenarios with less strict assumptions to enhance relevance
Topics	Topics selected to follow the firm's life cycle but were uneven regarding relative importance; in some cases, (for example, "protecting minority investors" was not well-justified while excluding "employing labor" was a clear omission)	B-READY topics also selected to follow firm's life cycle, including its participation in the market; all topics of major importance are covered
Indicators	Indicators grouped under (1) efficiency of business regulations and (2) quality of business regulations; not all topics consistently structured under these groupings; indicators tied to case study assumptions, limiting representativeness	All topics consistently structured under three pillars, (1) Regulatory Framework, (2) Public Services, and (3) Operational Efficiency; with less strict case study restrictions, indicators reveal information that better represents the economy
Scoring	Economies' performance assessed based on rankings and scores; strong focus on aggregate rankings to maximize public interest and motivate reforms	Economies' performance assessed based on quantifiable indicators; points are awarded at the most disaggregated indicator level under <i>firm flexibility</i> and <i>social benefits</i> ; B-READY aggregates the points into topic scores and pillar scores; aim to motivate reforms while avoiding hype surrounding economy-wide rankings
Coverage	Main business city in 191 economies; second largest business city also measured in 11 economies	As wide as possible regarding economy and within-economy coverage; within-economy coverage may differ across topics depending on whether regulations are national or local
Update	Annual	Annual for indicators based on expert consultations; staggered three-year cycle for indicators from firm-level surveys

Source: B-READY team.

Appendix 1.2-Enterprise Surveys

A key innovation of the *Business Ready* project is the collection and use of data obtained directly from firms. Firm-level data is obtained by expanding the [Enterprise Surveys](#) (ES) program, which is also housed in DECIG and has conducted over 300 Enterprise Surveys across 153 economies over the past two decades. The expanded Enterprise Surveys consists of full-fledged ES with B-READY-specific questions integrated into the main survey module. The expansion of the ES program carries the substantial benefits of a global public good. First, the WBG produces B-READY data that is grounded on information from entrepreneurs themselves. Second, the WBG delivers a high-quality firm survey program at regular frequencies with worldwide coverage that does not exist anywhere else in the world. This substantially expands the benefits that the WBG country teams (and, more broadly, policy makers, development practitioners, and researchers) enjoy from having an ES done in their economies. Third, the combination of B-READY data with rich data on firm attributes (included in the main ES questionnaire) enables more granular analysis (at both the firm and economy levels) of the causes and consequences of the regulatory and public service topics captured by B-READY. A limitation to note is that the ES includes registered firms only. Although information from informal firms can add value to measuring the business environment, extending the surveys to the informal sector would not only be prohibitively expensive but would have to address the lack of a well-established data collection methodology. The Enterprise Analysis Unit (DECEA) is developing a method to survey informal firms, known as the Informal Sector Enterprise Survey. In the future, when a cost-effective methodology is well established, the B-READY team will consider collecting data from informal firms and entrepreneurs too.

Appendix 1.3-Summary of Preliminary Topic Scoring

General Scoring Approach:

- Each topic is organized into three pillars.
- Each pillar is divided into categories—defined by common features that inform the grouping into a particular category—and each category is further divided into subcategories.
- Each subcategory consists of several indicators, each of which may, in turn, consist of several components.
- Relevant points are assigned to each indicator and subsequently aggregated to obtain the number of points for each subcategory, category, and pillar.
- Within each pillar, weights are assigned to categories according to their relevance and importance within the pillar. The exact weight distribution can be equal or unequal.
- Within each category, weights are assigned to subcategories according to their relevance and importance within the category. The exact weight distribution can be equal or unequal.
- Within each subcategory, an equal weight is assigned to every firm flexibility and social benefits point.
- The approach for assigning and aggregating points is different for Pillars I and II from that for Pillar III.

For Pillar I (Regulatory Framework) & Pillar II (Public Services):

- Points are awarded at the indicator level (0-2), considering the perspectives of entrepreneurs (*firm flexibility*, 0-1) and/or broader private sector development interests (*social benefits*, 0-1).
- Rescaled points for each indicator are calculated by dividing the subcategory's rescaled points by the total points for the same subcategory.
- Rescaled points assigned to each subcategory = Sum of rescaled points of all its indicators.
- Rescaled points assigned to each category = Sum of rescaled points of all its subcategories.
- Rescaled points per pillar = Sum of rescaled points of all its categories.
- The rescaled points for each pillar are summed, with a maximum total of 100 points per pillar.

For Pillar III (Operational Efficiency):

- Scores for Pillar III are calculated using the normal Cumulative Density Function (CDF) transformation method on a scale of 0 to 100, where 0 and 100 represent the lowest and highest possible scores, respectively. The best and worst performers are identified based on the 5th and 95th percentiles of the collected data, or according to the thresholds established by international standards or academic literature.
- Each indicator's rescaled points are calculated by multiplying its raw points (0-100) by its weight, represented by the maximum number of rescaled points available. Please see the topic chapters for further details.
- Rescaled points assigned to each category = Sum of rescaled points of all its indicators.
- Rescaled points of Pillar III = Sum of rescaled points of all its categories.
- The rescaled points of Pillar III have a maximum of 100 points.

Appendix 1.4-Parameters

Expert consultations ask experts questions about groups of firms with similar characteristics, allowing for a comparison of the experience of the same stylized firm across economies. In some cases, data comparability does not require limiting the range of firms because their regulations and related public services are similar. In other cases, certain broad parameters (for instance, firm sector and location or type and size of transactions) are defined so that the data collected are grounded in broad-based scenarios with similar characteristics, allowing for comparison across different locations and time.

Parameters are defined as assumptions that may be general or specific. General parameters apply across all pillars of a topic, while specific parameters apply to one or two pillars only. Every topic chapter in this document contains a section that provides details on the parameters that it relies on, including information on whether the assumption is categorized as a general or specific one, a justification for the use of such parameter, and information on how the parameter is applied in each pillar.

Firm surveys ask respondents questions about their firms and allow for the comparison across economies of the typical experience of actual firms, captured through a representative mean or median. This approach has the added benefit of providing information on variability across firms. No parameters are used when the data is collected from firm surveys.

CHAPTER 2. BUSINESS ENTRY–METHODOLOGY NOTE

I. MOTIVATION

Registered companies benefit from a variety of advantages, including the legal and financial services provided by courts and banks. Their employees enjoy social security protection. Additionally, the economy takes advantage of positive spillovers: where formal entrepreneurship is high, job creation and economic growth also tend to be high.¹ As more businesses formalize, the tax base also expands, enabling the government to spend on productivity-enhancing areas and pursue other social and economic policy goals. However, entrepreneurs often encounter barriers to entry into the formal economy.

There is evidence that higher costs for business start-ups are associated with lower business entry and lower levels of employment and productivity.² Cumbersome regulations for business start-ups are associated with high levels of corruption and informality.³ A simple business start-up process is a positive factor for fostering formal entrepreneurship.⁴ Moreover, digital technology and transparency of information can encourage businesses to register and promote private sector growth.

Digital public services can address the concerns of entrepreneurs by reducing the compliance cost of interacting with government authorities and thus encourage business formalization.⁵ In addition, transparent and accurate data on registered businesses are an important building block of a good business environment because they give governments the tools to produce business statistics and design relevant policies and provide market participants with the information to assess their risks and opportunities. Transparency of beneficial ownership helps safeguard the integrity and reputation of the business sector by making it unattractive to those intent on using its corporate structures for illicit purposes.

In this context, the Business Entry topic measures quality of regulations for business entry, the provision of digital public services and transparency of information for business entry, and the operational efficiency of business entry.

II. INDICATORS

The Business Entry topic measures the process of registration and start of operations of new limited liability companies (LLCs) across three different dimensions, here referred to as pillars. The first pillar assesses the quality of regulations for business entry, covering de jure features of a regulatory framework that are necessary for the adoption of good practices for business start-ups. The second pillar measures the availability of digital public services and transparency of information for business entry. The third pillar measures the time and cost required to register new domestic and foreign firms. Each pillar is divided into categories—defined by common features that inform the grouping into a particular category—and each category is further divided into subcategories. Each subcategory has several indicators, each of which may, in turn, have several components. Relevant points are assigned to each indicator and subsequently aggregated to obtain the number of points for each subcategory, category, and pillar. Table 1 summarizes all three pillars and their respective categories.

Table 1. Summary Table of all Three Pillars for the Business Entry Topic

Pillar I—Quality of Regulations for Business Entry (37 indicators)	
1.1	Information and Procedural Standards (18 indicators)
1.1.1	Company Information Filing Requirements (7 indicators)
1.1.2	Beneficial Ownership Filing Requirements (6 indicators)
1.1.3	Availability of Simplified Registration (3 indicators)
1.1.4	Risk-Based Assessment for Operating Business and Environmental Licenses (2 indicators)
1.2	Restrictions on Registering a Business (19 indicators)

1.2.1	Domestic Firms (9 indicators)
1.2.2	Foreign Firms (10 indicators)
Pillar II–Digital Public Services and Transparency of Information for Business Entry (24 indicators)	
2.1	Digital Services (11 indicators)
2.1.1	Business Start-Up Process (6 indicators)
2.1.2	Storage of Company and Beneficial Ownership Information (3 indicators)
2.1.3	Identity Verification (2 indicators)
2.2	Interoperability of Services (4 indicators)
2.2.1	Exchange of Company Information (2 indicators)
2.2.2	Unique Business Identification (2 indicators)
2.3	Transparency of Online Information (9 indicators)
2.3.1	Business Start-Up (includes gender and environment) (5 indicators)
2.3.2	Availability of General Company Information (2 indicators)
2.3.3	General and Sex-Disaggregated Statistics on Newly Registered Firms (2 indicators)
Pillar III–Operational Efficiency of Business Entry (4 indicators)	
3.1	Domestic Firms (2 indicators)
3.1.1	Total Time to Register a New Domestic Firm (1 indicator)
3.1.2	Total Cost to Register a New Domestic Firm (1 indicator)
3.2	Foreign Firms (2 indicators)
3.2.1	Total Time to Register a New Foreign Firm (1 indicator)
3.2.2	Total Cost to Register a New Foreign Firm (1 indicator)

1. PILLAR I. QUALITY OF REGULATIONS FOR BUSINESS ENTRY

Table 2 shows the structure for Pillar I, Quality of Regulations for Business Entry. Each of this pillar's categories and subcategories will be discussed in more detail in the order shown in the table.

Table 2. Pillar I–Quality of Regulations for Business Entry

1.1	Information and Procedural Standards
1.1.1	Company Information Filing Requirements
1.1.2	Beneficial Ownership Filing Requirements
1.1.3	Availability of Simplified Registration
1.1.4	Risk-Based Assessment for Operating Business and Environmental Licenses
1.2	Restrictions on Registering a Business
1.2.1	Domestic Firms
1.2.2	Foreign Firms

1.1 Information and Procedural Standards

Category 1.1 is divided into four subcategories consisting of several indicators, each of which may, in turn, have several components.

1.1.1 Company Information Filing Requirements

A safe business environment that enables formal entrepreneurship is critical to unleash the potential of new firms. As such, it is important to assess whether the applicable regulatory framework includes good practices promoting a safe and secure environment for business start-ups at the time of filing and updating company information. Good practices include the registration of company information with safety checks and preventive mechanisms (for example, verification of company name, verification of corporate identity, and/or verification of identity of entrepreneurs). In addition to compliance at the moment of incorporation, it is also important to make the necessary updates in the business registry when changes arise (for example, changes to the company name or shareholders' information) to guarantee the good quality and reliability of the registered information.⁶ Therefore, Subcategory 1.1.1–Company Information Filing Requirements has seven indicators (table 3).

Table 3. Subcategory 1.1.1–Company Information Filing Requirements

	Indicators	Components
1	Mandatory to Verify and to Have the Company Name Approved	Requiring verification and approval of the company name
2	Mandatory to Verify the Identity of Entrepreneurs	Requiring verification of the identity of entrepreneurs
3	Mandatory to Register Shareholders' Information	Requiring registration of shareholders' information
4	Mandatory to File Annual Returns/Financial Statements	Requiring filing of annual returns/financial statements
5	Mandatory to Register Changes to the Company Name	Requiring registration of changes to the company name
6	Mandatory to Register Changes to the Shareholders' Details	Requiring registration of changes to shareholders' details
7	Mandatory to Register Changes in the Articles of Association	Requiring registration of changes in the articles of association

1.1.2 Beneficial Ownership Filing Requirements

The registration of adequate, accurate, and timely information on beneficial owners is key to ensuring the transparency of information and to helping prevent the misuse of companies for money laundering or other illegal activities. This can be done, for instance, by submitting the necessary and valid information inherent to beneficial owners when entrepreneurs start a new business. Effectively, the correct and complete beneficial ownership information helps safeguard the integrity and reputation of the business sector by making it unattractive to those who are intent on using its corporate structures for illicit purposes.⁷ To provide up-to-date and reliable data, it is also important that the regulatory framework defines rules and deadlines to make the necessary updates on beneficial ownership information.⁸ Therefore, Subcategory 1.1.2–Beneficial Ownership Filing Requirements has six indicators (table 4).

Table 4. Subcategory 1.1.2–Beneficial Ownership Filing Requirements

	Indicators	Components
1	Mandatory to Register Beneficial Owners' Information	Requiring registration of beneficial owners' information
2	Mandatory Type of Information Required for Beneficial Owners	i) Full Name ii) Identification number iii) Date of birth iv) Address
3	Mandatory Time Limit to Register Beneficial Owners' Information	Requiring registration of beneficial owners' information within a certain time
4	Nominee Shareholders and Directors	Requiring registration of status as nominee shareholders and directors, or their prohibition/inexistence
5	Mandatory to Verify Beneficial Owners' Identity	Requiring verification of beneficial owners' identity
6	Mandatory to Register Changes to the Beneficial Ownership Information	Requiring registration of changes to beneficial ownership information

1.1.3 Availability of Simplified Registration

Allowing entrepreneurs to directly file standard incorporation documents electronically with the business registry can facilitate the automatic validation of information and reduce costs.⁹ Therefore, the Business Entry topic will assess whether the regulatory framework allows for the usage of simple standard forms, both for incorporation and updates of company information. Standard forms should be available to entrepreneurs without the need to seek third-party intermediaries' assistance. Therefore, Subcategory 1.1.3–Availability of Simplified Registration has three indicators (table 5).

Table 5. Subcategory 1.1.3–Availability of Simplified Registration

	Indicators	Components
1	Simple Registration Form without the Use of Intermediaries	Possibility for entrepreneurs to register a business by themselves using a simple standard registration form without the mandatory use of third-party intermediaries
2	Simple Registration Form for All Entrepreneurs	Possibility for all entrepreneurs to register a business by themselves using a simple standard registration form without the mandatory use of third-party intermediaries
3	Changes without the Use of Intermediaries	i) Possibility for entrepreneurs to update company information by themselves without the mandatory use of third-party intermediaries ii) Possibility for all entrepreneurs to update company information by themselves without the mandatory use of third-party intermediaries

1.1.4 Risk-Based Assessment for Operating Business and Environmental Licenses

Adopting a risk-based approach can simplify key regulatory processes that govern business activities.¹⁰ The classification of activities considering their risk level is particularly important for the efficient issue of business licenses. For this reason, the Business Entry topic assesses whether risk management is applied to business licensing and environmental clearances that may be required before the start of business operations (for example, operating licenses). Therefore, Subcategory 1.1.4–Risk-Based Assessment for Operating and Environmental Licenses has two indicators (table 6).

Table 6. Subcategory 1.1.4–Risk-Based Assessment for Operating and Environmental Licenses

	Indicators	Components
1	Risk-Based Regulations for Business Licensing	Providing a risk-based approach for issuing business operating licenses
2	Risk-Based Regulations for Environmental Permitting	Providing a risk-based approach for issuing environmental operating licenses

1.2 Restrictions on Registering a Business

Category 1.2 has two subcategories consisting of several indicators, each of which may, in turn, consist of several components.

1.2.1 Domestic Firms

Entry restrictions can create obstacles to setting up a business and diminish entrepreneurial activity.¹¹ Restrictions for domestic private firms can be either general or specific. For instance, they can apply across sectors (such as the requirement to deposit a minimum amount of capital) or only to activities with specific environmental impact or risk levels (such as certain business or environmental licenses). Equally, there are sector-specific restrictions that limit private domestic participation or equity ownership. Restrictions may also apply to domestic entrepreneurs in certain sociodemographic groups if they face additional requirements when they want to open a bank account or start their own company. Therefore, Subcategory 1.2.1–Domestic Firms has nine indicators (table 7).

Table 7. Subcategory 1.2.1–Domestic Firms

	Indicators	Components
1	Paid-in Minimum Capital Requirements	Requiring a mandated paid-in minimum capital for domestic private limited liability companies
2	Minimum Education or Training	Requiring an entrepreneur who wants to register a company and start business operations to have a certain minimum education or training
3	Criminal History Records or Affidavits	Requiring an entrepreneur who wants to register a company and start business operations to present criminal history records or affidavits
4	Approval of Business Plan, Feasibility Plan, or Financial Plan	Requiring an entrepreneur who wants to register a company and start business operations to present the approval of business plan, feasibility plan or financial plan

5	General Operating License	Requiring an entrepreneur who wants to register a company and start business operations to get a general operating license
6	Sociodemographic Restrictions for Domestic Entrepreneurs	i) Sociodemographic restrictions to register a company ii) Sociodemographic restrictions to open a bank
7	Sector-Specific Restrictions for Domestic Entrepreneurs Related to Service Industries	i) Banking and Insurance ii) Health Care iii) Retail and Tourism iv) Media and Telecom
8	Sector-Specific Restrictions for Domestic Entrepreneurs Related to Manufacturing and Infrastructure Industries	i) Construction ii) Light Manufacturing iii) Electricity iv) Transportation
9	Sector-Specific Restrictions for Domestic Entrepreneurs Related to Agriculture and Extractive Industries	i) Agriculture and Forestry ii) Metals and Mining iii) Oil and Gas iv) Waste Management and Disposal

1.2.2 Foreign Firms

A more restrictive regulatory framework for international investors is associated with reduced inflows of foreign direct investment.¹² Similar to the case of domestic firms, restrictions for foreign private firms can be either general or specific.¹³ In addition to general restrictions that apply to domestic private companies, foreign firms may face unique barriers. These can include limitations on ownership, dividend distribution, or the nationality of their employees. Foreign firms may also need to comply with additional regulatory requirements, such as, obtaining the approval of the national investment authority or applying for a general investor license. There can also be sector-specific restrictions where foreign participation or ownership is limited or fully restricted. Therefore, Subcategory 1.2.2–Foreign Firms has ten indicators (table 8).

Table 8. Subcategory 1.2.2–Foreign Firms

	Indicators	Components
1	Paid-in Minimum Capital Requirements	Requiring a mandated paid-in minimum capital for foreign private limited liability companies
2	Ownership and Participation Restrictions	i) Proportion of shares ii) Number of joint ventures
3	Screening and Approval	i) Investment screening or approval ii) Minimum size of investment
4	Restrictions on the Nationality of Key Personnel and Directors	i) Nationality of the management of foreign subsidiaries ii) Nationality/legal residency of company board members or managers
5	Restrictions on Employment of Foreign and Local Personnel	i) Restrictions on hiring foreign nationals ii) Minimum number or percentage of national employees required
6	Local Engagement Requirements	i) Obligation to have a local partner ii) Local sourcing requirements
7	Financial Restrictions	i) Dividend distribution ii) Setting up or holding a foreign currency commercial bank account
8	Sector-Specific Restrictions for Foreign Entrepreneurs Related to Service Industries	i) Banking and Insurance ii) Health Care iii) Retail and Tourism iv) Media and Telecom
9	Sector-Specific Restrictions for Foreign Entrepreneurs Related to Manufacturing and Infrastructure Industries	i) Construction ii) Light Manufacturing iii) Electricity iv) Transportation
10	Sector-Specific Restrictions for Foreign Entrepreneurs Related to Agriculture and Extractive Industries	i) Agriculture and Forestry ii) Metals and Mining iii) Oil and Gas iv) Waste Management and Disposal

2. PILLAR II. DIGITAL PUBLIC SERVICES AND TRANSPARENCY OF INFORMATION FOR BUSINESS ENTRY

Table 9 shows the structure for Pillar II, Digital Public Services and Transparency of Information for Business Entry. Each of this pillar's categories and subcategories will be discussed in more detail in the order shown in the table.

Table 9. Pillar II–Digital Public Services and Transparency of Information for Business Entry

2.1	Digital Services
2.1.1	Business Start-Up Process
2.1.2	Storage of Company and Beneficial Ownership Information
2.1.3	Identity Verification
2.2	Interoperability of Services
2.2.1	Exchange of Company Information
2.2.2	Unique Business Identification
2.3	Transparency of Online Information
2.3.1	Business Start-Up (includes gender and environment)
2.3.2	Availability of General Company Information
2.3.3	General and Sex-Disaggregated Statistics on Newly Registered Firms

2.1 Digital Services

Category 2.1 is divided into three subcategories consisting of several indicators, each of which may, in turn, has several components.

2.1.1 Business Start-Up Process

To reduce compliance time and cost, business registries are expanding the number of processes that can be completed online without the need to provide paper copies of documents or visit the registry in person. Such processes include the verification of company name, payment of fees, registration for taxes and social security, and updating of company records and beneficial ownership information. Business registries are increasingly expanding and connecting such services to allow entrepreneurs to complete the whole incorporation process online, from submitting the application to receiving company documents in an electronic format, including issuing the final incorporation certificate online.¹⁴ Therefore, Subcategory 2.1.1–Business Start-Up Process has six indicators (table 10).

Table 10. Subcategory 2.1.1–Business Start-Up Process

	Indicators	Components
1	Company Name Verification	Availability of an electronic and fully automated system to verify the uniqueness and compliance of company names
2	Entire Company Registration Process	Availability of an electronic system that covers the entire company registration process
3	Update of Company Information	Availability of an electronic system for businesses to update their statutory information
4	Registration and Update of Beneficial Ownership Information	Availability of an electronic platform to register and update information on beneficial owners
5	Payment of Incorporation Fees	Availability of an electronic payment option for all fees related to company incorporation
6	Issuance of Company Incorporation Certificate	Electronic issuance of company incorporation certificates

2.1.2 Storage of Company and Beneficial Ownership Information

One of the business registry's core functions is to store company information in the most comprehensive, transparent, and accessible manner, ensuring consistency and non-duplicity of records. Within this context, the implementation of electronic systems where company records are digitally stored contributes to a more

efficient storage of information. It also helps relevant public agencies and shareholders access company information simultaneously throughout the entire registry system.¹⁵ Along with systems to store company information, economies are increasingly setting up platforms to store information on beneficial ownership.¹⁶ Therefore, Subcategory 2.1.2–Storage of Company and Beneficial Ownership Information has three indicators (table 11).

Table 11. Subcategory 2.1.2–Storage of Company and Beneficial Ownership Information

	Indicators	Components
1	Database on Company Information	i) Fully electronic database ii) Centralized database with full national coverage iii) Database covering all types of companies and establishments
2	Company Information Records Digitally Stored	Storage of all company registration records in digital form
3	Database on Beneficial Ownership	i) Fully electronic database ii) Centralized database with full national coverage iii) Database covering all types of companies and establishments

2.1.3 Identity Verification

Effective identification of businesses and their representatives is a key element of a secure business environment.¹⁷ The availability of infrastructure that facilitates the identification of economic players supports efforts to prevent fraudulent activity and identity theft. This includes a unified and automated process for identity verification and the availability of electronic signatures. These tools help ensure that the information recorded by the registry and other public entities is reliable and make the interactions of businesses with the public sector and with other businesses more efficient. Therefore, Subcategory 2.1.3–Identity Verification has two indicators (table 12).

Table 12. Subcategory 2.1.3–Identity Verification

	Indicators	Components
1	Availability of Electronic Signature and Authentication	Availability of an electronic signature or another electronic form of authentication identification
2	Identity Document Verification Process	Availability of an electronic and fully automated process to verify the identity of entrepreneurs and beneficial owners

2.2 Interoperability of Services

Category 2.2 has two subcategories consisting of several indicators, each of which may, in turn, consist of several components.

2.2.1 Exchange of Company Information

The availability of electronic systems to exchange information across the agencies involved in registering a new business (for example, the business registry, tax administration, and social security agency) can enhance the efficiency and reliability of the business entry process.¹⁸ By linking or unifying the databases of different agencies involved, the risk of errors and the administrative burden for entrepreneurs are reduced. Similarly, such information exchange streamlines the process of updating company information during the life cycle of a business. Similarly, such information exchange streamlines the process of updating company information during a business' life cycle. Therefore, Subcategory 2.2.1–Exchange of Company Information has two indicators (table 13).

Table 13. Subcategory 2.2.1–Exchange of Company Information

	Indicators	Components
1	Exchange of Information Among Public Sector Agencies	Automatic electronic data exchange among public agencies

2	Update of Company Information Fully Automated	Automatic updates of company information across public agencies
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2.2.2 Unique Business Identification

A Unique Business Identifier (UBI) provides a single means of identifying legal entities engaged in different business transactions and regulatory interactions.¹⁹ It can help public agencies share information more seamlessly on the business activities occurring under their jurisdiction. For private companies, the UBI gives them a unique number that can be used as their identification in their legal and financial documents as well as in their contracts with other parties. Furthermore, it facilitates regulatory compliance in the business entry process by minimizing the burden of providing similar information to different agencies. Therefore, Subcategory 2.2.2–Unique Business Identification has two indicators (table 14).

Table 14. Subcategory 2.2.2–Unique Business Identification

	Indicators	Components
1	Unique Business Identification Number Existence	Uniform unique business identification number assignment
2	Unique Business Identification Number Used by All Agencies	Using a unique business identification number across key public sector agencies

2.3 Transparency of Online Information

Category 2.3 is divided into three subcategories consisting of several indicators, each of which may, in turn, have several components.

2.3.1 Business Start-Up (includes gender and environment)

Transparent information on registration procedures reduces compliance costs and makes the outcome of applications more predictable and accountable. At the same time, the easier it is to access information about regulations, the easier it is to comply with them.²⁰ Thus, this subcategory measures whether the fees, service standards, requirements, and documentation needed to incorporate and operate a company (including, where applicable, environmental licensing requirements) are easily accessible on an official website. In addition, it measures the availability of business information relevant for women entrepreneurs, particularly on publicly funded programs to support women-owned small and medium limited liability companies, because those represent policy solutions to reduce gender gaps in entrepreneurship.²¹ Therefore, Subcategory 2.3.1–Business Start-Up (includes gender and environment) has five indicators (table 15).

Table 15. Subcategory 2.3.1–Business Start-Up (includes gender and environment)

	Indicators	Components
1	List of Documents	Online accessibility of incorporation documents
2	List of Fees	Online accessibility of incorporation fees
3	Service Standards	Online accessibility of incorporation service standards
4	Environmental-Related Requirements	Online accessibility of environmental operating permits requirements
5	Information on Publicly Funded Programs to Support SMEs and Women Entrepreneurs	<ul style="list-style-type: none"> i) Existence of publicly funded programs to support SMEs ii) Online accessibility of information on publicly funded programs to support SMEs iii) Existence of publicly funded programs to support women-owned SMEs iv) Online accessibility of information on publicly funded programs to support women-owned SMEs

Note: SMEs = Small and Medium Enterprises.

2.3.2 Availability of General Company Information

As a collector and disseminator of business information, business registries should make available public information on registered businesses to allow citizens to make informed decisions about who they wish to

do business with, and for organizations to gather business intelligence, while enhancing transparency.²² For this reason, the Business Entry topic assesses the degree of transparency and accessibility of general company information in the business registry. For example, it measures whether the business registry provides public access to information on the names of companies, name of directors, name of shareholders, or annual financial statements, among others. Therefore, Subcategory 2.3.2–Availability of General Company Information has two indicators (table 16).

Table 16. Subcategory 2.3.2–Availability of General Company Information

	Indicators	Components
1	Electronic Search Available for All Company Records	Availability of electronic company records search
2	Types of Company Information Available Online to the Public	i) Name of company ii) Company ID iii) Name of directors iv) Name of shareholders v) Name of beneficial owners vi) Year of incorporation vii) Annual financial accounts viii) Legal address ix) Physical address x) Type of activity

2.3.3 General and Sex-Disaggregated Statistics on Newly Registered Firms

Information on firm statistics can be of great value to users if it is available to the public. Entrepreneurship statistics help provide information about innovation, competitiveness, economic growth, and job creation, and can be used to inform business policies for economic planning, analytical, and research purposes.²³ This subcategory assesses if general and sex-disaggregated statistics on formally registered firms are available online. Ultimately, the availability of such information increases transparency, reduces information asymmetry, and enhances sound business decisions. Therefore, Subcategory 2.3.3–General and Sex-Disaggregated Statistics on Newly Registered Firms has two indicators (table 17).

Table 17. Subcategory 2.3.3–General and Sex-Disaggregated Statistics on Newly Registered Firms

	Indicators	Components
1	Statistics Publicly Available on Business Entry (General)	Online accessibility of new company registration statistics
2	Statistics Publicly Available on Business Entry (Gender)	i) Collection of sex-disaggregated statistics ii) Availability of sex-disaggregated statistics

3. PILLAR III. OPERATIONAL EFFICIENCY OF BUSINESS ENTRY

Table 18 shows the structure for Pillar III, the Operational Efficiency of Business Entry. Each of this pillar's categories will be discussed in more detail in the order shown in the table.

Table 18. Pillar III–Operational Efficiency of Business Entry

3.1	Domestic Firms
3.1.1	Total Time to Register a New Domestic Firm
3.1.2	Total Cost to Register a New Domestic Firm
3.2	Foreign Firms
3.2.1	Total Time to Register a New Foreign Firm
3.2.2	Total Cost to Register a New Foreign Firm

3.1 Domestic Firms

The ease of incorporating a company is associated with more domestic firms undergoing new business activities. Indeed, the time-efficiency of the business incorporation process is a key factor for fostering formal sector entrepreneurship. Together with a fast registration, an inexpensive business entry process is key for the promotion of formal domestic entrepreneurship.²⁴ The Business Entry topic assesses the time and the cost it takes to incorporate a domestic company along three stages: pre-registration (the set of activities that must be performed before submitting the incorporation application); registration (the process of registering a new company with a registrar); and post-registration (the set of activities that must be performed after the new firm is registered with the company register for the entrepreneur to formally operate the company). Therefore, Subcategory 3.1–Domestic Firms has two indicators, one for time, and the other for cost (table 19).

Table 19. Category 3.1–Domestic Firms

	Indicators	Components
1	Total Time to Register a New Domestic Firm	Total time to register a new domestic firm along pre-registration, registration, and post-registration
2	Total Cost to Register a New Domestic Firm	Total cost to register a new domestic firm along pre-registration, registration, and post-registration

3.2 Foreign Firms

Governments need to ensure that the laws governing the business start-up process for foreign firms are as simple as possible and avoid redundant and unnecessary steps. Indeed, entry conditions for foreign firms should be efficient, inexpensive and comparable to domestic firms. In addition, fees related to incorporation should be low enough to promote business entry and should be based on the principle of cost recovery, where the charged fees should not generate a profit for the business registry or related agency but aim to cover the cost of the services provided.²⁵ The Business Entry topic assesses the time cost to incorporate a foreign company along three stages: pre-registration (the set of activities that must be performed before submitting the incorporation application); registration (the process of registering a new company with a registrar); and post-registration (the set of activities that must be performed after the new firm is registered with the company register for the entrepreneur to formally operate the company). Therefore, Subcategory 3.2–Foreign Firms has two indicators, one for time, and the other for cost (table 20).

Table 20. Category 3.2–Foreign Firms

	Indicators	Components
1	Total Time to Register a New Foreign Firm	Total time to register a new foreign firm along pre-registration, registration, and post-registration
2	Total Cost to Register a New Foreign Firm	Total cost to register a new foreign firm along pre-registration, registration, and post-registration

III. DATA SOURCES

4.1 Data Collection Sources

The data for all three pillars are collected through consultations with private and public sector experts. Private sector experts include practitioners, lawyers, and notaries working in the business start-up process. These experts have deep knowledge of the laws and regulations for company incorporation, as well as the different regulatory processes that new entrepreneurs need to complete before starting operations.

4.2 Screening and Selection of Experts

In order to select potential experts to participate in the questionnaire, a screener questionnaire has been developed (table 21).

Table 21. Screener Questionnaire and Respondent Criteria

Relevant Experts' Professions
Lawyers, notaries, tax advisors, accountants
Relevant Areas of Specialization
Business incorporation, corporate law, tax registration, domestic and foreign investment, and so on
Assessment of the Experts' Knowledge or Experience Related to Business Entry and Related Regulations, Services, and Processes
Knowledge of the laws and regulations affecting business incorporation and registration; knowledge of laws and regulations on foreign investment; experience with submitting applications for new company registration; experience with applying for business operational licenses; experience assisting new businesses to comply with other business start-up processes such as tax registration and bank account opening

Thus, the information provided in the screener questionnaire allows the team to better understand the experts' professions, areas of specialization and experts' knowledge or experience related to the business entry process. Ultimately, this will allow the team to select the experts to respond to the questionnaire.

IV. PARAMETERS

To ensure comparability of the data from expert consultations across economies, the Business Entry topic uses general and specific parameters. A parameter refers to an assumption that is made about the characteristics of location, corporate legal form, and start-up capital.

5.1 General Parameters

Pillars I, II, and III share the same general parameters. In many economies, there are subnational jurisdictions that require a business location to be specified for experts to identify the relevant regulatory framework to be assessed. Similarly, many economies have different regulations depending on the corporate legal form, which is also relevant for the assessment of the performance of the provision of business entry services.

5.1.1 Business Location

Justification:

Geographic location determines the legal requirements, the availability of services, and the time or cost to start a business. For instance, geographic location determines the regulatory framework for business incorporation, given that legal requirements may vary at the regional level. In the case of public services, digital public services availability may also differ by municipality. The efficiency, time, or cost to start a business can be different from city to city or from region to region in practice. Thus, business location is an essential parameter for assessing business entry. The largest city in the economy is chosen based on the population size as detailed in the overview chapter of this Methodology Handbook.

Application:

For Pillar I, the parameter is used in cases where regulations are not applicable at a national level, varying across states or regions. For the economies where regulations differ across states, regulations for the largest city are measured. For Pillar II, the parameter is used to determine the relevant business registry and its availability of business entry services. For Pillar III, the parameter is relevant for measures on time and cost because they can vary significantly across cities.

5.1.2 Corporate Legal Form–Most Common Type of Limited Liability Company

Justification:

Some legal requirements and procedures needed to formally start a business are different depending on the corporate legal form of the company. These can include, for instance, the requirements for the minimum amount of paid-in capital or the registration requirements, which can vary by type of corporate legal form. The same applies to the availability of public services, as well as the time and cost to start a business. Thus, the corporate legal form of a company is an essential parameter for assessing business entry. Specifically, the Business Entry topic looks at limited liability companies because they are a common corporate legal form in most economies as well as a safe legal vehicle to protect the personal assets of the business owners. The most common type of limited liability company is determined based on information obtained from incorporation lawyers and national statistical offices. The parameter applies to all pillars and indicators.

Application:

For Pillar I, the parameter is used in cases where regulations are different across corporate forms. For the economies where regulations differ across corporate forms, regulations for the most common type of limited liability companies are measured. For Pillar II, the parameter is used to determine the relevant services available. For Pillar III, the parameter is relevant for measures on time and cost because they can vary significantly across corporate legal forms.

5.2 Specific Parameters

Parameters specific to the Business Entry topic are also necessary to ensure that estimates specific to the time and cost of incorporation provided by experts are comparable across economies. Incorporation steps can change widely depending on the size of the company. To specify the size of the company, the Business Entry topic includes a parameter on start-up capital.

5.2.1 Size–Start-up Capital (5 times GNI per capita for domestic firms; 10 times GNI per capita for foreign firms)

Justification:

Small and medium enterprises (SMEs) play a major role in most economies, representing around 90 percent of businesses and more than 50 percent of employment worldwide, according to the World Bank Small and Medium Enterprises Finance unit. SMEs are mostly defined based on the number of employees. Some definitions also consider the expected turnover and the balance sheet total, start-up investment, or similar financial measures. Despite not being a direct criterion commonly used to legally define an SME, start-up capital is the size-related parameter that affects Business Entry data the most.²⁶

There is no global database on the most common amounts of start-up capital around the world. Thus, to assess a start-up capital measure, the Business Entry topic looks at the Balance Sheet Total/Total Assets/Total Investment limits within SME legal definitions as the closest proxy, with the following five caveats related to SMEs legal definitions. (1) The definitions vary across economies (for example, some economies consider the balance sheet total; others consider total investment or total assets; and still others exclude it from the definition). (2) They establish maximum values (for example, start-up capital is always below the threshold set by the definition). (3) They refer to companies at any stage of their life cycle and not necessarily at the time of incorporation (for example, it is expected that companies start smaller and then grow along their life cycle). (4) They are not necessarily the most representative measure of a given economy (for example, the European Union [EU] definition is the same for all member-states, even though gross national income [GNI] per capita varies significantly among them). (5) They usually refer to both domestic and foreign companies (for example, there is no difference in terms of ownership). Based on this, the Balance Sheet Total/Assets/Investment definitions serve to assess whether a parameter on start-up capital is within the SME legal maximums.

Specifically, the Business Entry topic looks at SMEs with a start-up capital of 5 times GNI per capita for domestic firms and 10 times GNI per capita for foreign firms. Such levels of start-up capital are within the legal maximums of Balance Sheet Total/Assets/Investment SME legal definitions.²⁷

Application:

For Pillar III, the parameter is relevant for measures on time and cost because they can vary significantly depending on the level of start-up capital. For example, registration fees are often defined as a percentage of the start-up capital. Incorporation steps can also vary depending on the start-up capital of the company.

V. TOPIC SCORING

The Business Entry topic has three pillars: Pillar I–Quality of Regulations for Business Entry; Pillar II–Digital Public Services and Transparency of Information for Business Entry; and Pillar III–Operational Efficiency of Business Entry. The total points for each pillar are further rescaled to values from 0 to 100, and subsequently aggregated into the total topic score. Each pillar contributes one-third to the total topic score. Table 22 shows the scoring for the Business Entry topic. The scores distinguish between benefits to the firm (captured as firm flexibility points) and benefits to society’s broader interests (captured as social benefits points). For further scoring details please see Annex A, which complements this section.

Table 22. Aggregate Scoring Overview

Pillar Number	Pillars	Number of Indicators	Score			Rescaled Points (0–100)	Weight
			Firm Flexibility Points	Social Benefits Points	Total Points		
I	Quality of Regulations for Business Entry	37	21	19	40	100	0.33
II	Digital Public Services and Transparency of Information for Business Entry	24	24	24	48	100	0.33
III	Operational Efficiency of Business Entry	4	100	n/a	100	100	0.33

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent).

6.1 Pillar I–Regulatory Framework: Quality of Regulations for Business Entry

Pillar I covers 37 indicators with a total score of 40 points (21 points on firm flexibility and 19 points on social benefits) (table 23). The scoring for each category under this pillar is as follows:

6.1.1 *Information and Procedural Standards* has 18 indicators with a total maximum score of 20 points (2 points on firm flexibility and 18 points on social benefits). Specifically, the *Company Information Filing Requirements* Subcategory has 7 indicators; the *Beneficial Ownership Filing Requirements* Subcategory has 6 indicators; the *Availability of Simplified Registration* Subcategory has 3 indicators; and the *Risk-Based Assessment for Operating Business and Environmental Licenses* Subcategory has another 2. A regulatory framework that follows good practices for business incorporation and beginning of operations benefits society (social benefits) and sometimes firms (firm flexibility).

6.1.2 *Restrictions on Registering a Business* has 19 indicators with a total maximum score of 20 points (19 points on firm flexibility and 1 point on social benefits). Specifically, the *Domestic Firms* Subcategory has 9 indicators; and the *Foreign Firms* Subcategory has another 10. While a

regulatory framework with less restrictions benefits firms (firm flexibility), in most cases, it shows ambiguous effects on society (social benefits).

Table 23. Aggregate Scoring Pillar I

Pillar I–Quality of Regulations for Business Entry		No. of Indicators	FFP	SBP	Total Points	Rescaled Points
1.1	Information and Procedural Standards	18	2	18	20	50.00
1.1.1	Company Information Filing Requirements	7	n/a	7	7	15.00
1.1.2	Beneficial Ownership Filing Requirements	6	n/a	6	6	15.00
1.1.3	Availability of Simplified Registration	3	n/a	3	3	10.00
1.1.4	Risk-Based Assessment for Operating Business and Environmental Licenses	2	2	2	4	10.00
1.2	Restrictions on Registering a Business	19	19	1	20	50.00
1.2.1	Domestic Firms	9	9	1	10	25.00
1.2.2	Foreign Firms	10	10	n/a	10	25.00
Total		37	21	19	40	100.00

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent). FFP = Firm Flexibility Point; SBP = Social Benefits Point.

6.2 Pillar II–Digital Public Services and Transparency of Information for Business Entry

Pillar II includes 24 indicators with a total score of 48 points (24 points on firm flexibility and 24 points on social benefits) (table 24). The scoring for each category under the pillar is as follows:

- 6.2.1** *Digital Services* has 11 indicators with a total maximum score of 22 points (11 points on firm flexibility and 11 points on social benefits). Specifically, the *Business Start-Up Process* Subcategory has 6 indicators; the *Storage of Company and Beneficial Ownership Information* Subcategory has 3 indicators; and the *Identity Verification* Subcategory has 2 indicators. A business entry system that provides online services for business incorporation and beginning of operations benefits society (social benefits) and firms (firm flexibility). Hence, points are equally assigned to both categories.
- 6.2.2** *Interoperability of Services* has 4 indicators with a total maximum score of 8 points (4 points on firm flexibility and 4 points on social benefits). Specifically, the *Exchange of Company Information* Subcategory has 2 indicators; and the *Unique Business Identification* Subcategory has another 2. A business entry system that promotes interoperability of services for business incorporation and beginning of operations benefits society (social benefits) and firms (firm flexibility). Hence, points are equally assigned to both categories.
- 6.2.3** *Transparency of Online Information* has 9 indicators with a total maximum score of 18 points (9 points on firm flexibility and 9 points on social benefits). Specifically, *Business Start-up (includes gender and environment)* Subcategory has 5 indicators; the *Availability of General Company Information* Subcategory has 2 indicators; and the *General and Sex-Disaggregated Statistics on Newly Registered Firms* Subcategory has another 2. A business entry system that provides information online and promotes transparency benefits society (social benefits) and firms (firm flexibility). Hence, points are equally assigned to both categories.

Table 24. Aggregate Scoring Pillar II

Pillar II–Digital Public Services and Transparency of Information for Business Entry		No. of Indicators	FFP	SBP	Total Points	Rescaled Points
2.1	Digital Services	11	11	11	22	40.00
2.1.1	Business Start-Up Process	6	6	6	12	20.00
2.1.2	Storage of Company and Beneficial Ownership Information	3	3	3	6	10.00
2.1.3	Identity Verification	2	2	2	4	10.00
2.2	Interoperability of Services	4	4	4	8	20.00
2.2.1	Exchange of Company Information	2	2	2	4	10.00
2.2.2	Unique Business Identification	2	2	2	4	10.00
2.3	Transparency of Online Information	9	9	9	18	40.00
2.3.1	Business Start-Up (includes gender and environment)	5	5	5	10	20.00
2.3.2	Availability of General Company Information	2	2	2	4	10.00
2.3.3	General and Sex-Disaggregated Statistics on Newly Registered Firms	2	2	2	4	10.00
Total		24	24	24	48	100.00

Note: FFP = Firm Flexibility Points; SBP = Social Benefits Points.

6.3 Pillar III–Operational Efficiency of Business Entry

Pillar III has 4 indicators with scores ranging from 0 to 100 on firm flexibility (table 25). The scores on indicators under this pillar are assigned to firm flexibility only, as the indicators measure the outcomes of service provision to firms. For example, high fees and long times to formally register a company have adverse impacts on firms, thus hampering firm flexibility.

6.3.1 *Domestic Firms* has 2 indicators with a total maximum score of 50 points. Specifically, the *Total Time to Register a New Domestic Firm* Subcategory has 1 indicator; and the *Total Cost to Register a New Domestic Firm* Subcategory has 1 indicator.

6.3.2 *Foreign Firms* has 2 indicators with a total maximum score of 50 points. Specifically, the *Total Time to Register a Foreign Firm* Subcategory has 1 indicator; and the *Total Cost to Register a New Foreign Firm* Subcategory has 1 indicator.

Table 25. Aggregate Scoring Pillar III

Pillar III–Operational Efficiency of Business Entry		No. of Indicators	Rescaled Points
3.1	Domestic Firms	2	50.00
3.1.1	Total Time to Register a New Domestic Firm	1	25.00
3.1.2	Total Cost to Register a New Domestic Firm	1	25.00
3.2	Foreign Firms	2	50.00
3.2.1	Total Time to Register a New Foreign Firm	1	25.00
3.2.2	Total Cost to Register a New Foreign Firm	1	25.00
Total		4	100.00

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- ²⁶ Based on *Doing Business* research, fees related to start-up capital represent, on average, approximately 50 percent of entry costs in about 35 percent of economies. Based on the same research, the number of employees or the expected turnover determine entry costs in only about 3 percent of economies, respectively.
- ²⁷ The Team analyzed 151 economies with a population of more than one million people as of 2020. From the analyzed 151 economies, 73 include a Balance Sheet Total/Assets/Investment measure in their SME legal definitions. Based on the Team's analysis, the proposed start-up capital of 5 times GNI per capita for domestic firms and 10 times GNI per capita for foreign firms are below the average Balance Sheet Total/Assets/Investment SME legal definition.

ANNEX A. BUSINESS ENTRY–SCORING SHEET

This document outlines the scoring approach for the Business Entry topic. For every indicator, a Firm Flexibility Point (FFP) and/or a Social Benefits Point (SBP) are assigned, along with a clarification on the detailed scoring for each such indicator and a note on the relevant background literature.

PILLAR I–QUALITY OF REGULATIONS FOR BUSINESS ENTRY					
1.1 INFORMATION AND PROCEDURAL STANDARDS					
1.1.1 Company Information Filing Requirements					
Indicators	FFP	SBP	Total Points	Rescaled Points	Background Literature
Mandatory to Verify and to Have the Company Name Approved	n/a	1	1	2.14	CRF (2020); IFC and World Bank (2013); UNCITRAL (2019)
Mandatory to Verify the Identity of Entrepreneurs	n/a	1	1	2.14	FATF (2022); OECD and IDB (2021); UNCITRAL (2019)
Mandatory to Register Shareholders' Information	n/a	1	1	2.14	CRF (2020); FATF (2022); IFC and World Bank (2013); OECD and IDB (2021); UNCITRAL (2019)
Mandatory to File Annual Returns/Financial Statements	n/a	1	1	2.14	CRF (2020); FATF (2022); IFC and World Bank (2013); UNCITRAL (2019); World Bank (2020)
Mandatory to Register Changes to the Company Name	n/a	1	1	2.14	CRF (2020); FATF (2022); IFC and World Bank (2013); OECD and IDB (2021); UNCITRAL (2019); World Bank (2020)
Mandatory to Register Changes to the Shareholders' Details	n/a	1	1	2.14	CRF (2020); FATF (2022); IFC and World Bank (2013); OECD and IDB (2021); UNCITRAL (2019); World Bank (2020)
Mandatory to Register Changes in the Articles of Association	n/a	1	1	2.14	CRF (2020); FATF (2022); IFC and World Bank (2013); OECD and IDB (2021); UNCITRAL (2019); World Bank (2020)
Total Points for Subcategory 1.1.1	n/a	7	7	15.00	
1.1.2 Beneficial Ownership Filing Requirements					
Mandatory to Register Beneficial Owners' Information	n/a	1	1	2.50	CRF (2020); FATF (2022); OECD and IDB (2021); UNCITRAL (2019); World Bank (2020)
Mandatory Type of Information Required for Beneficial Owners	n/a	1	1	2.50	CRF (2020); FATF (2022); OECD and IDB (2021); UNCITRAL (2019); World Bank (2020)
Mandatory Time Limit to Register Beneficial Owners' Information	n/a	1	1	2.50	IFC and World Bank (2013); OECD and IDB (2021); UNCITRAL (2019); World Bank (2020)
Mandatory to Register Nominee Shareholders and Directors	n/a	1	1	2.50	FATF (2022); World Bank (2020)

Mandatory to Verify Beneficial Owners' Identity	n/a	1	1	2.50	FATF (2022); OECD and IDB (2021); UNCITRAL (2019); World Bank (2020)
Mandatory to Register Changes to the Beneficial Ownership Information	n/a	1	1	2.50	CRF (2020); FATF (2022); IFC and World Bank (2013); OECD and IDB (2021); UNCITRAL (2019); World Bank (2020)
Total Points for Subcategory 1.1.2	n/a	6	6	15.00	
1.1.3 Availability of Simplified Registration					
Simple Registration Form without the Use of Intermediaries	n/a	1	1	3.33	IFC and World Bank (2013); UNCITRAL (2019)
Simple Registration Form for All Entrepreneurs	n/a	1	1	3.33	IFC and World Bank (2013); UNCITRAL (2019)
Changes without the Use of Intermediaries	n/a	1	1	3.33	IFC and World Bank (2013); UNCITRAL (2019)
Total Points for Subcategory 1.1.3	n/a	3	3	10.00	
1.1.4 Risk-Based Assessment for Operating Business and Environmental Licenses					
Risk-Based Regulations for Business Licensing	1	1	2	5.00	Blanc and Franco-Temple (2013)
Risk-Based Regulations for Environmental Permitting	1	1	2	5.00	Blanc and Franco-Temple (2013)
Total Points for Subcategory 1.1.4	2	2	4	10.00	
Total Points for Category 1.1	2	18	20	50.00	
1.2 RESTRICTIONS ON REGISTERING A BUSINESS					
1.2.1 Domestic Firms					
Paid-in Minimum Capital Requirements	1	n/a	1	2.50	Armour (2006); Hornuf et al. (2011); Kübler (2004); Mülbert and Birke (2002); Simon (2004); Van Stel, Storey, and Thurik (2007)
Minimum Education or Training	1	n/a	1	2.50	Branstetter et al. (2013); Klapper, Laeven, and Rajan (2006); OECD (2018)
Criminal History Records or Affidavits	1	n/a	1	2.50	Branstetter et al. (2013); Klapper, Laeven, and Rajan (2006); OECD (2018)
Approval of Business Plan, Feasibility Plan, or Financial Plan	1	n/a	1	2.50	Branstetter et al. (2013); Klapper, Laeven, and Rajan (2006); OECD (2018)
General Operating License	1	n/a	1	2.50	Blanc and Franco-Temple (2013); Klapper, Laeven, and Rajan (2006)
Socio-demographic Restrictions for Domestic Entrepreneurs	1	1	2	5.00	Branstetter et al. (2013); Klapper, Laeven, and Rajan (2006); OECD (2018)
Sector-Specific Restrictions for Domestic Entrepreneurs Related to Services Industries	1	n/a	1	2.50	Branstetter et al. (2013); Klapper, Laeven, and Rajan (2006); OECD (2018)
Sector-Specific Restrictions for Domestic Entrepreneurs Related to Manufacturing and Infrastructure Industries	1	n/a	1	2.50	Branstetter et al. (2013); Klapper, Laeven, and Rajan (2006); OECD (2018)

Sector-Specific Restrictions for Domestic Entrepreneurs Related to Agriculture and Extractive Industries	1	n/a	1	2.50	Branstetter et al. (2013); Klapper, Laeven, and Rajan (2006); OECD (2018)
Total Points for Subcategory 1.2.1	9	1	10	25.00	
1.2.2 Foreign Firms					
Paid-in Minimum Capital Requirements	1	n/a	1	2.50	Armour (2006); Hornuf et al. (2011); Kübler (2004); Mülbert and Birke (2002); Simon (2004); Van Stel, Storey, and Thurik (2007)
Ownership and Participation Restrictions	1	n/a	1	2.50	IFC, MIGA, and World Bank (2010); Mistura and Roulet (2019); OECD (2020); UNCTAD (2015, 2022)
Screening and Approval	1	n/a	1	2.50	IFC, MIGA, and World Bank (2010); Mistura and Roulet (2019); OECD (2020); UNCTAD (2015, 2022)
Restrictions on the Nationality of Key Personnel and Directors	1	n/a	1	2.50	IFC, MIGA, and World Bank (2010); Mistura and Roulet (2019); OECD (2020); UNCTAD (2015, 2022)
Restrictions on Employment of Foreign and Local Personnel	1	n/a	1	2.50	IFC, MIGA, and World Bank (2010); Mistura and Roulet (2019); OECD (2020); UNCTAD (2015, 2022)
Local Engagement Requirements	1	n/a	1	2.50	IFC, MIGA, and World Bank (2010); Mistura and Roulet (2019); OECD (2020); UNCTAD (2015, 2022)
Financial Restrictions	1	n/a	1	2.50	IFC, MIGA, and World Bank (2010); Mistura and Roulet (2019); OECD (2020); UNCTAD (2015, 2022)
Sector-Specific Restrictions for Foreign Entrepreneurs Related to Services Industries	1	n/a	1	2.50	IFC, MIGA, and World Bank (2010); Mistura and Roulet (2019); OECD (2020); UNCTAD (2015, 2022)
Sector-Specific Restrictions for Foreign Entrepreneurs Related to Manufacturing and Infrastructure Industries	1	n/a	1	2.50	IFC, MIGA, and World Bank (2010); Mistura and Roulet (2019); OECD (2020); UNCTAD (2015, 2022)
Sector-Specific Restrictions for Foreign Entrepreneurs Related to Agriculture and Extractive Industries	1	n/a	1	2.50	IFC, MIGA, and World Bank (2010); Mistura and Roulet (2019); OECD (2020); UNCTAD (2015, 2022)
Total Points for Subcategory 1.2.2	10	n/a	10	25.00	
Total Points for Category 1.2	19	1	20	50.00	
Total Points for Pillar I	21	19	40	100.00	

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent); FFP = Firm Flexibility Point; SBP = Social Benefits Point.

PILLAR II–DIGITAL PUBLIC SERVICES AND TRANSPARENCY OF INFORMATION FOR BUSINESS ENTRY					
2.1 DIGITAL SERVICES					
2.1.1 Business Start-Up Process					
Indicators	FFP	SBP	Total Points	Rescaled Points	Background Literature
Company Name Verification	1	1	2	3.33	UNCITRAL (2019)
Entire Company Registration Process	1	1	2	3.33	UNCITRAL (2019); UNCTAD (n.d.)
Update of Company Information	1	1	2	3.33	UNCITRAL (2019)
Registration and Update of Beneficial Ownership Information	1	1	2	3.33	CRF (2020)
Payment of Incorporation Fees	1	1	2	3.33	UNCITRAL (2019); UNCTAD (n.d.)
Issuance of Company Incorporation Certificate	1	1	2	3.33	UNCITRAL (2019); UNCTAD (n.d.)
Total Points for Subcategory 2.1.1	6	6	12	20.00	
2.1.2 Storage of Company and Beneficial Ownership Information					
Database on Company Information	1	1	2	3.33	UNCITRAL (2019)
Company Information Records Digitally Stored	1	1	2	3.33	UNCITRAL (2019)
Database on beneficial ownership	1	1	2	3.33	CRF (2020)
Total Points for Subcategory 2.1.2	3	3	6	10.00	
2.1.3 Identity Verification					
Availability of Electronic Signature and Authentication	1	1	2	5.00	UNCITRAL (2019)
Identity Document Verification Process	1	1	2	5.00	CRF (2020); Klapper, Miller, and Hess (2019); Lewin et al. (2007); UNCTAD (n.d.)
Total Points for Subcategory 2.1.3	2	2	4	10.00	
Total Points for Category 2.1	11	11	22	40.00	
2.2 INTEROPERABILITY OF SERVICES					
2.2.1 Exchange of Company Information					
Exchange of Information Among Public Sector Agencies	1	1	2	5.00	Klapper, Miller, and Hess (2019); Lewin et al. (2007); Wille et al. (2011)
Update of Company Information Fully Automated	1	1	2	5.00	Klapper, Miller, and Hess (2019); Lewin et al. (2007); Wille et al. (2011)

Total Points for Subcategory 2.2.1	2	2	4	10.00	
2.2.2 Unique Business Identification					
Unique Business Identification Number Existence	1	1	2	5.00	UNCITRAL (2019)
Unique Business Identification Number Used by All Agencies	1	1	2	5.00	UNCITRAL (2019)
Total Points for Subcategory 2.2.2	2	2	4	10.00	
Total Points for Category 2.2	4	4	8	20.00	
2.3 TRANSPARENCY OF ONLINE INFORMATION					
2.3.1 Business Start-Up (includes gender and environment)					
List of Documents	1	1	2	4.00	UNCITRAL (2019); UNCTAD (n.d.)
List of Fees	1	1	2	4.00	UNCITRAL (2019); UNCTAD (n.d.)
Service Standards	1	1	2	4.00	UNCITRAL (2019); UNCTAD (n.d.)
Environmental-Related Requirements	1	1	2	4.00	Koźluk (2014); UNCITRAL (2019); UNCTAD (n.d.)
Information on Publicly Funded Programs to Support SMEs and Women Entrepreneurs	1	1	2	4.00	Halabisky (2018); Koźluk (2014); OECD (2021); UNCITRAL (2019); UNCTAD (n.d.)
Total Points for Subcategory 2.3.1	5	5	10	20.00	
2.3.2 Availability of General Company Information					
Electronic Search Available for All Company Records	1	1	2	5.00	CRF (2020); Dayan and Bolislis (2017); UNCITRAL (2019)
Types of Company Information Available Online to the Public	1	1	2	5.00	CRF (2020); UNCITRAL (2019)
Total Points for Subcategory 2.3.2	2	2	4	10.00	
2.3.3 General and Sex-Disaggregated Statistics on Newly Registered Firms					
Statistics Publicly Available on Business Entry (General)	1	1	2	5.00	UNCITRAL (2019); UNECE (2018)
Statistics Publicly Available on Business Entry (Gender)	1	1	2	5.00	Halabisky (2018); OECD (2021); OECD (n.d.); UNCITRAL (2019); UNECE (2018)
Total Points for Subcategory 2.3.3	2	2	4	10.00	
Total Points for Category 2.3	9	9	18	40.00	
Total Points for Pillar II	24	24	48	100.00	

Note: SMEs = Small and Medium Enterprises; FFP = Firm Flexibility Point; SBP = Social Benefits Point.

PILLAR III—OPERATIONAL EFFICIENCY OF BUSINESS ENTRY					
3.1 DOMESTIC FIRMS					
Indicators	FFP	SBP	Total Points	Rescaled Points	Background Literature
Total Time to Register a New Domestic Firm	50	n/a	50	25.00	Bruhn (2012); Klapper, Lewin, and Quesada Delgado (2009); Klapper and Love (2011); UNCITRAL (2019)
Total Cost to Register a New Domestic Firm	50	n/a	50	25.00	Bruhn (2012); Klapper, Lewin, and Quesada Delgado (2009); Klapper and Love (2011); UNCITRAL (2019)
Total Points for Subcategory 3.1	100	n/a	100	50.00	
3.2 FOREIGN FIRMS					
Total Time to Register a New Foreign Firm	50	n/a	50	25.00	Bruhn (2012); Klapper, Lewin, and Quesada Delgado (2009); Klapper and Love (2011); UNCITRAL (2019)
Total Cost to Register a New Foreign Firm	50	n/a	50	25.00	Bruhn (2012); Klapper, Lewin, and Quesada Delgado (2009); Klapper and Love (2011); UNCITRAL (2019)
Total Points for Subcategory 3.2	100	n/a	100	50.00	
Total Points for Pillar III	100	n/a	100	100.00	

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent); FFP = Firm Flexibility Point; SBP = Social Benefits Point.

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ANNEX B. BUSINESS ENTRY–ANNOTATED QUESTIONNAIRE

Annex B consists of a Glossary and Annotated Questionnaire for the Business Entry topic. The Annotated Questionnaire provides the mapping between each indicator and the corresponding questions.

Glossary

Beneficial owner: The natural person who ultimately owns or controls a company, even if the title to the property is under another name.

Beneficial ownership information: Information on beneficial owner(s) name, identification number, address, and so on.

Company statutory information: Information on bylaws, articles of incorporation, general company information, or any statute that prescribes the rules of the company's operations and governance.

Electronic company registration process: Process during which the entrepreneur can fully register a company online with no need to go in person to the business registry, or any other agency, to present or obtain hard copies of documents.

Environmental operating licenses: License or permits for water management, for waste management and disposal, for using or processing hazardous materials, and so on. "Environmental operating licenses" refer to the commencement of new business activities and exclude, for instance, environmental impact assessments, which can be required for the issuance of building permits.

Fully electronic registry/database: System where all data are stored and accessible electronically.

Local sourcing requirement: Requirement for the foreign firm to purchase goods or services from local suppliers.

Nominee shareholder and director: Person who is officially registered as the holder of shares on behalf of another person.

Relevant government agencies for business entry: Business registry, tax authority, social security, and so on.

Risk-based approach: System that determines the licensing requirements (such as an operating license, operating permit) for a firm based on the level of risk posed by a particular business. The criteria can include the type of activity, size and location of the business, health and safety risk, use of natural resources, and environmental impact.

Service standards: Expected time to obtain a service.

Simple standard registration form: Standard template for business incorporation.

Sociodemographic groups: Groups categorized by age, ethnicity/race, gender, migration status, religious affiliation.

Third-party intermediaries: Notaries, lawyers, accountants, and others.

BUSINESS ENTRY QUESTIONNAIRE

The tables that follow present all indicators (including their components, if applicable) under each pillar, with a reference to the corresponding question number in parenthesis. The questions are listed before each table for ease of reference.

For Y/N questions, the Y response accounts for the score and is considered as the good practice, unless otherwise indicated with the sign “Y/N; N – good practice”.

In the tables that follow, “AND” means all referenced questions must have a good practice response to obtain a score on the indicator.

In the tables the follow, “OR” means one or more referenced questions must have a good practice response to obtain a score on the indicator.

Certain questions are marked as "not scored," which indicates that they do not affect the score in any way. The purpose of these questions is to further inform and refine the questions design for subsequent years of the rollout, as needed, as well as to substantiate and provide further information for the scored questions.

PILLAR I–QUALITY OF REGULATIONS FOR BUSINESS ENTRY	
Parameters	
Business Location	The largest (most populous) city in the economy. The parameter applies to all questions under Pillar I.
Corporate legal form	The most common type of limited liability company (LLC) in the economy. The parameter applies to all questions under Pillar I.

1.1 INFORMATION AND PROCEDURAL STANDARDS

1.1.1 Company Information Filing Requirements

1. Does the legislation require entrepreneurs to verify and to have the company name approved in order to register a new business? (Y/N)
2. Does the legislation provide for clear, exhaustive, and specific rules for rejecting proposed company names? (Y/N)
3. Does the legislation require verifying the identity of the entrepreneurs willing to start a new business? (Y/N)
4. Which of the following holds responsibility for verifying the entrepreneurs' identity? (*not scored*)
 - 4a. Registrar
 - 4b. Notary
 - 4c. Lawyer
 - 4d. Other
5. Does the legislation require registration of shareholders details? (Y/N)
6. Does the legislation require companies to file annual company returns and financial statements? (Y/N)

1.1.2 Beneficial Ownership Filing Requirements

7. Does the legislation require new companies to register beneficial ownership information? (Y/N)
8. Does the legislation require companies to register the following type of information about beneficial owners? (Y/N)
 - 8a. Full name
 - 8b. Identification number and information
 - 8c. Date of birth
 - 8d. Address
 - 8e. Other
9. Does the legislation specify a time limit for registering the required beneficial owner information in the case of a newly registered company? (Y/N)
10. Please indicate the time limit (in calendar days): *(not scored)*
11. Does the legislation allow nominee shareholders and directors? (Y/N; N – good practice)
12. Does the legislation require registering their status as nominee shareholders and directors with public authorities? (Y/N)
13. Does the legislation require verifying the identity of beneficial owners? (Y/N)
14. Which of the following holds responsibility for verifying the identity of beneficial owners? *(not scored)*
 - 14a. Registrar
 - 14b. Notary
 - 14c. Lawyer
 - 14d. Other
15. Does the legislation require registering changes to the company name at the business registry or another relevant agency? (Y/N)
16. What is the time limit (in calendar days) for registering such changes? *(not scored)*
17. Does the legislation require registering changes to the shareholders' details at the business registry or another relevant agency? (Y/N)
18. What is the time limit (in calendar days) for registering such changes? *(not scored)*
19. Does the legislation require registering changes in the articles of association at the business registry or another relevant agency? (Y/N)
20. What is the time limit (in calendar days) for registering such changes? *(not scored)*
21. Does the legislation require registering changes to beneficial ownership information? (Y/N)
22. What is the time limit (in calendar days) for registering such changes? *(not scored)*

1.1.3 Availability of Simplified Registration

- 23. Does the legislation allow entrepreneurs to register a business by themselves using a simple standard registration form without the mandatory use of third-party intermediaries? (Y/N)**
- 24. Does the legislation allow all entrepreneurs and limited liability companies to use simple standard registration forms without the mandatory use of third-party intermediaries? (Y/N)**
- 25. Does the legislation allow entrepreneurs to make updates to company's statutory information without the mandatory use of third-party intermediaries? (Y/N)**
- 26. Does the legislation allow all entrepreneurs and limited liability companies to make company statutory updates without the mandatory use of third-party intermediaries? (Y/N)**

1.1.4 Risk-Based Assessment for Operating Business and Environmental Licenses

- 27. Does the legislation provide for a risk-based approach for issuing business operating licenses? (Y/N)**
- 28. Does the legislation exempt new businesses conducting activities with minimal or no operational risk from getting any type of operating license or permit? (Y/N) *(not scored)***
- 29. Does the legislation require new business conducting activities with high operational risk to apply for any type of operating license or permit? (Y/N) *(not scored)***
- 30. At which level is the business operating license implemented? *(not scored)***
 - 30a. National
 - 30b. Regional
 - 30c. Local
 - 30d. Other
- 31. Does the legislation provide for a risk-based assessment for issuing environmental operating licenses? (Y/N)**
- 32. Does the legislation exempt new businesses conducting activities with minimal or no adverse environmental impact from getting any type of environmental operating permit or approval? (Y/N) *(not scored)***
- 33. Does the legislation require new businesses conducting activities with high environmental impact to get any environmental permit or approval? (Y/N) *(not scored)***
- 34. At which level is environmental permitting implemented? *(not scored)***
 - 34a. National
 - 34b. Regional
 - 34c. Local
 - 34d. Other

1.1 QUALITY OF REGULATIONS FOR BUSINESS ENTRY			
1.1.1 Company Information Filing Requirements			
Indicators	FFP	SBP	Total Points
Mandatory to Verify and to Have the Company Name Approved (1 AND 2)	0	1	1
Mandatory to Verify the Identity of Entrepreneurs (3)	0	1	1
Mandatory to Register Shareholders' Information (5)	0	1	1
Mandatory to File Annual Returns/Financial Statements (6)	0	1	1
Mandatory to Register Changes to the Company Name (15)	0	1	1
Mandatory to Register Changes to the Shareholders' Details (17)	0	1	1
Mandatory to Register Changes in the Articles of Association (19)	0	1	1
Total Points	0	7	7
1.1.2 Beneficial Ownership Filing Requirements			
Indicators	FFP	SBP	Total Points
Mandatory to Register Beneficial Owners' Information (7)	0	1	1
Mandatory Type of Information Required for Beneficial Owners (8a AND 8b AND 8c AND 8d)	0	1	1
Mandatory Time Limit to Register Beneficial Owners' Information (9)	0	1	1
Nominee Shareholders and Directors (11 AND 12)	0	1	1
Mandatory to Verify Beneficial Owners' Identity (13)	0	1	1
Mandatory to Register Changes to the Beneficial Ownership Information (21)	0	1	1
Total Points	0	6	6
1.1.3 Availability of Simplified Registration			
Indicators	FFP	SBP	Total Points
Simple Registration Form without the Use of Intermediaries (23)	0	1	1
Simple Registration Form for All Entrepreneurs (24)	0	1	1
Changes without the Use of Intermediaries (25 AND 26)	0	1	1
Total Points	0	3	3
1.1.4 Risk-Based Assessment for Operating Business and Environmental Licenses			
Indicators	FFP	SBP	Total Points
Risk-Based Regulations for Business Licensing (27)	1	1	2
Risk-Based Regulations for Environmental Permitting (31)	1	1	2
Total Points	2	2	4

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

1.2 RESTRICTIONS ON REGISTERING A BUSINESS

1.2.1 Domestic Firms

- 35. Does the legislation require a mandated paid-in minimum capital for domestic private limited liability companies? (Y/N; N – good practice)**
- 36. What is the minimum capital amount established by regulations that domestic firms need to deposit (please provide in local currency units)? *(not scored)***
- 37. When should domestic firms deposit the minimum capital? *(not scored)***
- 37a. Prior to incorporation
 - 37b. At the time of incorporation
 - 37c. Within one week from incorporation
 - 37d. Within more than one week from incorporation
- 38. For how long (in calendar days) must the required minimum capital remain deposited? *(not scored)***
- 39. Are there any consequences for not depositing the minimum capital? *(not scored)***
- 40. Please indicate whether the legislation mandates any of the following general requirements for an entrepreneur who wants to register a limited liability company and start business operations. (Y/N; N – good practice)**
- 40a. Minimum education or training
 - 40b. Criminal history records or affidavits
 - 40c. Approval of business plan, feasibility plan, or financial plan
 - 40d. Obtaining a general operating license
- 41. If the company requires an operating license, must it be renewed? *(not scored)***
- 42. Do any additional general requirements apply for domestic entrepreneurs? Please specify: *(not scored)***
- 43. Does the legislation mandate specific requirements for domestic entrepreneurs from different sociodemographic groups that wish to undertake the following processes? (Y/N; N – good practice)**
- 43a. To register a company
 - 43b. To open a bank account
- 44. Does the legislation limit full private domestic participation/equity ownership in any of the following sectors? (Y/N; N – good practice)**
- 44a. Banking and Insurance
 - 44b. Health Care
 - 44c. Retail and Tourism
 - 44d. Media
 - 44e. Construction
 - 44f. Light Manufacturing
 - 44g. Electricity and Telecommunications
 - 44h. Transportation
 - 44i. Agriculture and Forestry
 - 44j. Metals and Mining
 - 44k. Oil and Gas
 - 44l. Waste Management and Disposal

1.2.2 Foreign Firms

45. Does the legislation require a mandated paid-in minimum capital for foreign private limited liability companies? (Y/N; N – good practice)
46. What is the minimum capital amount established by regulations that foreign firms need to deposit (please provide in local currency units)? *(not scored)*
47. When should foreign firms deposit the minimum capital? *(not scored)*
- 47a. Prior to incorporation
 - 47b. At the time of incorporation
 - 47c. Within one week from incorporation
 - 47d. Within more than one week from incorporation
48. For how long (in calendar days) must the required minimum capital remain deposited? *(not scored)*
49. Are there any consequences for not paying in the minimum capital? *(not scored)*
50. Does the legislation impose any of the following restrictions for foreign entrepreneurs? (Y/N; N – good practice)
- 50a. Limitations on the proportion of shares that can be held in a company
 - 50b. Limitations on the number of joint ventures
 - 50c. Investment screening or approval by government authority
 - 50d. Minimum size of investment, different from the amount for domestic firms
 - 50e. Restrictions on the nationality of the management of foreign subsidiaries
 - 50f. Restrictions on the nationality/legal residency of company board members or managers
 - 50g. Restrictions on hiring foreign nationals
 - 50h. Minimum required number or percentage of national employees
 - 50i. Obligation to have a local partner
 - 50j. Local sourcing requirements
 - 50k. Limitations on dividend distribution
 - 50l. Restrictions on setting up or holding a foreign currency commercial bank account
51. Does the legislation limit the full foreign ownership in the following sectors? (Y/N; N – good practice)
- 51a. Banking and Insurance
 - 51b. Health Care
 - 51c. Retail and Tourism
 - 51d. Media
 - 51e. Construction
 - 51f. Light Manufacturing
 - 51g. Electricity and Telecommunications
 - 51h. Transportation
 - 51i. Agriculture and Forestry
 - 51j. Metals and Mining
 - 51k. Oil and Gas
 - 51l. Waste Management and Disposal

1.2 RESTRICTIONS ON REGISTERING A BUSINESS			
1.2.1 Domestic Firms			
Indicators	FFP	SBP	Total Points
Paid-in Minimum Capital Requirements (35)	1	0	1
Minimum Education or Training (40a)	1	0	1
Criminal History Records or Affidavits (40b)	1	0	1
Approval of Business Plan, Feasibility Plan, or Financial Plan (40c)	1	0	1
General Operating License (40d)	1	0	1
- Sociodemographic Restrictions for Domestic Entrepreneurs (43a AND 43b)	1	1	2
Sector-Specific Restrictions for Domestic Entrepreneurs in Service-Related Industries	1	0	1
- Banking and insurance (44a)	0.25	0	0.25
- Health care (44b)	0.25	0	0.25
- Retail and tourism (44c)	0.25	0	0.25
- Media (44d)	0.25	0	0.25
Sector-Specific Restrictions for Domestic Entrepreneurs in Manufacturing and Infrastructure-Related Industries	1	0	1
- Construction (44e)	0.25	0	0.25
- Light manufacturing (44f)	0.25	0	0.25
- Electricity (44g)	0.25	0	0.25
- Transportation (44h)	0.25	0	0.25
Sector-Specific Restrictions for Domestic Entrepreneurs Related to Agriculture and Extractive Industries	1	0	1
- Agriculture and forestry (44i)	0.25	0	0.25
- Metals and mining (44j)	0.25	0	0.25
- Oil and gas (44k)	0.25	0	0.25
- Waste management and disposal (44l)	0.25	0	0.25
Total Points	9	1	10
1.2.2 Foreign Firms			
Indicators	FFP	SBP	Total Points
Paid-in Minimum Capital Requirements (45)	1	0	1
Ownership and Participation Restrictions	1	0	1
- Proportion of shares (50a)	0.5	0	0.5
- Number of joint ventures (50b)	0.5	0	0.5
Screening and Approval	1	0	1
- Investment screening or approval (50c)	0.5	0	0.5
- Minimum size of investment (50d)	0.5	0	0.5
Restrictions on the Nationality of Key Personnel and Directors	1	0	1
- Nationality of the management of foreign subsidiaries (50e)	0.5	0	0.5
- Nationality/legal residency of board members or managers (50f)	0.5	0	0.5
Restrictions on Employment of Foreign and Local Personnel	1	0	1
- Restrictions on hiring foreign nationals (50g)	0.5	0	0.5
- Minimum number or percentage of national employees required (50h)	0.5	0	0.5
Local Engagement Requirements	1	0	1
- Obligation to have a local partner (50i)	0.5	0	0.5
- Local sourcing requirements (50j)	0.5	0	0.5
Financial Restrictions	1	0	1
- Dividend distribution (50k)	0.5	0	0.5

- Setting up or holding a foreign currency commercial bank account (50l)	0.5	0	0.5
Sector-Specific Restrictions for Foreign Entrepreneurs Related to Services Industries	1	0	1
- Banking and insurance (51a)	0.25	0	0.25
- Health care (51b)	0.25	0	0.25
- Retail and tourism (51c)	0.25	0	0.25
- Media (51d)	0.25	0	0.25
Sector-Specific Restrictions for Foreign Entrepreneurs Related to Manufacturing and Infrastructure Industries	1	0	1
- Construction (51e)	0.25	0	0.25
- Light manufacturing (51f)	0.25	0	0.25
- Electricity (51g)	0.25	0	0.25
- Transportation (51h)	0.25	0	0.25
Sector-Specific Restrictions for Foreign Entrepreneurs Related to Agriculture and Extractive Industries	1	0	1
- Agriculture and forestry (51i)	0.25	0	0.25
- Metals and mining (51j)	0.25	0	0.25
- Oil and gas (51k)	0.25	0	0.25
- Waste management and disposal (51l)	0.25	0	0.25
Total Points	10	0	10

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

PILLAR II-DIGITAL PUBLIC SERVICES AND TRANSPARENCY OF INFORMATION FOR BUSINESS ENTRY	
Parameters	
Business Location	The largest (most populous) city in the economy. The parameter applies to all questions under Pillar II.
Corporate Legal Form	The most common type of limited liability company (LLC) in the economy. This parameter applies to all questions under Pillar II.

2.1 DIGITAL SERVICES

2.1.1 Storage of Company and Beneficial Ownership Information

52. Please indicate whether or not the following features apply to the company information database at the business registry. (Y/N)

- 52a. Fully electronic
- 52b. Centralized with full national coverage
- 52c. Covers all types of companies and establishments

53. Does the business registry store all company registration records in digital form? (Y/N)

54. Please indicate whether or not each of the following features applies to the beneficial ownership database. (Y/N)

- 54a. Fully electronic
- 54b. Centralized with full national coverage
- 54c. Covers all types of companies and establishments

2.1.2 Business Start-Up Process

55. Does an electronic and fully automated system to verify the uniqueness and compliance of company names exist? (Y/N)
56. Does an electronic system that covers the entire company registration process from submitting the application to receiving the company documents exist? (Y/N)
57. Please indicate whether or not the company registration system allows registrants to complete the following steps electronically. (Y/N) *(not scored)*
- 57a. Tax registration
 - 57b. Beneficial ownership registration
 - 57c. Other
58. Does a fully electronic system for businesses to update their statutory information exist? (Y/N)
59. Does a fully electronic platform to register and update information on beneficial owners exist? (Y/N)
60. Does an electronic payment option for all fees, such as business registry fees, related to company incorporation exist? (Y/N)
61. Does the business registry issue the certificate of company incorporation fully electronically? (Y/N)

2.1.3 Identity Verification

62. Is an electronic signature or another electronic form of authentication identification available for online company registration? (Y/N)
63. Is there an electronic and fully automated process to verify the identity of entrepreneurs and beneficial owners? (Y/N)

2.1 DIGITAL SERVICES			
2.1.1 Business Start-Up Process			
Indicators	FFP	SBP	Total Points
Company Name Verification (55)	1	1	2
Entire Company Registration Process (56)	1	1	2
Update of Company Information (58)	1	1	2
Registration and Update of Beneficial Ownership Information (59)	1	1	2
Payment of Incorporation Fees (60)	1	1	2
Issuance of Company Incorporation Certificate (61)	1	1	2
Total Points	6	6	12
2.1.2 Storage of Company and Beneficial Ownership Information			
Indicators	FFP	SBP	Total Points
Database on Company Information (52)	1	1	2

Company Information Records Digitally Stored (53)	1	1	2
Database on Beneficial Ownership (54)	1	1	2
Total Points	3	3	6
2.1.3 Identity Verification			
Indicators	FFP	SBP	Total Points
Availability of Electronic Signature and Authentication (62)	1	1	2
Identity Document Verification Process (63)	1	1	2
Total Points	2	2	4

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

2.2 INTEROPERABILITY OF SERVICES

2.2.1 Exchange of Company Information

64. Do key public sector agencies for business entry exchange information on companies automatically and electronically? (Y/N)

65. Which public sector agencies exchange company information electronically? (*not scored*)

66. Are changes to company information automatically updated for all relevant government agencies? (Y/N)

2.2.2 Unique Business Identification

67. Does the business registry or another relevant authority assign a Unique Business Identification number (UBI) for all companies? (Y/N)

68. Do all relevant government agencies use the UBI? (Y/N)

69. Which other agencies issue their own separate company identification number? (*not scored*)

2.2 INTEROPERABILITY OF SERVICES			
2.2.1 Exchange of Company Information			
Indicators	FFP	SBP	Total Points
Exchange of Information among Public Sector Agencies (64)	1	1	2
Update of Company Information Fully Automated (66)	1	1	2
Total Points	2	2	4
2.2.2 Unique Business Identification			
Indicators	FFP	SBP	Total Points
Unique Business Identification Number Existence (67)	1	1	2
Unique Business Identification Number Used by All Agencies (68)	1	1	2
Total Points	2	2	4

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

2.3 TRANSPARENCY OF ONLINE INFORMATION

2.3.1 Business Start-Up (includes gender and environment)

70. Please indicate whether each of the following types of information is available online to the general public. (Y/N)

70a. List of documents needed to incorporate an LLC

70b. List of all fees required for company incorporation at the business registry

70c. Service standards for company incorporation at the business registry

70d. Regulatory information about environmental-related requirements for new business conducting activities with low or negligible environmental impact

71. Do publicly funded programs to support small and medium limited liability companies exist in [economy]? (Y/N)

72. Is information on publicly funded programs to support small and medium limited liability companies publicly available online? (Y/N)

73. Do publicly funded programs to support women-owned small and medium liability companies exist? (Y/N)

74. Is information on publicly funded programs to support women-owned small and medium limited liability companies publicly available online? (Y/N)

2.3.2 Availability of General Company Information

75. Is electronic search available for all company records? (Y/N)

76. Please indicate whether or not it is possible to obtain the following corporate information on individual companies online from the database of the business registry. (Y/N)

76a. Name of the company

76b. Company ID

76c. Name of company's directors

76d. Name of company's shareholders

76e. Name of company's beneficial owners

76f. Year of company's incorporation

76g. Company's annual financial accounts

76h. Company's legal address

76i. Company's physical address

76j. Company's type of activity

2.3.3 General and Sex-Disaggregated Statistics on Newly Registered Firms

77. Are statistics about limited liability companies newly registered in 2022 in [economy] available online to the public? (Y/N)

78. What is the number of newly registered limited liability companies in 2022 in [economy]? (Y/N)
(not scored)

79. Are data on male and female ownership and/or staff composition of limited liability companies collected by the business registry of [economy]? (Y/N)
80. Which of the following data are sex-disaggregated? (Y/N) *(not scored)*
- 80a. Number of female business owners of limited liability companies
 - 80b. Number of female sole proprietors
 - 80c. Number of female directors of limited liability companies
 - 80d. Share of female employees of limited liability companies
81. Are the data available for the most recent calendar year (2022)? (Y/N)
82. Are these data anonymized? (Y/N) *(not scored)*
83. Are these data publicly available online? (Y/N) *(not scored)*
84. What is the number of newly registered limited liability companies owned by at least one woman in 2022 in [economy]? (Y/N) *(not scored)*
85. What is the number of newly registered limited liability companies owned by all men in 2022 in [economy]? (Y/N) *(not scored)*

2.3 TRANSPARENCY OF ONLINE INFORMATION			
2.3.1 Business Start-Up (includes gender and environment)			
Indicators	FFP	SBP	Total Points
List of Documents (70a)	1	1	2
List of Fees (70b)	1	1	2
Service Standards (70c)	1	1	2
Environmental-Related Requirements (70d)	1	1	2
Information on Publicly Funded Programs to Support SMEs and Women Entrepreneurs	1	1	2
- Information on public funded programs to support SMEs (71 AND 72)	0.5	0.5	1
- Information on public funded programs to support women entrepreneurs (73 AND 74)	0.5	0.5	1
Total Points	5	5	10
2.3.2 Availability of General Company Information			
Indicators	FFP	SBP	Total Points
Electronic Search Available for All Company Records (75)	1	1	2
Types of Company Information Available Online to the Public	1	1	2
- Name of company (76a)	0.1	0.1	0.2
- Company ID (76b)	0.1	0.1	0.2
- Name of directors (76c)	0.1	0.1	0.2
- Name of shareholders (76d)	0.1	0.1	0.2
- Name of beneficial owners (76e)	0.1	0.1	0.2
- Year of incorporation (76f)	0.1	0.1	0.2
- Annual financial accounts (76g)	0.1	0.1	0.2
- Legal address (76h)	0.1	0.1	0.2
- Physical address (76i)	0.1	0.1	0.2

- Type of activity (76j)	0.1	0.1	0.2
Total Points	2	2	4
2.3.3 General and Sex-Disaggregated Statistics on Newly Registered Firms			
Indicators	FFP	SBP	Total Points
Statistics Publicly Available on Business Entry (General) (77)	1	1	2
Statistics Publicly Available on Business Entry (Gender) (79 AND 81)	1	1	2
Total Points	2	2	4

Note: FFP = Firm Flexibility Points; SBP = Social Benefits Points; SMEs = Small and Medium Enterprises.

PILLAR III—OPERATIONAL EFFICIENCY OF BUSINESS ENTRY	
Parameters	
Business Location	The largest (most populous) city in the economy. The parameter applies to all questions under Pillar III.
Corporate Legal Form	The most common type of limited liability company (LLC) in the economy. The parameter applies to all questions under Pillar III.
Size	Start-up capital is 5 times income per capita for domestic companies and 10 times income per capita for foreign companies. The parameter applies to all questions under Pillar III.

Further information (based on the scope of the topic):

- The company performs general industrial or commercial activities.
- The company expected turnover reaches the threshold upon which value added tax (VAT) registration is required (if applicable).
- The company has employees.
- The company will have domestic ownership (section 3.1) or foreign ownership (section 3.2).

If additional parameters are needed when providing time and cost estimates, please consider what would apply in average to the most typical company in the economy.

For Pillar III, data are collected in number of days for time indicators and in local currency units (LCU) for cost indicators. Cost is then recorded as a percentage of the economy's gross national income (GNI) per capita.

The scores for Pillar III indicators are calculated using the Normal Cumulative Density Function (CDF) transformation method on a scale of 0 to 100, where 0 and 100 represent the lowest and highest possible scores, respectively. The best and worst performers are identified based on the 5th and 95th percentiles of the collected data.

General Instructions:

Time: When calculating time, consider the average overall time it takes in practice, from the moment the first step is initiated by the entrepreneur or their representative, until the last step is fully completed with the relevant agency (for example, this includes waiting times from the moment a request is submitted by the entrepreneur until the final document is issued by the relevant agency). Also take into account simultaneity of steps (such as whether certain steps can be completed at the same time). If a step can be completed online or in person, consider the most common way of completing the step and its associated

time (for example, if the most common way of is online, please include the time it takes to complete the step electronically). Please consider the parameters mentioned above for domestic firms. When needed please add in the comments how time is calculated.

Cost: When calculating cost, consider the average total cost in practice to complete each step mentioned. This can include, for instance, hiring the services of a third-party intermediary if they are commonly used in practice for completing the step. When needed please add in the comments how the fees and other costs are calculated.

If a step costs a different amount (or takes a different time) depending on whether a standard or fast-track scheme is used, please consider the most common manner of completing the step and its associated cost. Please consider the parameters mentioned above for domestic firms.

3.1 DOMESTIC FIRMS

3.1.1 Pre-Incorporation Steps for Domestic Firms

Pre-incorporation captures the set of activities that must be performed before submitting the incorporation application.

86. What are the pre-incorporation steps for opening a new domestic firm required by law and/or commonly done in practice? Please include steps that are completed online and/or in person. *(not scored)*

86a. Company name verification

86b. Third-party (notaries, lawyers, accountants) involvement for business start-up

86c. Bank-related step(s) before registering a company

87. For each of the selected steps, what is the agency in charge of completing the step? *(not scored)*

88. Please list any other additional steps

89. What is the total time to complete all pre-incorporation steps for a domestic firm mentioned above (calendar days)? *(not scored)*

Note: Please take into account the simultaneity of steps (such as whether certain steps can be completed at the same time). When calculating time, please consider the General Instructions provided above.

90. What is the total cost to complete all pre-incorporation steps for a domestic firm mentioned above (local currency)? *(not scored)*.

Note: When calculating cost, please consider the General Instructions provided above.

3.1.2 Incorporation of Domestic Firms

Incorporation captures the process of registering a new company with a registrar.

91. What is the agency where incorporation is completed?

92. What is the total time to complete the incorporation of a domestic firm with the business registry (calendar days)? *(not scored)*

Note: Please take into account the simultaneity of steps (for example, whether certain steps can be completed at the same time). When calculating time, please consider the General Instructions provided above.

93. What is the total cost to complete the incorporation of a domestic firm with the business registry (local currency)? (not scored)

Note: When calculating cost, please consider the General Instructions provided above.

3.1.3 Post-Incorporation Steps for Domestic Firms

Post-incorporation captures the set of activities that must be performed after the new company is registered with the company register.

94. What are the post-incorporation procedures for opening a new domestic firm required by law and/or commonly done in practice? Please include steps that are completed online and/or in person. (not scored)

- 94a. Beneficial ownership registration
- 94b. Tax registration
- 94c. VAT/sales tax registration
- 94d. Employer and employee registration
- 94e. Social security registration
- 94f. Publication of the company information
- 94g. Company books or accounting books registration
- 94h. Opening of bank account for any other post incorporation steps
- 94i. Importer and exporter registration
- 94j. General operating or trading business license
- 94k. Local/municipal registration

95. For each of the selected steps, what is the agency in charge of completing the step? (not scored)

96. Please list any other additional steps.

97. What is the total time to complete all post-incorporation steps for a domestic firm mentioned above (calendar days)? (not scored)

Note: Please take into account the simultaneity of steps (for example, whether certain steps can be completed at the same time). When calculating time, please consider the General Instructions provided above.

98. What is the total cost to complete all post-incorporation steps for a domestic firm mentioned above (local currency)? (not scored)

Note: When calculating cost, please consider the General Instructions provided above.

3.1.4 Total Time and Cost of the Entire Business Entry Process for Domestic Firms

99. What is the total time to complete the entire company entry process for a domestic firm (calendar days)?

Note: Please consider the time indicated above for all pre-incorporation, incorporation, and post-incorporation steps. Please also take into account simultaneity of steps (for example, whether certain steps can be completed at the same time).

100. What is the total cost to complete the entire company entry process for a domestic firm (local currency)?

Note: Please consider the cost indicated above for all pre-incorporation, incorporation, and post-incorporation steps.

3.2 FOREIGN FIRMS

3.2.1 Pre-Incorporation Steps for Foreign Firms

Pre-incorporation captures the set of activities that must be performed before submitting the incorporation application.

101. Are any of the pre-incorporation steps you selected for domestic firms different for foreign firms in terms of agency, time, or cost? Or are there any unique additional procedures for foreign firms? (Y/N) (not scored)

102. If yes, what are the pre-incorporation steps required by law and/or commonly done in practice for opening a new foreign firm that are different from those for domestic firms? Please include steps that are completed online and/or in person. (not scored)

102a. Company name verification

102b. Third-party (notaries, lawyers, accountants) involvement for business start-up

102c. Bank related step(s) before registering a company

103. For each of the selected steps, what is the agency in charge of completing the step? (not scored)

104. Please list any other additional steps

105. What is the total time to complete all pre-incorporation steps for a foreign firm (calendar days)? (not scored)

Note: Please take into account the simultaneity of steps (for example, whether certain steps can be completed at the same time). When calculating time, please consider the General Instructions provided above.

106. What is the total cost to complete all pre-incorporation steps for a foreign firm (local currency)? (not scored)

Note: When calculating cost, please consider the General Instructions provided above.

3.2.2 Incorporation of Foreign Firms

Incorporation captures the process of registering a new company with a registrar.

107. Is the incorporation process for foreign firms different in terms of agency, time, and cost compared to domestic firms? (Y/N)

108. What is the agency where incorporation is completed for foreign companies?

109. What is the total time to complete the incorporation of a foreign firm with the business registry (calendar days)? (not scored)

Note: Please take into account the simultaneity of steps (for example, whether certain steps can be completed at the same time). When calculating time, please consider the General Instructions provided above.

110. What is the total cost to complete the incorporation of a foreign firm with the business registry (local currency)? (not scored)

Note: When calculating cost, please consider the General Instructions provided above.

3.2.3 Post-Incorporation Steps for Foreign Firms

Post-incorporation captures the set of activities that must be performed after the new company is registered with the company register.

111. Are any of the post-incorporation steps you selected for domestic firms different for foreign firms in terms of agency, time, and cost? Or are there any unique additional procedures for foreign firms? (Y/N)

112. If yes, what are the post-incorporation steps required by law and/or commonly done in practice for opening a new foreign firm that are different than those for domestic firms? (not scored)

- 112a. Beneficial ownership registration
- 112b. Tax registration
- 112c. VAT/sales tax registration
- 112d. Employer and employee registration
- 112e. Social security registration
- 112f. Publication of the company information
- 112g. Company books or accounting books registration
- 112h. Opening of bank account for any other post incorporation steps
- 112i. Importer and exporter registration
- 112j. General operating or trading business license
- 112k. Local/municipal registration

113. For each of the selected steps, what is the agency, time and cost associated with completing the step?

114. Please list any other additional steps.

115. What is the total time to complete all post-incorporation steps for a foreign firm mentioned above (calendar days)? (not scored)

Note: Please take into account the simultaneity of steps (for example, whether certain steps can be completed at the same time). When calculating time, please consider the General Instructions provided above.

116. What is the total cost to complete all post-incorporation steps for a foreign firm mentioned above (local currency)? (not scored)

Note: When calculating cost, please consider the General Instructions provided above.

3.2.4 Total Time and Cost of the Entire Business Entry Process for Foreign Firms

117. What is the total time to complete the entire company entry process for a foreign firm (calendar days)?

Note: Please consider the time indicated above for all pre-incorporation, incorporation, and post-incorporation steps. Please also take into account simultaneity of steps (for example, whether certain steps can be completed at the same time).

118. What is the total cost to complete the entire company entry process for a foreign firm (calendar days)?

Note: Please consider the cost indicated above for all pre-incorporation, incorporation, and post-incorporation steps.

3.1 DOMESTIC FIRMS			
Indicators	FFP	SBP	Total Points
Total Time to Register a New Domestic Firm (99)	100 (50%)	n/a	100 (50%)
Total Cost to Register a New Domestic Firm (100)	100 (50%)	n/a	100 (50%)
Total Points	100	n/a	100
3.2 FOREIGN FIRMS			
Indicators	FFP	SBP	Total Points
Total Time to Register a New Foreign Firm (117)	100 (50%)	n/a	100 (50%)
Total Cost to Register a New Foreign Firm (118)	100 (50%)	n/a	100 (50%)
Total Points	100	n/a	100

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent).
FFP = Firm Flexibility Point; SBP = Social Benefits Point.

CHAPTER 3. BUSINESS LOCATION–METHODOLOGY NOTE

I. MOTIVATION

Acquiring the physical space where a business will operate is a crucial ingredient of success for many firms, even in the digital age. Getting the right location can influence business access to customers, transportation, labor, and materials, as well as determine taxes, regulations, and environmental commitments they must comply with.¹ Whether an entrepreneur is leasing or purchasing a commercial property, the regulatory framework and the public services related to acquiring a location can have an impact on how conducive the business environment is for individual firms and the private sector development of an economy.² Firms are more likely to invest in economies with strong property rights, where they can be confident that their investment in immovable property will be safe.³ Looking at how well the administration of property rights functions gives a good indication of the economy's prospects for economic growth and provides confidence to the private sector in investing in strategic locations for businesses.⁴ Quality and transparency of land administration are also vital in reducing information asymmetries and increasing market efficiency. A reliable land administration system provides clear information on property ownership, facilitates the development of real estate markets, and supports security of tenure.

When investors and entrepreneurs acquire a new location for their business, the process often involves licensing requirements for altering a property or changing tenancy. Building-related permits are essential for public safety, strengthening property rights, and contributing to capital formation. Last but not least, transparent and accessible environmental regulations related to building control reduce the regulatory burden on firms by offering clarity on rules and regulations.

In this context, the Business Location topic measures the effectiveness of the regulatory framework, the quality of governance and the transparency and operational efficiency in providing services for property transfer, building and environmental permits. The topic indicators consider both the perspective of the firm/entrepreneur (firm flexibility) and the broader public (social benefits). Most of the indicators under the regulatory framework pillar and the public services pillar measure both firm flexibility and social benefits, while indicators under the operational efficiency pillar relate to firm flexibility only.

II. INDICATORS

The Business Location topic measures three different options—purchase, lease, or build—that are available to entrepreneurs to choose the adequate location to set up their company, across three different dimensions, here referred to as pillars. The first pillar assesses the quality of regulations pertaining to property transfer, building, and environmental permitting, covering de jure features of a regulatory framework that are necessary for immovable property lease, property ownership, urban planning, and environmental licenses. The second pillar assesses the quality of public services and transparency of information in the provision of property transfer, building, and environmental permitting. The third pillar measures the operational efficiency of establishing a business location in practice. Each pillar is divided into categories—defined by common features that inform the grouping into a particular category—and each category is further divided into subcategories. Each subcategory consists of several indicators, each of which may, in turn, have several components. Relevant points are assigned to each indicator and subsequently aggregated to obtain the number of points for each subcategory, category, and pillar. Table 1 includes a summary of all three pillars along with their respective categories and subcategories.

Table 1. Summary Table of all Three Pillars for the Business Location Topic

Pillar I—Quality of Regulations for Business Location (62 indicators)	
1.1	Property Transfer and Land Administration (11 indicators)
1.1.1	Property Transfer Standards (4 indicators)
1.1.2	Land Dispute Mechanisms (4 indicators)
1.1.3	Land Administration System (3 indicators)
1.2	Building, Zoning, and Land Use (20 indicators)
1.2.1	Building Standards (11 indicators)
1.2.2	Building Energy Standards (4 indicators)
1.2.3	Zoning and Land Use Regulations (5 indicators)
1.3	Restrictions on Owning and Leasing Property (19 indicators)
1.3.1	Domestic Firms—Ownership (4 indicators)
1.3.2	Domestic Firms—Leasehold (5 indicators)
1.3.3	Foreign Firms—Ownership (5 indicators)
1.3.4	Foreign Firms—Leasehold (5 indicators)
1.4	Environmental Permits (12 indicators)
1.4.1	Environmental Permits for Construction (10 indicators)
1.4.2	Dispute Mechanisms for Construction-Related Environmental Permits (2 indicators)
Pillar II—Quality of Public Services and Transparency of Information for Business Location (46 indicators)	
2.1	Availability and Reliability of Digital Services (21 indicators)
2.1.1	Property Transfer—Digital Public Services (6 indicators)
2.1.2	Property Transfer—Digital Land Management and Identification System (5 indicators)
2.1.3	Property Transfer—Coverage of the Land Registry and Mapping Agency (4 indicators)
2.1.4	Building Permits—Digital Public Services (4 indicators)
2.1.5	Environmental Permits—Digital Public Services (2 indicators)
2.2	Interoperability of Services (6 indicators)
2.2.1	Interoperability of Services for Property Transfer (4 indicators)
2.2.2	Interoperability of Services for Building Permits (2 indicators)
2.3	Transparency of Information (19 indicators)
2.3.1	Immovable Property (includes gender) (9 indicators)
2.3.2	Building, Zoning and Land Use (8 indicators)
2.3.3	Environmental Permits (2 indicators)
Pillar III—Operational Efficiency of Establishing a Business Location (8 indicators)	
3.1	Property Transfer and Land Administration (3 indicators)
3.1.1	Major Constraints on Access to Land (1 indicator)
3.1.2	Time to Obtain a Property Transfer (1 indicator)
3.1.3	Cost to Obtain a Property Transfer (1 indicator)
3.2	Construction Permits (3 indicators)
3.2.1	Time to Obtain Construction-Related Permits (1 indicator)
3.2.2	Time to Obtain a Building Permit (1 indicator)
3.2.3	Cost to Obtain a Building Permit (1 indicator)
3.3	Environmental Permit (2 indicators)
3.3.1	Time to Obtain an Environmental Permit (1 indicator)
3.3.2	Cost to Obtain an Environmental Permit (1 indicator)

1. PILLAR I. QUALITY OF REGULATIONS FOR BUSINESS LOCATION

Table 2 shows the structure for Pillar I, the Quality of Regulations for Business Location. Each of this pillar's categories and subcategories will be discussed in more detail below, following the structure of this table.

Table 2. Pillar I–Quality of Regulations for Business Location

1.1	Property Transfer and Land Administration
1.1.1	Property Transfer Standards
1.1.2	Land Dispute Mechanisms
1.1.3	Land Administration System
1.2	Building, Zoning and Land Use
1.2.1	Building Standards
1.2.2	Building Energy Standards
1.2.3	Zoning and Land Use Regulations
1.3	Restrictions on Owning and Leasing Property
1.3.1	Domestic Firms–Ownership
1.3.2	Domestic Firms–Leasehold
1.3.3	Foreign Firms–Ownership
1.3.4	Foreign Firms–Leasehold
1.4	Environmental Permits
1.4.1	Environmental Permits for Construction
1.4.2	Dispute Mechanisms for Construction-Related Environmental Permits

1.1 Property Transfer and Land Administration

Category 1.1 has three subcategories consisting of several indicators, each of which may, in turn, consist of several components.

1.1.1 Property Transfer Standards

A sound regulatory framework is essential to ensure secure property transactions. Having processes that ascertain rightful ownership and registration of sale deeds in the immovable property registry increases security for people.⁵ Effective property transfer standards can improve efficiency and transparency of property transactions, reduce costs, and increase accuracy of property information.⁶ Therefore, Subcategory 1.1.1–Property Transfer Standards has four indicators (table 3).

Table 3. Subcategory 1.1.1–Property Transfer Standards

	Indicators	Components
1	Legal Obligation to Check Compliance of Documents with the Law	Requiring a control of legality of the documents necessary for a property transaction
2	Legal Obligation to Verify Identities of Parties	Requiring verification of the identity of each party engaged in a property transaction
3	Legal Obligation to Register Sales Transactions	Requiring that all property sale transactions be registered at the land registry to make them opposable to third parties
4	Legal Provision on the Legality of Online Documents	<ul style="list-style-type: none"> i) Property title certificate ii) Title search certificate iii) Tax certificate iv) Company profile document v) Cadastral plans

1.1.2 Land Dispute Mechanisms

In some economies, land disputes make up most of the volume of court cases. To prevent land disputes and better manage the existing ones, the legal framework for land administration needs to assign clear

responsibilities to stakeholders involved in land transactions as well as provide effective mechanisms of dispute resolution that can be implemented in a consistent way and be accessible to all.⁷ Disputes can also occur due to errors in title registration, resulting in significant losses to affected parties, including property owners and lenders.⁸ To complement that, available evidence suggests that offering an out-of-court compensation mechanism has the potential of reducing court cases.⁹ Therefore, Subcategory 1.1.2–Land Dispute Mechanisms has four indicators (table 4).

Table 4. Subcategory 1.1.2–Land Dispute Mechanisms

	Indicators	Components
1	Legal Provisions for Arbitration as an Alternative Land Disputes Resolution Mechanism	Arbitration offered as an out-of-court resolution mechanism for land disputes
2	Legal Provisions for Conciliation and Mediation as Alternative Land Disputes Resolution Mechanisms	Conciliation and mediation offered as an out-of-court resolution mechanism for land disputes
3	Legal Provisions to Provide Out-of-Court Compensation for Losses due to Erroneous Information from the Land Registry	Out-of-court compensation mechanism to allow for compensation payments to parties who suffer losses due to an error in title registration
4	Legal Provisions for Protection of Property Title	Property title subject to a guarantee

1.1.3 Land Administration System

Having a reliable, transparent, and secure land registration system is important to support the security of land tenure and facilitates development of an efficient land market. Such a system must provide clear and accurate information on land ownership, boundaries, and land use rights to all stakeholders, including government agencies, landowners, investors, and the public.¹⁰ The higher the quality of the land administration system, the higher the chance of getting credit when using property as collateral, thereby increasing incentives for investment. Good practices include having transparency of information because it eliminates the asymmetry of information between users and officials and increases the efficiency of land markets, as well as a sound infrastructure to maintain land information supported by an appropriate institutional framework.¹¹ Therefore, Subcategory 1.1.3–Land Administration System has three indicators (table 5).

Table 5. Subcategory 1.1.3–Land Administration System

	Indicators	Components
1	Disclosure of Land Registry Information	Legal framework specifies who can obtain information on land ownership at the immovable property
2	Disclosure of Cadastral Information	Legal framework provides who can consult cadastral plans of private land plots
3	Infrastructure for Land Administration	Existence of cadaster/mapping agency (institution in charge of surveying each plot of land)

1.2 Building, Zoning and Land Use

Category 1.2 has three subcategories consisting of several indicators, each of which may, in turn, consist of several components.

1.2.1 Building Standards

Having a defined set of building regulation standards is important to ensure that buildings are constructed, maintained, and used in a way that minimizes the risk of harm to individuals and the environment. Having clear and publicly accessible building regulations, as well as clear regulations regarding safety mechanisms in construction, is key to guaranteeing a safe construction process.¹² Therefore, Subcategory 1.2.1–Building Standards has eleven indicators (table 6).

Table 6. Subcategory 1.2.1–Building Standards

	Indicators	Components
1	Building Codes/Standards Applicable to All Constructions	Existence of unified building standards
2	Clear Provisions or Guidelines regarding Safety Standards	i) Natural disaster resistant construction (e.g., floods, storms, earthquakes, etc.) ii) Building classification according to certain criteria (e.g., usage; size) iii) Active and passive fire safety measures iv) Soil testing requirements for certain permanent building types v) Structural strength (materials to be used)
3	Regulation of Health Risk Related to Construction Materials	Regulatory framework requirements for the handling, removal, and disposal of regulated construction materials that pose health risks (such as asbestos, lead, mercury-containing devices, polychlorinated biphenyls [PCB])
4	List of Regulated Materials	i) Asbestos ii) Lead-containing pipes, components, paints iii) Mercury-containing fluorescent lamps, thermostats, and electric devices iv) Polychlorinated biphenyls (PCB) in electric transformers, fluorescent light ballasts, caulk, and masonry joints
5	Responsibility for Compliance with Legal Requirements	i) Public agency: Certified/licensed engineer or architect ii) Public agency: Somebody other than an architect or engineer iii) Private and external firms of certified architects and/or civil engineers, not part of the building company iv) Internal review by the architect/engineer who prepared the plans
6	Type of Inspections Carried Out during Construction	Type of inspections carried out during construction
7	Requirement of Final Inspection by Law	Requirement of final inspection by law
8	Materials Required to be Inspected/Tested by Law	i) Asbestos ii) Lead-containing pipes, components, paints iii) Mercury-containing fluorescent lamps, thermostats, and electric devices Polychlorinated biphenyls (PCB) in electric transformers, fluorescent light ballasts, caulk, and masonry joints
9	Liability for Structural Flaws/Problems	i) The architect or engineer who designed the plans of the building ii) The professional or agency, conducting the technical inspections during construction and the final inspection iii) The construction company iv) Liability is not defined by law but is contractual between the involved parties (Contractual Law)
10	Qualifications to Conduct Technical Supervision/Inspections	i) Is an architect or engineer ii) Years of practical experience iii) Member of association of architects or engineers iv) Pass an exam
11	Ability to Dispute Building Permit Decisions	Ability to dispute building permit decisions

Note: PCB = Polychlorinated Biphenyls.

1.2.2 Building Energy Standards

Building energy standards are essential tools for promoting energy efficiency and reducing greenhouse gas emissions in the building sector. Building energy standards are regulatory requirements that set minimum energy efficiency requirements for new buildings.¹³ Energy efficiency performance standards in building energy codes typically include several key elements, including building envelope requirements, lighting, and heating cooling requirements.¹⁴ Therefore, Subcategory 1.2.2–Building Energy Standards has four indicators (table 7).

Table 7. Subcategory 1.2.2–Building Energy Standards

	Indicators	Components
1	Mandatory Minimum Energy Efficiency Performance Standards	Mandatory minimum energy efficiency performance standards

2	Pre-Condition to Provide Proof of Design Compliance with the Energy Efficiency Performance Standards	Pre-condition to provide proof of design compliance with the energy efficiency performance standards
3	Energy Efficiency Performance Standards are Verified as Part of the Building Plans Review Process	<ul style="list-style-type: none"> i) Thermal transmittance or insulation calculations for building envelope ii) Solar heat gain calculations for building envelope iii) Glazing factors for fenestration iv) Heating/cooling demand calculations v) Daylighting and orientation vi) Permanent shading vii) Air barrier, air leakage or air infiltration viii) Efficiency of heating and cooling equipment and controls ix) Efficiency of water heating equipment and controls x) Efficiency of lighting fixtures and controls
4	Incentives to Promote Green Building Standards	Incentives to promote green building standards

1.2.3 Zoning and Land Use Regulations

Zoning is a planning control tool for regulating the built environment and creating functional real estate markets. Effective zoning and land use planning ensures sustainable and safe urban development planning to ensure equitable access to services such as water, electricity, and sanitation.¹⁵ Hazard maps and related means are also essential to identify areas where construction of buildings is not permitted due to natural hazards and to determine minimum separation distances between residential and hazardous occupancies.¹⁶ Zoning can also provide the opportunity to stimulate or slow down development in specific areas.¹⁷ Therefore, Subcategory 1.2.3–Zoning and Land Use Regulations has five indicators on land use and zoning regulations (table 8).

Table 8. Subcategory 1.2.3–Zoning and Land Use Regulations

	Indicators	Components
1	Requirements for Trunk Infrastructure Service Access (Water, Electricity, Sanitation)	Requirements for trunk infrastructure service access (water, electricity, sanitation)
2	Maps that Identify Areas Allocated to Residential, Commercial, Agricultural, Recreational, Public/Institutional, Mixed Use	Maps that identify areas allocated to residential, commercial, agricultural, recreational, public/institutional, mixed use
3	Hazard Maps that Identify Areas in which Building is Not Permitted due to Natural Hazards	Hazard maps that identify areas in which building is not permitted due to natural hazards
4	Hazard Maps that Identify Minimum Separation between Residential and Hazardous Occupancies	Hazard maps that identify minimum separation between residential and hazardous occupancies
5	Maps that Identify Areas in which Building is Not Permitted in relation to Natural Resources	Maps that identify areas in which building is not permitted in relation to natural resources

1.3 Restrictions on Owning and Leasing Property

Category 1.3 has four subcategories consisting of several indicators, each of which may, in turn, consist of several components.

1.3.1 Domestic Firms–Ownership

Restrictions for domestic firms to own a property limit their ability to access capital and other resources, which can hinder competitiveness and reduce investments.¹⁸ Therefore, Subcategory 1.3.1–Domestic Firms–Ownership has four indicators (table 9).

Table 9. Subcategory 1.3.1–Domestic Firms–Ownership

	Indicators	Components
1	Restriction on Ownership Based on the Area of the Land for Domestic Firms	Restriction on ownership based on the area of the land for domestic firms
2	Restriction on Ownership Based on the Location of Property for Domestic Firms	Restriction on the location of property for land ownership for domestic firms
3	Restriction on Ownership of Agricultural Land for Domestic Firms	Restriction on ownership of agricultural land for domestic firms
4	Restriction on Ownership Based on the Height of Building for Domestic Firms	Restriction on ownership by the height of building for domestic firms

1.3.2 Domestic Firms–Leasehold

Restrictions for domestic firms to lease properties, whether based on zoning or land use regulations, can impact the decision of a firm on where to establish a business.¹⁹ Leasing restrictions on land can limit the ability of domestic firms to acquire a property, which can hinder their growth and development.²⁰ Therefore, Subcategory 1.3.2–Domestic Firms–Leasehold has five indicators (table 10).

Table 10. Subcategory 1.3.2–Domestic Firms–Leasehold

	Indicators	Components
1	Restriction on Leasehold Based on the Area of the Land for Domestic Firms	Restriction to lease a certain area of land for domestic firms
2	Restriction on the Duration of the Lease for Domestic Firms	Restriction on the duration of lease for domestic firms
3	Restriction on Leasehold Based on the Location of Property for Domestic Firms	Restriction on the location of property for domestic firms
4	Restriction on Leasehold of Agricultural Land for Domestic Firms	Restriction to lease agricultural land for domestic firms
5	Restriction on Leasehold Based on the Height of Building for Domestic Firms	Restrictions on domestic firms to lease based on height of buildings

1.3.3 Foreign Firms–Ownership

Economies are divided regarding foreign ownership. In most economies there are at least some kinds of restrictions on foreign ownership, whether it is on agricultural lands or residential properties.²¹ Such restrictions can hinder the ability of foreign firms to invest in a particular country, leading to reduced economic performance, lower financial development and absorptive capacity, and reduced investment incentives.²² Therefore, Subcategory 1.3.3–Foreign Firms–Ownership has five indicators (table 11).

Table 11. Subcategory 1.3.3–Foreign Firms–Ownership

	Indicators	Components
1	Restriction on Ownership Based on the Area of the Land for Foreign Firms	Restriction of ownership on the area of land for foreign firms
2	Restriction on the Duration of Ownership for Foreign Firms	Restriction on the duration of ownership for foreign firms
3	Restriction on Ownership Based on the Location of Property for Foreign Firms	Restriction on property ownership based on location for foreign firms

4	Restriction on Ownership of Agricultural Land for Foreign Firms	Restriction on the ownership of agricultural land for foreign firms
5	Restriction on Ownership Based on the Height of Building for Foreign Firms	Restriction on ownership for foreign firms by the height of buildings

1.3.4 Foreign Firms–Leasehold

A lease is an agreement between the owner of a property who will allow the lessee to use this property for profit.²³ Some economies have strict rules on the duration of leases, while others allow for a much longer period, usually ninety-nine years. Some other economies leave the duration of the lease to the contractual parties. Restrictions on leasing can hinder the ability of foreign firms to invest in and develop operations in a particular country.²⁴ Therefore, Subcategory 1.3.4–Foreign Firms–Leasehold has five indicators (table 12).

Table 12. Subcategory 1.3.4–Foreign Firms–Leasehold

	Indicators	Components
1	Restriction on Leasehold Based on the Area of the Land for Foreign Firms	Restriction on lease based on the area of the land for foreign firms
2	Restriction on the Duration of Lease for Foreign Firms	Restrictions on the duration of the lease for foreign firms
3	Restriction on Leasehold Based on the Location of Property for Foreign Firms	Restriction on the location of property leasehold for foreign firms
4	Restriction on Leasehold of Agricultural Land for Foreign Firms	Restriction on the lease of agricultural land for foreign firms
5	Restrictions on Leasehold Based on the Height of Building for Foreign Firms	Restrictions on foreign firms to lease based on height of buildings

1.4 Environmental Permits

Category 1.4 has two subcategories consisting of several indicators, each of which may, in turn, consist of several components.

1.4.1 Environmental Permits for Construction

Environmental permitting is a critical aspect of construction project planning and management. Studies have shown that obtaining environmental permits can be a time-consuming and complex process, requiring significant resources and expertise.²⁵ However, environmental permits are essential to ensuring that construction projects comply with environmental regulations and standards, and that the potential impacts on the natural environment are minimized. Construction projects that require environmental permits can have significant impacts on local communities and the broader environment, and the decisions made during the environmental permitting process can have implications for sustainable development.²⁶ The legal framework on environment governing construction projects typically defines low, moderate, or high levels of environmental risk projects based on the potential environmental impacts of the project. The categorization of projects is usually determined through an environmental review process that considers factors such as the project's location, size, and potential impact on natural resources.²⁷ Therefore, Subcategory 1.4.1–Environmental Permits for Construction has ten indicators (table 13).

Table 13. Subcategory 1.4.1–Environmental Permits for Construction

	Indicators	Components
1	Existence of National Environmental Regulations during Construction	Existence of national environmental regulations during construction
2	Update or Revision of National Environmental Regulations during Construction	Update or revision of national environmental regulations during construction
3	Penalties or Fines in place for Non-Compliance with the Regulations	Penalties or fines in place for non-compliance with the regulations
4	Environmental Risks as Defined by Legal Framework	Environmental risks as defined by legal framework for new construction projects
5	Qualified Professional/Professional Agency to Conduct EIA	Qualified professional/professional agency to conduct the environmental impact assessment (EIA)
6	Criteria that Trigger an EIA	<ul style="list-style-type: none"> i) Size of project ii) Nature of industry iii) Geographical location
7	Requirements for an EIA Process	<ul style="list-style-type: none"> i) Scoping and baseline studies (identification of the scope of the assessment, including issues to be addressed and the potential environmental impacts of the proposed project) (assessment of the current environmental conditions and the potential effects of the proposed project on the environment, including air and water quality, biodiversity, and socioeconomic conditions) ii) Impact assessment (identification and evaluation of the potential positive and negative environmental impacts of the proposed project, including direct and indirect impacts, short-term and long-term impacts, and cumulative impacts) iii) Mitigation measures (development of measures to avoid, minimize, or compensate for the negative environmental impacts of the proposed project, and enhancement of positive impacts) and alternative analysis (assessment of feasible alternatives to the proposed project, including the no-action alternative, and evaluation of their potential environmental impacts) iv) Public participation (consultation with the public and other stakeholders to obtain their views on the proposed project and the potential environmental impacts, and consideration of their concerns and suggestions in the decision-making process) v) Monitoring and follow-up (implementation of a monitoring program to verify the accuracy of the impact predictions, and to ensure that the mitigation measures are effective in reducing the negative environmental impacts)
8	Legal Responsibility for Checking Compliance	<ul style="list-style-type: none"> i) Internal review (undertaken by the responsible authority or other government agency, with or without formal guidelines and procedure) ii) External review (undertaken by an independent body, separate from and/or outside government agencies, with an open and transparent procedure for public comment)
9	Legal Framework Mandates Public Consultations with Concerned Stakeholders	Requirement of public consultation with concerned stakeholders
10	Public Consultations Requirement Elements	<ul style="list-style-type: none"> i) Ensuring that the information is provided in a language that is accessible to the intended audience ii) Clear and accessible information in an accessible place, online, in gazettes, media, etc. iii) Surveys and polls to capture inputs and feedback from the stakeholders iv) Capacity buildings (training, resources, and technical assistance to stakeholders, as needed)

1.4.2 Dispute Mechanisms for Construction-Related Environmental Permits

Dispute mechanisms for environmental permits for construction can be critical in resolving conflicts that may arise during environmental clearance. Effective dispute resolution mechanisms should consider the interests of all stakeholders and seek to find a fair and equitable solution that balances environmental

protection, safety in construction and economic development. Several stakeholders should be involved in these disputes, including project proponents, regulatory authorities, local communities, environmental organizations and nongovernmental organizations (NGOs), and government agencies.²⁸ Therefore, Subcategory 1.4.2–Dispute Mechanisms for Construction-Related Environmental Permits has two indicators (table 14).

Table 14. Subcategory 1.4.2–Dispute Mechanisms for Construction-Related Environmental Permits

	Indicators	Components
1	Ability to Dispute Environmental Clearances and Permits	Ability to dispute environmental clearances and permits
2	Out-of-court Resolution Mechanisms for Environmental Disputes	i) Arbitration ii) Conciliation iii) Mediation

2. PILLAR II. QUALITY OF PUBLIC SERVICES AND TRANSPARENCY OF INFORMATION FOR BUSINESS LOCATION

Table 15 shows the structure for Pillar II, which covers the Quality of Public Services and Transparency of Information for Business Location. Each of this pillar’s categories and subcategories will be discussed in more detail in the order shown in the table (table 15).

Table 15. Pillar II–Quality of Public Services and Transparency of Information for Business Location

2.1	Availability and Reliability of Digital Services
2.1.1	Property Transfer–Digital Public Services
2.1.2	Property Transfer–Digital Land Management and Identification System
2.1.3	Property Transfer–Coverage of the Land Registry and Mapping Agency
2.1.4	Building Permits–Digital Public Services
2.1.5	Environmental Permits–Digital Public Services
2.2	Interoperability of Services
2.2.1	Interoperability of Services for Property Transfer
2.2.2	Interoperability of Services for Building Permits
2.3	Transparency of Information
2.3.1	Immovable Property (includes gender)
2.3.2	Building, Zoning and Land Use
2.3.3	Environmental Permits

2.1 Availability and Reliability of Digital Services

Category 2.1 has five subcategories consisting of several indicators, each of which may, in turn, consist of several components.

2.1.1 Property Transfer–Digital Public Services

With internet availability in almost every country, public services can offer secure online services such as due diligence checking and property registration for real estate transactions. Therefore, Subcategory 2.1.1–Property Transfer–Digital Public Services has six indicators (table 16).

Table 16. Subcategory 2.1.1–Property Transfer–Digital Public Services

	Indicators	Components
1	Online Platform Encumbrance Checking	i) Title search (ownership) ii) Encumbrances (liens, charges) iii) Outstanding taxes (tax agency) iv) Bankruptcy search

		v) Company profile
2	Single Online Platform for Encumbrance Checking	i) Accurate (precise, no errors) ii) Current (latest information) iii) Detailed (all information provided) iv) Reliable (information can be verified)
3	Online Platform for Property Transfer	Online platform for property transfer
4	Processes Available Online for Property Transfer	i) Downloading forms ii) Uploading document iii) Getting notifications iv) Processing payment
5	Complaint Mechanisms for Immovable Property Registry	Complaint mechanisms for immovable property registry
6	Complaint Mechanisms for Cadaster	Complaint mechanisms for cadaster

2.1.2 Property Transfer–Digital Land Management and Identification System

In a good land management system, the institutional framework must ensure that both the land registry and the mapping system (cadaster) have adequate infrastructure to maintain land information to guarantee high standards and reduce the risk of errors. Good infrastructure is essential for the implementation of land policy and land use planning.²⁹ Digital tools machine learning can provide more accurate and efficient means of verifying the legal, financial, and physical status of a property, which can ultimately lead to better decision-making in real estate transactions.³⁰ Online portals for property transfer can provide more efficient and convenient means of completing real estate transactions, which can ultimately lead to better outcomes for buyers, sellers, and investors.³¹ Therefore, Subcategory 2.1.2–Property Transfer–Digital Land Management and Identification System has five indicators (table 17).

Table 17. Subcategory 2.1.2–Property Transfer–Digital Land Management and Identification System

	Indicators	Components
1	Electronic Database for Checking Encumbrances	i) Liens ii) Mortgages (charges) iii) Restrictions iv) Easements
2	Format of Land Title Certificates	i) Titles are digitalized (i.e., accessible on the cloud) ii) Titles are digitized (i.e., pdf saved on a computer)
3	Format of Cadastral Plans	i) Titles are digitalized (i.e., accessible on the cloud) ii) Titles are digitized (i.e., pdf saved on a computer)
4	Method to Conduct Cadastral Surveying	i) Direct (geodesic and topographic in situ) ii) Indirect (photogrammetric–pictures taken from airplanes and drones) iii) A combination of the previous two options
5	National Database for Checking Identification	National database for checking identification of parties involved in property transactions

2.1.3 Property Transfer–Coverage of the Land Registry and Mapping Agency

The completeness of coverage of all land and property at the immovable property registry is a crucial aspect of effective land management. The immovable property registry is a system used to record and manage information related to land and property ownership. A complete and accurate registry can help prevent disputes, fraud, and other problems related to land ownership.³² Complete or partial coverage of the immovable property registry and the mapping agency (cadaster) may influence the decision of an entrepreneur on where to locate a business. Effective land information systems ensure that the registry and the cadaster make records of all registered private land readily available, and the records cover the entire economy. Therefore, Subcategory 2.1.3–Property Transfer–Coverage of the Land Registry and Mapping Agency has four indicators (table 18).

Table 18. Subcategory 2.1.3–Property Transfer–Coverage of the Land Registry and Mapping Agency

	Indicators	Components
1	Property Registration Coverage at Main Business City Level	Property registration coverage at main business city level
2	Property Registration Coverage at National Level	Property registration coverage at national level
3	Cadastral Coverage at Main City Level	Cadastral coverage at main city level
4	Cadastral Coverage at National Level	Cadastral coverage at national level

2.1.4 Building Permits–Digital Public Services

Digital public services can help to reduce the time and cost associated with building permit applications, while also increasing transparency and accountability.³³ Digital building permitting services can improve communication between various stakeholders, including architects, contractors, and government officials.³⁴ Therefore, Subcategory 2.1.4–Building Permits–Digital Public Services has four indicators (table 19).

Table 19. Subcategory 2.1.4–Building Permits–Digital Public Services

	Indicators	Components
1	Online Platform for Issuing Building Authorizations	i) Online platform for building authorizations and integration of all relevant authorizations from organizations outside of the planning/building departments ii) Online platform for building authorizations and integration of some relevant authorizations from organizations outside of the planning/building departments iii) Online platform for building authorizations but not integration of any relevant authorizations from organizations outside of the planning/building departments
2	Online Permitting Systems with Several Functionalities	i) Online payment ii) Online communication iii) Online notification iv) Online submission v) Auto-generated checklist
3	Online Permitting Systems to Submit Building and Occupancy Permits	i) Building permit can be obtained online ii) Occupancy permit can be obtained online
4	File Dispute Online on Building Permits	Mechanism available to file a dispute online on the final decision on building permits

2.1.5 Environmental Permits–Digital Public Services

Digital public services can also improve the quality of the built environment and can help ensure that building plans meet safety, health, and environmental standards.³⁵ Therefore, Subcategory 2.1.5–Environmental Permits–Digital Public Services has two indicators (table 20).

Table 20. Subcategory 2.1.5– Environmental Permits–Digital Public Services

	Indicators	Components
1	Online Environmental Permitting Systems with Several Functionalities	i) Online payment ii) Online communication iii) Online notification iv) Online submission v) Auto-generated checklist
2	File Dispute Online on Environmental Licensing	Mechanism available to file a dispute online on the final decision on environmental licensing

2.2 Interoperability of Services

Category 2.2 has two subcategories consisting of several indicators, each of which may, in turn, consist of several components.

2.2.1 Interoperability of Services for Property Transfer

Data exchange between the immovable property registry and the mapping agency (cadaster) ensures data accuracy and reduces the risk of mistakes in property data. Interoperability can increase the efficiency of property transactions by reducing the time and resources required to complete them, as well as enhance the accuracy and reliability of property records, which can reduce disputes and errors in property transactions³⁶. Interoperability can also help to overcome the challenges posed by fragmented land administration systems, improve the accessibility of land information, and help to overcome the challenges posed by limited resources and capacity in land administration agencies.³⁷ Therefore, Subcategory 2.2.1–Interoperability of Services for Property Transfer has four indicators (table 21).

Table 21. Subcategory 2.2.1–Interoperability of Services for Property Transfer

	Indicators	Components
1	Interoperability between Land Registry and Cadaster	Information recorded by the immovable property registration agency and the cadastral/mapping agency kept in a (1) single database containing both legal and geographical information; (2) different but linked databases (where information is automatically updated and shared between the two institutions); or (3) separate databases
2	Interoperability between Land Registry and Other Services	Interoperability between land registry and other services
3	Existence of a Geographic Information System	Existence of a Geographic Information System (GIS)
4	Existence of a unique identifier between Land Registry and Cadaster	Existence of a Unique Identifier between land registry and cadaster

2.2.2 Interoperability of Services for Building Permits

Interoperability in building permits can improve the efficiency and transparency of the permitting process³⁸. Linking all relevant agencies has significant advantages as it eliminates the need to submit the same information to multiple public actors, reducing the time for the firm to obtain all the relevant information from each agency. Having an integrated Geographic Information System (GIS) can enable building departments and related agencies to streamline and automate their procedures for planning, zoning, and issuing building permits. This set of indicators assesses the exchange of information across agencies, such as municipalities, cadasters, land registries, utility service providers, fire safety agency, etc. Specifically, it assesses whether and how institutional information systems are interlinked to exchange information automatically. Therefore, Subcategory 2.2.2–Interoperability of Services for Building Permits has two indicators (table 22).

Table 22. Subcategory 2.2.2–Interoperability of Services for Building Permits

	Indicators	Components
1	Availability of Spatial Plans and Zoning Requirements to All Stakeholders	Availability of spatial plans and zoning requirements to all stakeholders from the central information data source/digital platform such as GIS or national spatial planning platform
2	Integration of GIS or National Spatial Platforms	Integration of GIS or national spatial platforms between the permit-issuing agency and other stakeholder agencies

Note: GIS = Geographic Information System.

2.3 Transparency of Information

Category 2.3 has three subcategories consisting of several indicators, each of which may, in turn, consist of several components.

2.3.1 Immoveable Property (includes gender)

One of the key elements of a good land administration system is transparency as it eliminates asymmetry of information between users and the administration. Transparency in land administration is essential for

good governance and economic development, and the adoption of open data policies and make land ownership information easily accessible to the public.³⁹ When all land-related information is publicly available, all fees for public services are easily accessible, this minimizes the possibilities of informal payments.

Moreover, from a gender perspective, equal property rights are important to foster inclusive economic growth. There is a significant link between a woman's ownership of property and her increased influence in family decisions, economic advancement, and the family's ability to withstand hardships. Having secure property rights goes beyond just contributing to economic growth and the welfare of future generations. It can also be a conduit for enhancing women's empowerment and independence.⁴⁰ As such, having sex-disaggregated data on property ownership can help reveal gender disparities in land ownership and control, and to identify opportunities for policy interventions to promote women's land rights as well help monitor progress towards gender equality in land governance.⁴¹ Therefore, Subcategory 2.3.1–Immovable Property (includes gender) has nine indicators (table 23).

Table 23. Subcategory 2.3.1–Immovable Property (includes gender)

	Indicators	Components
1	Publication of Property Transactions Requirements	Publication of property transactions requirements
2	Transparency of Property Transaction Costs	Transparency of property transactions costs
3	Service Standards at the Land Registry	Service standards at the land registry
4	Transparency of Cadaster Costs	Transparency of cadaster costs
5	Service Standards at the Cadaster	Service standards for cadaster
6	Availability of Statistics on Land Transactions	Official updated statistics tracking the number and the type of transactions at the immovable property registration agency over the past five years publicly available online: i) Statistics are available for the past five years ii) Statistics are available for the past four years iii) Statistics are available for the past three years iv) Statistics are available for the past two years v) Statistics are available for one year only
7	Availability of Statistics on Number and Type of Land Disputes	Official updated statistics tracking the number and type of land disputes over the past five years publicly available online i) Statistics are available for the past five years ii) Statistics are available for the past four years iii) Statistics are available for the past three years iv) Statistics are available for the past two years v) Statistics are available for one year only
8	Availability of Statistics on the Average Time to Resolve Land Disputes	Official updated statistics tracking the average time taken to resolve land disputes over the past five years publicly available online i) Statistics are available for the past five years ii) Statistics are available for the past four years iii) Statistics are available for the past three years iv) Statistics are available for the past two years v) Statistics are available for one year only
9	Availability of Sex-Disaggregated Data on Property Ownership	Sex-disaggregated data on property ownership

2.3.2 Building, Zoning and Land Use

Transparency in building permit systems is essential for promoting fair competition, ensuring compliance with safety and environmental regulations, facilitating the use of new technologies, improving the efficiency and effectiveness of the permitting process, and promoting economic growth and development.⁴² In the realm of urban development, the interplay between building, zoning, and land use is pivotal. Ensuring public accessibility to planning and building control regulations is a cornerstone of transparent governance.

This transparency extends to the public online availability of requirements for obtaining all types of building-related permits, as well as those needed to secure an occupancy permit. Moreover, it is essential that applicable fee schedules for construction are not only publicly available but also regularly updated to reflect current standards. To facilitate informed decision-making, official statistics on the issuance of building permits should be updated and readily accessible online. Lastly, the city's master plan, including zoning, must be current and available for public scrutiny, with clear procedures outlined for any proposed modifications to zoning or land use plans, ensuring strict adherence to established zoning regulations. Therefore, Subcategory 2.3.2–Building, Zoning and Land Use has eight indicators (table 24).

Table 24. Subcategory 2.3.2–Building, Zoning and Land Use

	Indicators	Components
1	Public Accessibility of Planning and Building Control Regulations	Public accessibility of planning and building control regulations
2	Public Online Availability of Requirements to Obtain All Types of Building Related Permits	i) Pre-approvals are provided ii) All requirements to submit building permit are available
3	Public Online Availability of Requirements Needed to Obtain Occupancy Permit	Public online availability of requirements needed to obtain occupancy permit
4	Applicable Fee Schedules for All Types of Construction Publicly Available and Up to Date	Applicable fee schedules for all types of construction publicly available and up to date
5	Availability of Official, Updated and Publicly Available Online Statistics Tracking the Number of Issued Building Permits	Public online availability of requirements to obtain environmental licensing for constructing a building with a moderate environmental risk
6	Updated City Master Plan/Zoning Plan	Updated city master plan/zoning plan
7	Steps to Modify Zoning/Land Use Plan	Steps to modify zoning/land use plan
8	Adherence to Zoning Regulations	i) Through zoning maps of city accessible to builder online to verify that the project's intended location is in compliance with zoning regulations ii) Permit issuing authority checks the zoning compliance after receiving building permit application with no involvement from builder iii) Builder obtains urban planning approval from planning agency before obtaining building permit

2.3.3 Environmental Permits

Transparency in environmental licenses ushers a new standard in environmental governance, particularly in the context of construction projects with moderate environmental risk. A key aspect of this governance is the public online availability of requirements for obtaining environmental licensing, which empowers stakeholders by providing clear, accessible information. Equally important is the maintenance of an up-to-date fee schedule for all types of environmental clearances, ensuring that applicants are aware of the financial implications of compliance. Therefore, Subcategory 2.3.3–Environmental Permits has two indicators (table 25).

Table 25. Subcategory 2.3.3–Environmental Permits

	Indicators	Components
1	Public Online Availability of Environmental Licensing Requirements for Moderate-Risk Construction Project	i) Available online and updated ii) Available online but not updated iii) Not available online iv) Available in paper format
2	Applicable and Up-to-Date Fee Schedule for Environmental Clearances	i) Statistics are available for the past five years ii) Statistics are available for the past four years iii) Statistics are available for the past three years iv) Statistics are available for the past two years v) Statistics are available for one year only

3. PILLAR III. OPERATIONAL EFFICIENCY OF ESTABLISHING A BUSINESS LOCATION

Table 26 shows the structure for Pillar III, the Operational Efficiency of Establishing a Business Location. Each of this pillar's categories and subcategories will be discussed in more detail in the order shown in the table.

Table 26. Pillar III—Operational Efficiency of Establishing a Business Location

3.1	Property Transfer and Land Administration
3.1.1	Major Constraints on Access to Land
3.1.2	Time to Obtain a Property Transfer
3.1.3	Cost to Obtain a Property Transfer
3.2	Construction Permits
3.2.1	Time to Obtain Construction-Related Permits
3.2.2	Time to Obtain a Building Permit
3.2.3	Cost to Obtain a Building Permit
3.3	Environmental Permit
3.3.1	Time to Obtain an Environmental Permit
3.3.2	Cost to Obtain an Environmental Permit

3.1 Property Transfer and Land Administration

Category 3.1 has three subcategories consisting of one indicator each.

3.1.1 Major Constraints on Access to Land

Secure access to land poses a significant hurdle for firms, acting as a bottleneck to their growth and operations. This uncertainty can deter investments, stifle development projects, and impede the expansion of businesses, particularly in sectors such as agriculture, manufacturing, and real estate⁴³. Therefore, Subcategory 3.1.1—Major Constraints on Access to Land has one indicator (table 27).

Table 27. Subcategory 3.1.1—Major Constraints on Access to Land

	Indicators	Components
1	Major Constraints on Access to Land	Percent of firms identifying access to land as a major or very severe constraint

3.1.2 Time to Obtain a Property Transfer

The time taken to obtain property transfer varies from country to country and can depend on various factors such as the complexity of the property transaction, the efficiency of the legal system, and the availability of resources such as surveyors, appraisers, and land registry offices. The timeliness in which a change of ownership is processed is important for businesses as this can lead to delays in starting their business. Having an efficient conveyancing system in place, where bottlenecks are assessed on a regular basis, is important to avoid delays in property transactions.⁴⁴ Therefore, Subcategory 3.1.2—Time to Obtain a Property Transfer has one indicator (table 28).

Table 28. Subcategory 3.1.2—Time to Obtain a Property Transfer

	Indicators	Components
1	Time to Obtain a Property Transfer	The period in calendar days to complete the entire process to transfer the ownership of a commercial property from one domestic company to another domestic company

3.1.3 Cost to Obtain a Property Transfer

Cumbersome processes and high fees, such as transfer tax, registration fees or stamp duties can discourage people from registering the transfer of property. It can also lead to reduced revenue collected by government from property taxation if high cost discourages property registration. Reducing the cost of transferring property ownership is essential for promoting transparency, competition, and innovation and for reducing corruption.⁴⁵ Therefore, Subcategory 3.1.3–Cost to Obtain a Property Transfer has one indicator (table 29).

Table 29. Subcategory 3.1.3–Cost to Obtain a Property Transfer

	Indicators	Components
1	Cost to Obtain a Property Transfer	Includes all administrative costs incurred by the firm to transfer ownership of a property from a buyer to a seller, including fees, transfer taxes, stamp duties and any other payment to the property registry, notaries, public agencies, or lawyers

3.2 Construction Permits

Category 3.2 has three subcategories consisting of one indicator each.

3.2.1 Time to Obtain Construction-Related Permits

The speed of obtaining construction-related permits directly impacts business operations and investment decisions. Lengthy and cumbersome permit procedures can delay construction projects, leading to increased costs, missed deadlines, and potential disruptions to business activities. Conversely, shorter permit processing times can enhance the attractiveness of a location for investment, encouraging firms to allocate resources more efficiently and stimulating economic growth. Time to Obtain Construction-Related Permits indicator shows the average number of days it takes to receive a construction-related permit from the time an establishment applies for it until it is granted. Therefore, Subcategory 3.2.1–Time to Obtain Construction-Related Permits has one indicator (table 30).

Table 30. Subcategory 3.2.1–Time to Obtain Construction-Related Permits

	Indicators	Components
1	Time to Obtain Construction-Related Permits	Time taken by firms to obtain a construction related permit

3.2.2 Time to Obtain a Building Permit

There can be significant variation in the time required to obtain building permits and this depends on numerous factors such as existing backlogs of applications to be processed, scarce resources to process these applications or excessive requirements to submit these applications (such as too many required inspections).⁴⁶ Tackling this issue is important as more efficient processing of building permits can have positive impact on economic growth and development, by increasing investment and employment opportunities. Therefore, Subcategory 3.2.2–Time to Obtain a Building Permit has one indicator (table 31).

Table 31. Subcategory 3.2.2–Time to Obtain a Building Permit

	Indicators	Components
1	Time to Obtain a Building Permit	The period in calendar days to complete the entire process to obtain a building permit for a commercial property-office building type

3.2.3 Cost to Obtain a Building Permit

Lowering the cost of building permits can have significant positive impacts on the construction industry and the broader economy. By reducing the financial burden of obtaining permits, more construction projects can be initiated and completed, leading to increased job opportunities and economic growth. Additionally, lower permit costs can encourage the development of affordable housing and other infrastructure projects

that benefit communities, including helping firms choose an appropriate location for their business operations.⁴⁷ Therefore, Subcategory 3.2.3–Cost to Obtain a Building Permit has one indicator (table 32).

Table 32. Subcategory 3.2.3–Cost to Obtain a Building Permit

	Indicators	Components
1	Cost to Obtain a Building Permit	Includes all costs incurred by the firm to obtain a building permit, including obtaining any required land use approvals and preconstruction design clearances, building permit fees

3.3 Environmental Permit

Category 3.3 has two subcategories consisting of one indicator each.

3.3.1 Time to Obtain an Environmental Permit

Establishing clear and transparent environmental permit procedures can help reduce the time to obtain environmental permits, which is essential for promoting sustainable development.⁴⁸ Delays in environmental permits can significantly increase project costs and result in economic losses. Therefore, Subcategory 3.3.1–Time to Obtain Environmental Permit has one indicator (table 33).

Table 33. Subcategory 3.3.1–Time to Obtain an Environmental Permit

	Indicators	Components
1	Time to Obtain an Environmental Permit	The period in calendar days to complete all steps to obtain environmental licenses

3.3.2 Cost to Obtain an Environmental Permit

High cost of environmental permitting can have a significant impact on the economy and on businesses, impacting project feasibility and investment decisions. In addition, high permitting costs can discourage investment in environmental innovation, as well as making it more difficult for businesses to invest in and adopt new environmental technologies.⁴⁹ Therefore, Subcategory 3.3.2–Cost to Obtain an Environmental Permit has one indicator (table 34).

Table 34. Subcategory 3.3.2–Cost to Obtain an Environmental Permit

	Indicators	Components
1	Cost to Obtain an Environmental Permit	Includes all costs incurred by the firm to obtain the environmental permit

III. DATA SOURCES

4.1 Data Collection Sources

The data for Pillar I and Pillar II are collected through consultations with private sector experts. Private sector experts include lawyers and practitioners working in the areas of property transfer, building permitting, and environmental permitting such as property lawyers, notaries, conveyancers, architects, engineers, environmental consultants, environmental engineers, and environmental planners.

The data for Pillar III are collected through consultation with private sector experts and Enterprise Surveys (ES). The ES provides representative data on major constraints on access to land and the time to obtain construction-related permits, as experienced by businesses in practice. A representative sample of companies captures the variation of user experience within each economy. Businesses with different characteristics, such as size, region, and sector participate in the surveys. For more details on the collection of data by the ES, please refer to the Overview Chapter of this Methodology Handbook. Data on time and cost to obtain a property transfer, a building permit and an environmental permit are collected through

consultation with private sector experts. The reason for this approach is the limited experience that firms surveyed by Enterprise Surveys are expected to have with processes that do not occur on a regular basis for most companies (such as submitting building permits). Finally, broad parameters are defined (as described in Section IV below) to ensure data comparability across economies.

4.2 Screening and Selection of Experts

The Business Location topic has three questionnaires, one for each of the following areas: Property Transfer, Building Permits, and Environmental Permits. Each questionnaire targets experts in their respective areas of expertise. In order to select potential experts to participate in the questionnaires, screener questionnaires have been developed (table 35). The information provided in the screener questionnaires allows the team to better understand the experts' professions, areas of specialization, and knowledge or experience related to property transfer, building permitting, and environmental permitting. Ultimately, this will allow the Team to select the experts to respond to the questionnaire on each of the topics (Property Transfer, Building Permits, and Environment Permits).

Table 35. Screener Questionnaire and Respondent Criteria

Relevant Experts' Professions	
Property Transfer	Property lawyers, notaries, conveyancers
Building Permits	Architects, engineers, construction lawyers
Environmental Permits	Environmental consultants, environmental engineers, and environmental planners
Relevant Areas of Specialization	
Property Transfer	Property law, notarial services, conveyancing
Building Permits	Architecture, civil engineering, construction contracting, construction law
Environmental Permits	Environmental law, environmental engineering, environmental planning
Assessment of the Experts' Knowledge and Experience Related to Property Transfer, Building Permitting and Environmental Permitting and Related Regulations, Services, and Processes	
Property Transfer	Experience with preparing contracts of purchase and sale of property, conducting commercial property transactions, conducting property registrations at land registry/deed registry, contacting tax authorities for property transaction-related taxes (transfer tax, stamp duty, etc.); engagement with complaint mechanisms for property transfer services; as well as knowledge of the regulations affecting property transfer
Building Permits	Experience with obtaining all necessary pre-approvals and submitting applications for building permits with the building control agency or municipality; awareness of building code provisions, building permitting fees; engagement; and knowledge of the regulations affecting building control
Environmental Permits	Experience with obtaining environmental clearances and permits related new construction projects, preparing and submitting Environmental Impact Assessments, awareness of environmental laws and regulations, awareness of complaint mechanisms for environmental permitting

Thus, the information provided in the screener questionnaires allows the team to better understand the experts' professions, areas of specialization, and knowledge or experience related to property transfer, building permitting and environmental permitting. Ultimately, this will allow the team to select the experts to respond to the relevant questionnaires.

IV. PARAMETERS

To ensure comparability of the data from expert consultations across economies, the Business Location topic uses general and specific parameters. A parameter refers to an assumption that is made about the characteristics of a location, the type and size of a construction project and the value of a property.

5.1 General Parameters

Property Transfer, Building Permitting, and Environmental Permitting share a common general parameter of location. Many economies have subnational jurisdictions (such as the state level), which requires a specific business location to be specified in order for experts to identify the relevant regulatory framework to be assessed.

5.1.1 Business Location

Justification:

Geographic location determines the relevant regulatory framework governing building and environmental permits. In many economies, legislation governing building and environmental permits is defined at city and municipal level. For property transfer, building permits, and environmental permits, geographical location determines which municipality, agency, or registry provides the permitting services. Some restrictions might be imposed on construction and on property ownership and leasehold (both for domestic and foreign firms) depending on location. Environmental clearances are also affected by the location of the property being developed. Thus, business location is an essential parameter for assessing the efficiency of obtaining a business location. The largest city is chosen based on the population size, as detailed in the Overview chapter of this Methodology Handbook.

Application:

For Pillar I, the parameter is used in cases where regulations are not applicable at the national level but vary across states or regions. For the economies where regulations differ across states, regulations for the largest city (by population) are measured. For Pillar II, the parameter is used to determine the relevant municipality involved in providing building permitting services and the relevant agency involved in providing environmental clearances for construction projects. For Pillar III, this parameter applies to data collected through expert consultations rather than through enterprise surveys. Specifically, the parameter is relevant for measures on time and cost to obtain a property transfer, a building permit and an environmental permit as they can vary significantly across cities.

5.2 Specific Parameters

Some specific parameters are also necessary to ensure that estimates provided by experts with regard to the transfer of property, to obtaining building-related permits or environmental permits in construction, are comparable across economies. Obtaining such estimates can vary widely depending on the value of property (for transfer of property); type and size of building (for building permits); type and size of housing development (for environmental permits).

5.2.1 Value of Property

Justification:

For property transfer and building permits, a specific parameter of the value of property or construction cost is used to be able to compute time and cost indicators. The value of the property or the construction cost is required to calculate transfer tax, registration fees, and stamp duties in several jurisdictions.⁵⁰ For example, in South Africa the amount of transfer duty paid is based on the value of the property being transferred and is calculated using a sliding scale of property tax. In Ghana, the amount of stamp duty paid is based on the value of the property being transferred and is calculated using a fixed rate.

Building permit fees are often based on the value of the construction project. In many cases, the fees are calculated as a percentage of the estimated construction costs. Knowing the value of the property allows the building department to accurately assess the estimated cost of the construction project and apply the appropriate fee.⁵¹ Considering the example of Australia, building permit fees are based on the value of the construction project: in Sydney, the Building and Development Advisory Service provides a fee calculator

tool that allows users to estimate the cost of building permit fees based on the value of the construction project. Put simply, the rationale behind setting a value of property is to ensure data comparability across all surveyed economies.

Application:

Pillar III of the Business Location topic for Building Permitting and Property Transfer assumes the value of property or construction cost to be 100 times gross national income (GNI) per capita. This value will be provided as an equivalent in local currency of each economy. In the absence of reliable data on property or construction values across all economies, GNI per capita multiplied by 100 is suggested to approximate these values based on respective affordability rates.

5.2.2 Largest Municipality

Justification:

In some cities, there could be one or several municipalities. The Business Location topic, and building permitting in particular, aim to capture the most common practice; hence, the largest municipality in the largest city is considered (in terms of customers served or market share).

Application:

The parameter of the largest municipality in the largest city is relevant to all measures of Pillar II and Pillar III for building permitting because provision of building permits varies depending on the municipality. For Pillar III, the parameter applies to measures on time and cost as efficiency of obtaining a building permit may vary depending on the municipality.

5.2.3 Type and Size of Building

Justification:

To make the data comparable across economies for building permitting, the type and size of building are used as a unit of measurement. Building regulations vary depending on the type of construction being permitted—typically classified as residential, commercial, or industrial. The type and level of pre-approvals and the type of documents to be submitted, as well as the associated regulatory costs, vary with type of construction (for example, residential buildings usually require fewer technical plans, documents, fewer pre-approvals, and lower fees). Regulatory aspects, like technical inspections mandated by law, are also usually governed by the type of construction in question. The size of building affects the cost of permitting. In some cases, it can affect the number of inspections to be conducted during construction, which is often calculated as a fixed fee per square meter/foot or cubic meter. For example, in Singapore, Thailand, and the United Kingdom, fees to obtain building and occupancy permits are based on a fixed fee per square meter/foot or cubic meter. In Jordan, the fees for building permits are calculated based on the number of floors. The size of the building can also affect the fees in property transactions. For example, in Albania local fees are calculated based on the size of the building.

Application:

Pillar III of the Business Location topic for Building Permitting provides specific parameters about the type of building being considered, and its size, and height for the purposes of comparison:

- Type of building: commercial building—in particular, an office building.
- Size of commercial building: 1800 square meters (19,375 square feet)⁵².
 - Computed assuming 5 floors and 360 square meters per floor (3875 square feet).
- Building height: 5 floors, with each floor assumed to be 3 meters (9 ft and 10 inches) high.

5.2.4 Type and Size of Project

Justification:

Environmental clearances and permits requirements vary depending on the size and location of the project, as well as its potential impact on the environment. Establishing clear and transparent criteria for triggering

environmental clearances can help to ensure that all relevant projects are subject to the same scrutiny and can increase public trust and confidence in the clearance process.⁵³ For example, the environmental impact assessment and audit regulations in Tanzania require an environmental impact assessment study to be conducted for projects that are above certain sizes and include housing developments. The threshold for when an EIA is required in Tanzania for housing developments is more than 50 housing units or more than 2 hectares of land.⁵⁴

The size and type of a project can lead to increased stormwater runoff, changes to the hydrology of nearby water bodies, or potential contamination of groundwater resources. Many jurisdictions therefore require developers to obtain permits or approvals related to water quality and management as part of the environmental review process for new construction projects.⁵⁵ In addition, construction projects may have an adverse impact on water resources, particularly in areas with high planned residential density, highlighting the need for effective environmental permitting requirements to protect water quality in these areas.

Application:

Pillar I and Pillar III of the Business Location topic for Environmental Permitting provide for specific parameters for the construction of a housing development project:

- Total surface area of residential housing development project: 10 acres (40,468 sqm).
- Type of residence: Detached single-family house with 1, 2, and 3 bedrooms, each with its own driveway.
- Estimated number of houses: 100 single-family homes.
- Estimated number of residents in the housing project: 600.⁵⁶

V. TOPIC SCORING

The Business Location topic has three pillars: Pillar I—Quality of Regulations for Business Location; Pillar II—Quality of Public Services and Transparency of Information for Business Location, and Pillar III—Operational Efficiency of Establishing a Business Location. The total points for each pillar are further rescaled to values from 0 to 100, and subsequently aggregated into the total topic score. Each pillar contributes one-third to the total topic score. Table 36 shows the scoring for the Business Location topic. The scores distinguish between benefits to the firm (captured as firm flexibility points) and benefits to society’s broader interests (captured as social benefits points). For further scoring details, please see Annex A, which complements this section.

Table 36. Aggregate Scoring Overview

Pillar Number	Pillar	Number of Indicators	Score			Rescaled Points (0-100)	Weight
			Firm Flexibility Points	Social Benefits Points	Total Points		
I	Quality of Regulations for Business Location	62	44	43	87	100.00	0.33
II	Quality of Public Services and Transparency of Information for Business Location	46	46	46	92	100.00	0.33
III	Operational Efficiency of Establishing a Business Location	8	100	n/a	100	100.00	0.33

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent).

6.1 Pillar I–Quality of Regulations for Business Location

Pillar I covers 62 indicators with a total score of 87 points (44 points on firm flexibility and 43 points on social benefits) (table 37). The scoring for each category under this pillar is as follows:

- 6.1.1** *Property Transfer and Land Administration* has 11 indicators with a total maximum score of 22 points (11 points on firm flexibility and 11 points on social benefits). Specifically, this category has three subcategories. The *Property Transfer Standards* Subcategory has 4 indicators. The *Land Dispute Mechanisms* Subcategory has 4 indicators. The *Land Administration System* Subcategory has 3 indicators. A regulatory framework that ensures efficiency of land administration systems and effective dispute resolution mechanisms benefits both firms (firm flexibility) and society/customers (social benefits). Hence, equal points are assigned to both categories.
- 6.1.2** *Building, Zoning, and Land Use* has 20 indicators with a total maximum score of 32 points (12 points on firm flexibility and 20 points on social benefits). Specifically, the *Building Standards* Subcategory has 11 indicators; the *Building Energy Standards* Subcategory has 4 indicators; the *Zoning, and Land Use Regulations* Subcategory has 5 indicators. Some measures under this category have either a neutral impact on firms, or an ambiguous impact and hence are not scored.
- 6.1.3** *Restrictions on Owning and Leasing Property* has 19 indicators with a total maximum score of 19 points (19 points on firm flexibility and 0 on social benefits). Specifically, this category has 4 subcategories: the *Domestic Firms–Ownership* Subcategory has 4 indicators; the *Domestic Firms–Leasehold* Subcategory has 5 indicators; the *Foreign Firms–Ownership* Subcategory has 5 indicators; and the *Foreign Firms–Leasehold* Subcategory has 5 indicators. A regulatory framework that imposes restrictions on lease or ownership of property can create obstacles to developing a business. Therefore, it is important to eliminate such barriers to promote a flexible environment for firms (firm flexibility). On the other hand, the short-term impact of such restriction on society is ambiguous (social benefits). Hence, points are only assigned to firm flexibility.
- 6.1.4** *Environmental Permits* has 12 indicators with a total maximum score of 14 points (2 points on firm flexibility and 12 points on social benefits). Specifically, this category has 2 subcategories; the *Environmental Permits for Construction* Subcategory has 10 indicators, and the *Dispute Mechanisms for Construction-Related Environmental Permits* Subcategory has 2 indicators. The positive impact for society is derived from enhanced environmental sustainability and improved adherence to environmental standards. Some measures under this category have either a neutral impact on firms, or an ambiguous impact and hence are not scored.

Table 37. Aggregate Scoring Pillar I

Pillar I–Quality of Regulations for Business Location		No. of Indicators	FFP	SBP	Total Points	Rescaled Points
1.1	Property Transfer and Land Administration	11	11	11	22	40.00
1.1.1	Property Transfer Standards	4	4	4	8	15.00
1.1.2	Land Dispute Mechanism	4	4	4	8	15.00
1.1.3	Land Administration System	3	3	3	6	10.00
1.2	Building, Zoning, and Land Use	20	12	20	32	40.00
1.2.1	Building Standards	11	7	11	18	15.00
1.2.2	Building Energy Standards	4	0	4	4	15.00
1.2.3	Zoning and Land Use Regulations	5	5	5	10	10.00
1.3	Restrictions on Owning and Leasing Property	19	19	0	19	10.00
1.3.1	Domestic Firms–Ownership	4	4	0	4	2.50

1.3.2	Domestic Firms–Leasehold	5	5	0	5	2.50
1.3.3	Foreign Firms–Ownership	5	5	0	5	2.50
1.3.4	Foreign Firms–Leasehold	5	5	0	5	2.50
1.4	Environmental Permits	12	2	12	14	10.00
1.4.1	Environmental Permits for Construction	10	0	10	10	5.00
1.4.2	Dispute Mechanisms for Construction-Related Environmental Permits	2	2	2	4	5.00
	Total	62	44	43	87	100.00

Note: n/a= not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent). FFP = Firm Flexibility Point; SBP = Social Benefits Point.

6.2 Pillar II–Quality of Public Services and Transparency of Information for Business Location

Pillar II includes 46 indicators with a total score of 92 points (46 points on firm flexibility and 46 points on social benefits) (table 38). The scoring for each category under the pillar is as follows:

- 6.2.1** *Availability and Reliability of Digital Services* has 21 indicators with a total maximum score of 42 points (21 points on firm flexibility and 21 points on social benefits). Specifically, the *Property Transfer–Digital Public Services* Subcategory has 6 indicators; the *Property Transfer– Digital Land Management and Identification System* Subcategory has 5 indicators; the *Property Transfer– Coverage of the Land Registry and Mapping Agency* Subcategory has 4 indicators; the *Building Permits–Digital Public Services* has 4 indicators and the *Environmental Permits–Digital Public Services* Subcategory has 2 indicators. Availability of online services for property transactions, building permitting and environmental permitting increases efficiency and supports public accountability, therefore extending benefits to firms (firm flexibility) and society as a whole (social benefits). Hence, equal points are assigned to both categories.
- 6.2.2** *Interoperability of Services* has 6 indicators with a total maximum score of 12 points (6 points on firm flexibility and 6 points on social benefits). Specifically, the *Interoperability of Services for Property Transfer* Subcategory has 4 indicators; and the *Interoperability of Services for Building Permits* Subcategory has 2 indicators. A regulatory framework that promotes the integration and compatibility of different systems and services related land administration and building control services provides for greater transparency and efficiency of services and benefits both firms (firm flexibility) and society (social benefits). Hence, equal points are assigned to both categories.
- 6.2.3** *Transparency of Information* has 19 indicators with a total maximum score of 38 points (19 points on firm flexibility and 19 on social benefits). Specifically, the *Immovable Property (includes gender)* Subcategory has 9 indicators; the *Building, Zoning and Land Use* Subcategory has 8 indicators; and the *Environmental Permits* Subcategory has 2 indicators. A regulatory framework that ensures transparency of land administration, building control and environmental permitting services provides firms with clarity and predictability regarding the rules and regulations they need to comply with, which in turn allows them to operate with greater flexibility and adaptability. This can result in increased innovation, competitiveness, and profitability for businesses, which benefits both firms (firm flexibility) and society (social benefits). Hence, equal points are assigned to both categories.

Table 38. Aggregate Scoring Pillar II

Pillar II–Quality of Public Services and Transparency of Information for Business Location		No. of Indicators	FFP	SBP	Total Points	Rescaled Points
2.1	Availability and Reliability of Digital Services	21	21	21	42	40.00
2.1.1	Property Transfer–Digital Public Services	6	6	6	12	8.00

2.1.2	Property Transfer–Digital Land Management and Identification System	5	5	5	10	8.00
2.1.3	Property Transfer–Coverage of the Land Registry and Mapping Agency	4	4	4	8	8.00
2.1.4	Building Permits–Digital Public Services	4	4	4	8	8.00
2.1.5	Environmental Permits– Digital Public Services	2	2	2	4	8.00
2.2	Interoperability of Services	6	6	6	12	20.00
2.2.1	Interoperability of Services for Property Transfer	4	4	4	8	10.00
2.2.2	Interoperability of Services for Building Permits	2	2	2	4	10.00
2.3	Transparency of Information	19	19	19	38	40.00
2.3.1	Immovable Property (includes gender)	9	9	9	18	20.00
2.3.2	Building, Zoning and Land Use	8	8	8	16	15.00
2.3.3	Environmental Permits	2	2	2	4	5.00
	Total	46	46	46	92	100.00

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

6.3 Pillar III–Operational Efficiency of Establishing a Business Location

Pillar III has 8 indicators with scores ranging from 0 to 100 on firm flexibility (table 39). The scores on indicators under this pillar are assigned to firm flexibility only, as the indicators measure the outcomes of service provision to firms. For example, high fees and long times to transfer a property or to obtain building and environmental permits have adverse impacts on firms, thus reducing the firm flexibility score.

6.3.1 *Property Transfer and Land Administration* has 3 indicators with a total maximum score of 40 points. Specifically, the *Major Constraints on Access to Land* Subcategory has 1 indicator, the *Time to Obtain a Property Transfer* Subcategory has 1 indicator and the *Cost to Obtain a Property Transfer* Subcategory has 1 indicator.

6.3.2 *Construction Permits* has 3 indicators with a total maximum score of 40 points. Specifically, the *Time to Obtain Construction-Related Permits* Subcategory has 1 indicator, the *Time to Obtain a Building Permit* Subcategory has 1 indicator and the *Cost to Obtain a Building Permit* Subcategory has 1 indicator.

6.3.3 *Environmental Permits* has 2 indicators with a total maximum score of 20 points. Specifically, the *Time to Obtain an Environmental Permit* Subcategory has 1 indicator and the *Cost to Obtain an Environmental Permit* Subcategory has 1 indicator.

Table 39. Aggregate Scoring Pillar III

Pillar III–Operational Efficiency of Establishing a Business Location		No. of Indicators	Rescaled Points
3.1	Property Transfer and Land Administration	3	40.00
3.1.1	Major Constraints on Access to Land	1	13.33
3.1.2	Time to Obtain a Property Transfer	1	13.33
3.1.3	Cost to Obtain a Property Transfer	1	13.33
3.2	Construction Permits	3	40.00
3.2.1	Time to Obtain Construction-Related Permits	1	13.33
3.2.2	Time to Obtain a Building Permit	1	13.33
3.2.3	Cost to Obtain a Building Permit	1	13.33
3.3	Environmental Permit	2	20.00
3.3.1	Time to Obtain an Environmental Permit	1	10.00
3.3.2	Cost to Obtain an Environmental Permit	1	10.00

	Total	8	100.00
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Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

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ANNEX A. BUSINESS LOCATION–SCORING SHEET

This document outlines the scoring approach for the Business Location topic. For every indicator, a Firm Flexibility Point (FFP) and/or a Social Benefits Point (SBP) are assigned, along with a clarification on the detailed scoring for each such indicator and a note on the relevant background literature.

PILLAR I–QUALITY OF REGULATIONS FOR BUSINESS LOCATION					
1.1. PROPERTY TRANSFER AND LAND ADMINISTRATION					
1.1.1 Property Transfer Standards					
Indicators	FFP	SBP	Total Points	Rescaled Points	Background Literature
Legal Obligation to Check Compliance of Documents with the Law	1	1	2	3.75	Bennison (2006); Deininger and Feder (2009)
Legal Obligation to Verify Identities of the Parties	1	1	2	3.75	Bennison (2006); Deininger and Feder (2009)
Legal Obligation to Register Sales Transactions	1	1	2	3.75	Bennison (2006); Deininger and Feder (2009)
Legal Provision on the Legality of Online Documents	1	1	2	3.75	Bennison (2006); Deininger and Feder (2009)
Total Points for Subcategory 1.1.1	4	4	8	15.00	
1.1.2 Land Dispute Mechanisms					
Legal Provisions for Arbitration as an Alternative Land Disputes Resolution Mechanism	1	1	2	3.75	Deininger and Feder (1996); Gathii (2013); Wehrmann (2008)
Legal Provisions for Conciliation and Mediation as Alternative Land Disputes Resolution Mechanisms	1	1	2	3.75	Deininger and Feder (1996); Gathii (2013); Wehrmann (2008)
Legal Provisions to Provide Out-of-Court Compensation for Losses due to Erroneous Information from the Land Registry	1	1	2	3.75	Deininger and Feder (1996); Gathii (2013); Wehrmann (2008)
Legal Provision for Protection of Property Title	1	1	2	3.75	Deininger and Feder (1996); Gathii (2013); Wehrmann (2008)
Total Points for Subcategory 1.1.2	4	4	8	15.00	
1.1.3 Land Administration System					
Disclosure of Land Registry Information	1	1	2	3.33	Deininger and Feder (2009); Deininger and Selod (2012); Zakout, Wehrmann, and Törhönen (2006)
Disclosure of Cadastral Information	1	1	2	3.33	Deininger and Feder (2009); Deininger and Selod (2012); Zakout, Wehrmann, and Törhönen (2006)
Infrastructure for Land Administration	1	1	2	3.33	Deininger and Feder (2009); Deininger and Selod (2012); Zakout, Wehrmann, and Törhönen (2006)
Total Points for Subcategory 1.1.3	3	3	6	10.00	

Total Points for Category 1.1	11	11	22	40.00	
1.2 BUILDING, ZONING AND LAND USE					
1.2.1 Building Standards					
Building Codes/Standards Applicable to All Constructions	1	1	2	1.67	IFC, World Bank, and MIGA (2013)
Clear Provisions or Guidelines Regarding Safety Standards	n/a	1	1	0.83	IFC, World Bank, and MIGA (2013)
Regulation of Health Risk Related to Construction Materials	n/a	1	1	0.83	IFC, World Bank, and MIGA (2013)
List of Regulated Materials	n/a	1	1	0.83	IFC, World Bank, and MIGA (2013)
Responsibility for Compliance with Legal Requirements	1	1	2	1.67	IFC, World Bank, and MIGA (2013)
Type of Inspections Carried Out during Construction	1	1	2	1.67	IFC, World Bank, and MIGA (2013)
Requirement of Final Inspection by Law	1	1	2	1.67	IFC, World Bank, and MIGA (2013)
Materials Required to be Inspected/Tested by Law	n/a	1	1	0.83	IFC, World Bank, and MIGA (2013)
Liability for Structural Flaws/Problems	1	1	2	1.67	IFC, World Bank, and MIGA (2013)
Qualifications to Conduct Technical Supervision/Inspections	1	1	2	1.67	IFC, World Bank, and MIGA (2013)
Ability to Dispute Building Permit Decisions	1	1	2	1.67	IFC, World Bank, and MIGA (2013)
Total Points for Subcategory 1.2.1	7	11	18	15.00	
1.2.2 Building Energy Standards					
Mandatory Minimum Energy Efficiency Performance Standards	n/a	1	1	3.75	Garrido, Tapia, and Vergara (2019); Rosenberg et al. (2014)
Pre-Condition to Provide Proof of Design Compliance with the Energy Efficiency Performance Standards	n/a	1	1	3.75	Garrido, Tapia, and Vergara (2019); Rosenberg et al. (2014)
Energy Efficiency Performance Standards are Verified as Part of the Building Plans Review Process	n/a	1	1	3.75	Garrido, Tapia, and Vergara (2019); Rosenberg et al. (2014)
Incentives to Promote Green Building Standards	n/a	1	1	3.75	Garrido, Tapia, and Vergara (2019); Rosenberg et al. (2014)
Total Points for Subcategory 1.2.2	n/a	4	4	15.00	
1.2.3 Zoning and Land Use Regulations					
Requirements for Trunk Infrastructure Service Access (Water, Electricity, Sanitation)	1	1	2	2.00	Babatunde, Yusuf, and Ogunbode (2016); Boonyabancha, Singhadej, and Dhanapal (2017); World Bank Group, Zoning and Land Use Planning
Maps that Identify Areas Allocated to Residential, Commercial, Agricultural, Recreational, Public/Institutional, Mixed Use	1	1	2	2.00	Babatunde, Yusuf, and Ogunbode (2016); Boonyabancha, Singhadej, and Dhanapal (2017); World Bank Group, Zoning and Land Use Planning

Hazard Maps that Identify Areas in which Building is Not Permitted due to Natural Hazards	1	1	2	2.00	Babatunde, Yusuf, and Ogunbode (2016); Boonyabancha, Singhadej, and Dhanapal (2017); World Bank Group, Zoning and Land Use Planning
Hazard Maps that Identify Minimum Separation between Residential and Hazardous Occupancies	1	1	2	2.00	Babatunde, Yusuf, and Ogunbode (2016); Boonyabancha, Singhadej, and Dhanapal (2017); World Bank Group, Zoning and Land Use Planning
Maps that Identify Areas in which Building is Not Permitted in relation to Natural Resources	1	1	2	2.00	Babatunde, Yusuf, and Ogunbode (2016); Boonyabancha, Singhadej, and Dhanapal (2017); World Bank Group, Zoning and Land Use Planning
Total Points for Subcategory 1.2.3	5	5	10	10.00	
Total Points for Category 1.2	12	20	32	40.00	
1.3 RESTRICTIONS ON OWNING AND LEASING PROPERTY					
1.3.1 Domestic Firms–Ownership					
Restriction on Ownership Based on the Area of the Land for Domestic Firms	1	n/a	1	0.625	Dasgupta and Singh (2006)
Restriction on Ownership Based on the Location of Property for Domestic Firms	1	n/a	1	0.625	Dasgupta and Singh (2006)
Restriction on Ownership of Agricultural Land for Domestic Firms	1	n/a	1	0.625	Dasgupta and Singh (2006)
Restriction on Ownership Based on the Height of Building for Domestic Firms	1	n/a	1	0.625	Dasgupta and Singh (2006)
Total Points for Subcategory 1.3.1	4	0	4	2.50	
1.3.2 Domestic Firms–Leasehold					
Restriction on Leasehold Based on the Area of the Land for Domestic Firms	1	n/a	1	0.50	Halpern and Lutz (2014); Hodge and Greve (2017)
Restriction on the Duration of the Lease for Domestic Firms	1	n/a	1	0.50	Halpern and Lutz (2014); Hodge and Greve (2017)
Restriction on Leasehold Based on the Location of Property for Domestic Firms	1	n/a	1	0.50	Halpern and Lutz (2014); Hodge and Greve (2017)
Restriction on Leasehold of Agricultural Property for Domestic Firms	1	n/a	1	0.50	Halpern and Lutz (2014); Hodge and Greve (2017)
Restrictions on Leasehold Based on the Height of Building for Domestic Firms	1	n/a	1	0.50	Halpern and Lutz (2014); Hodge and Greve (2017)
Total Points for Subcategory 1.3.2	5	0	5	2.50	
1.3.3 Foreign Firms–Ownership					
Restriction on Ownership Based on the Area of the Land for Foreign Firms	1	n/a	1	0.50	Liao and Zhang (2016); Tan (2004)
Restriction on the Duration of Ownership for Foreign Firms	1	n/a	1	0.50	Liao and Zhang (2016); Tan (2004)

Restriction on Property Ownership Based on Location of Property for Foreign Firms	1	n/a	1	0.50	Liao and Zhang (2016); Tan (2004)
Restriction on Ownership of Agricultural Land for Foreign Firms	1	n/a	1	0.50	Liao and Zhang (2016); Tan (2004)
Restriction on Ownership Based on the Height of Building for Foreign Firms	1	n/a	1	0.50	Liao and Zhang (2016); Tan (2004)
Total Points for Subcategory 1.3.3	5	0	5	2.50	
1.3.4 Foreign Firms–Leasehold					
Restriction on Leasehold Based on the Area of the Land for Foreign Firms	1	n/a	1	0.50	Golub (2003); Lee, Lee, and Lee (2014)
Restriction on the Duration of Lease for Foreign Firms	1	n/a	1	0.50	Golub (2003); Lee, Lee, and Lee (2014)
Restriction on leasehold Based on the Location of Property for Foreign Firms	1	n/a	1	0.50	Golub (2003); Lee, Lee, and Lee (2014)
Restriction on Leasehold of Agricultural Land for Foreign Firms	1	n/a	1	0.50	Golub (2003); Lee, Lee, and Lee (2014)
Restrictions on Leasehold Based on the Height of Building for Foreign Firms	1	n/a	1	0.50	Golub (2003); Lee, Lee, and Lee (2014)
Total Points for Subcategory 1.3.4	5	0	5	2.50	
Total Points for Category 1.3	19	0	19	10	
1.4 ENVIRONMENTAL PERMITS					
1.4.1 Environmental Permits for Construction					
Existence of National Environmental Regulations during Construction	n/a	1	1	0.50	Grunwald, Bendt, and Kopfmüller (2016); Gupta and Bansal (2014); Ryan and O'Regan (2015)
Update or Revision of National Environmental Regulations during Construction	n/a	1	1	0.50	Grunwald, Bendt, and Kopfmüller (2016); Gupta and Bansal (2014); Ryan and O'Regan (2015)
Penalties or Fines in Place for Non-Compliance with the Regulations	n/a	1	1	0.50	Grunwald, Bendt, and Kopfmüller (2016); Gupta and Bansal (2014); Ryan and O'Regan (2015)
Environmental Risks as Defined by Legal Framework	n/a	1	1	0.50	Grunwald, Bendt, and Kopfmüller (2016); Gupta and Bansal (2014); Ryan and O'Regan (2015)
Qualified Professional/Professional Agency to Conduct EIA	n/a	1	1	0.50	Grunwald, Bendt, and Kopfmüller (2016); Gupta and Bansal (2014); Ryan and O'Regan (2015)
Criteria that Trigger an EIA	n/a	1	1	0.50	Grunwald, Bendt, and Kopfmüller (2016); Gupta and Bansal (2014); Ryan and O'Regan (2015)
Requirements for an EIA Process	n/a	1	1	0.50	Grunwald, Bendt, and Kopfmüller (2016); Gupta and Bansal (2014); Ryan and O'Regan (2015)
Legal Responsibility for Checking Compliance	n/a	1	1	0.50	Grunwald, Bendt, and Kopfmüller (2016); Gupta and Bansal (2014); Ryan and O'Regan (2015)
Legal Framework Mandates Public Consultations with Concerned Stakeholders	n/a	1	1	0.50	Grunwald, Bendt, and Kopfmüller (2016); Gupta and Bansal (2014); Ryan and O'Regan (2015)

Public Consultations Requirement Elements	n/a	1	1	0.50	Grunwald, Bendt, and Kopfmüller (2016); Gupta and Bansal (2014); Ryan and O'Regan (2015)
Total Points for Subcategory 1.4.1	0	10	10	5.00	
1.4.2 Dispute Mechanisms for Construction-Related Environmental Permits					
Ability to Dispute Environmental Clearances and Permits	1	1	2	2.50	Ramanathan et al. (2018); Sánchez-Triana et al. (2014); Wang and Liu (2015); World Bank (2014)
Out of Court Resolution Mechanisms for Environmental Disputes	1	1	2	2.50	Ramanathan et al. (2018); Sánchez-Triana et al. (2014); Wang and Liu (2015); World Bank (2014)
Total Points for Subcategory 1.4.2	2	2	4	5.00	
Total Points for Category 1.4	2	12	14	10.00	
Total Points for Pillar I	44	43	87	100.00	

Note: n/a= not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent). FFP = Firm Flexibility Point; SBP = Social Benefits Point.

PILLAR II–QUALITY OF PUBLIC SERVICES AND TRANSPARENCY OF INFORMATION FOR BUSINESS LOCATION					
2.1 AVAILABILITY AND RELIABILITY OF DIGITAL SERVICES					
2.1.1 Property Transfer–Digital Public Services					
Indicators	FFP	SBP	Total Points	Rescaled Points	Background Literature
Online Platform Encumbrance Checking	1	1	2	1.33	Williamson (2001)
Single Online Platform for Encumbrance Checking	1	1	2	1.33	Williamson (2001)
Online Platform for Property Transfer	1	1	2	1.33	Williamson (2001)
Processes Available Online for Property Transfer	1	1	2	1.33	Williamson (2001)
Complaint Mechanisms for Immovable Property Registry	1	1	2	1.33	Williamson (2001)
Complaint Mechanisms for Cadaster	1	1	2	1.33	Williamson (2001)
Total Points for Subcategory 2.1.1	6	6	12	8.00	
2.1.2 Property Transfer–Digital Land Management and Identification System					
Electronic Database for Checking Encumbrances	1	1	2	1.60	Gao et al. (2020); Green and Moser (2013); Gupta, Dunning, and McAllister (2020)
Format of Land Title Certificates	1	1	2	1.60	Gao et al. (2020); Green and Moser (2013); Gupta, Dunning, and McAllister (2020)
Format of Cadastral Plans	1	1	2	1.60	Gao et al. (2020); Green and Moser (2013); Gupta, Dunning, and McAllister (2020)
Method to Conduct Cadastral Surveying	1	1	2	1.60	Gao et al. (2020); Green and Moser (2013); Gupta, Dunning, and McAllister (2020)
National Database for Checking Identification	1	1	2	1.60	Gao et al. (2020); Green and Moser (2013); Gupta, Dunning, and McAllister (2020)
Total Points for Subcategory 2.1.2	5	5	10	8.00	
2.1.3 Property Transfer–Coverage of the Land Registry and Mapping Agency					
Property Registration Coverage at Main Business City Level	1	1	2	2.00	Deininger and Feder (2009)
Property Registration Coverage at National Level	1	1	2	2.00	Deininger and Feder (2009)
Cadastral Coverage at Main City Level	1	1	2	2.00	Deininger and Feder (2009)
Cadastral Coverage at National Level	1	1	2	2.00	Deininger and Feder (2009)
Total Points for Subcategory 2.1.3	4	4	8	8.00	
2.1.4 Building Permits–Digital Public Services					

Online Platform for Issuing Building Authorizations	1	1	2	2.00	Charalambous, Cimren, and Bano (2018); Linnenberg, Gür, and Gür (2020)
Online Permitting Systems with Several Functionalities	1	1	2	2.00	Charalambous, Cimren, and Bano (2018); Linnenberg, Gür, and Gür (2020)
Online Permitting Systems to Submit Building and Occupancy Permits	1	1	2	2.00	Charalambous, Cimren, and Bano (2018); Linnenberg, Gür, and Gür (2020)
File Dispute Online on Building Permits	1	1	2	2.00	Ramanathan et al. (2018); Sánchez-Triana et al. (2014); Wang and Liu (2015); World Bank (2014)
Total Points for Subcategory 2.1.4	4	4	8	8.00	
2.1.5 Environmental Permits–Digital Public Services					
Online Environmental Permitting Systems with Several Functionalities	1	1	2	4.00	Charalambous, Cimren, and Bano (2018); Linnenberg, Gür, and Gür (2020)
File Dispute Online on Environmental Licensing	1	1	2	4.00	Charalambous, Cimren, and Bano (2018); Linnenberg, Gür, and Gür (2020)
Total Points for Subcategory 2.1.4	2	2	4	8.00	
Total Point for Category 2.1	21	21	42	40.00	
2.2 INTEROPERABILITY OF SERVICES					
2.2.1 Interoperability of Services for Property Transfer					
Interoperability between Land Registry and Cadaster	1	1	2	2.50	ILC (2017); NIST (2007)
Interoperability between Land Registry and Other Services	1	1	2	2.50	ILC (2017); NIST (2007)
Existence of a Geographic Information System (GIS)	1	1	2	2.50	ILC (2017); NIST (2007)
Existence of a Unique Identifier between Land Registry and Cadaster	1	1	2	2.50	ILC (2017); NIST (2007)
Total Points for Subcategory 2.2.1	4	4	8	10.00	
2.2.2 Interoperability of Services for Building Permits					
Availability of Spatial Plans and Zoning Requirements to All Stakeholders	1	1	2	5.00	Sarris, Tzovaras, and Doukas (2020)
Integration of GIS or National Spatial Platforms	1	1	2	5.00	Sarris, Tzovaras, and Doukas (2020)
Total Points for Subcategory 2.2.2	2	2	4	10.00	
Total Points for Category 2.2	6	6	12	20.00	
2.3 TRANSPARENCY OF INFORMATION					
2.3.1 Immovable Property (includes gender)					
Publication of Property Transactions Requirements	1	1	2	2.22	Van der Molen (2007)

Transparency of Property Transactions Costs	1	1	2	2.22	Van der Molen (2007)
Service Standards at the Land Registry	1	1	2	2.22	Van der Molen (2007)
Transparency of Cadaster Costs	1	1	2	2.22	Van der Molen (2007)
Service Standards at the Cadaster	1	1	2	2.22	Van der Molen (2007)
Availability of Statistics on Land Transactions	1	1	2	2.22	Van der Molen (2007)
Availability of Statistics on Number and Type of Land Disputes	1	1	2	2.22	Van der Molen (2007)
Availability of Statistics on the Average Time to Resolve Land Disputes	1	1	2	2.22	Van der Molen (2007)
Availability of Sex-Disaggregated Data on Property Ownership	1	1	2	2.22	FAO (2013)
Total Points for Subcategory 2.3.1	9	9	18	20.00	
2.3.2 Building, Zoning and Land Use					
Public Accessibility of Planning and Building Control Regulations	1	1	2	1.875	OECD (2019)
Public Online Availability of Requirements to Obtain All Types of Building Related Permits	1	1	2	1.875	OECD (2019)
Public Online Availability of Requirements Needed to Obtain Occupancy Permit	1	1	2	1.875	OECD (2019)
Applicable Fee Schedules for All Types of Construction Publicly Available and Up to Date	1	1	2	1.875	OECD (2019)
Availability of Official, Updated and Publicly Available Online Statistics Tracking the Number of Issued Building Permits	1	1	2	1.875	OECD (2019)
Updated City Master Plan/Zoning Plan	1	1	2	1.875	OECD (2019)
Steps to Modify Zoning/Land Use Plan	1	1	2	1.875	OECD (2019)
Adherence to Zoning Regulations	1	1	2	1.875	OECD (2019)
Total Points for Subcategory 2.3.2	8	8	16	15.00	
2.3.3 Environmental Permits					
Public Online Availability of Environmental Licensing Requirements for Moderate-Risk Construction Project	1	1	2	2.50	Davis and Barlow (2017)
Applicable and Up-to-Date Fee Schedule for Environmental Clearances	1	1	2	2.50	Davis and Barlow (2017)
Total Points for Subcategory 2.3.3	2	2	4	5.00	
Total Points for Category 2.3	19	19	38	40.00	
Total Points for Pillar II	46	46	92	100.00	

Note: FFP = Firm Flexibility Point; GIS = Geographic Information System; SBP = Social Benefits Point.

PILLAR III—OPERATIONAL EFFICIENCY OF ESTABLISHING A BUSINESS LOCATION					
3.1 PROPERTY TRANSFER AND LAND ADMINISTRATION					
Indicators	FFP	SBP	Total Points	Rescaled Points	Background Literature
Major Constraints on Access to Land (ES) <i>Percent of Firms Identifying Access to Land as a Major or Very Severe Constraint</i>	33.33	n/a	33.33	13.33	Amadi-Enchendu and Pellissier (2014)
Time to Obtain a Property Transfer	33.33	n/a	33.33	13.33	Moussa and Li (2020); Wang and Cen (2016)
Cost to Obtain a Property Transfer	33.33	n/a	33.33	13.33	Kuprenas and Chalmers (1999); NAHB (2021)
Total Points for Category 3.1	100	n/a	100	40.00	
3.2 CONSTRUCTION PERMITS					
Time to Obtain Construction-Related Permits (ES) <i>Time Taken by Firms to Obtain a Construction Related Permit</i>	33.33	n/a	33.33	13.33	IBA (2019); UNECE (2018)
Time to Obtain a Building Permit	33.33	n/a	33.33	13.33	IBA (2019); UNECE (2018)
Cost to Obtain a Building Permit	33.33	n/a	33.33	13.33	Kuprenas and Chalmers (1999); NAHB (2021)
Total Points for Category 3.2	100	n/a	100	40.00	
3.3 ENVIRONMENTAL PERMIT					
Time to Obtain an Environmental Permit	50	n/a	50	10.00	Ghosh (2013)
Cost to Obtain an Environmental Permit	50	n/a	50	10.00	Ghosh (2013)
Total Points for Category 3.3	100	n/a	100	20.00	
Total Points for Pillar III	100	n/a	100	100.00	

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent). FFP = Firm Flexibility Point; SBP = Social Benefits Point.

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ANNEX B. BUSINESS LOCATION–ANNOTATED QUESTIONNAIRE

Annex B consists of a Glossary and Annotated Questionnaires for Property Transfer, Building Permits and Environmental Permits. The Annotated Questionnaire provides the mapping between each indicator and the corresponding question(s). Due to the presence of multiple questionnaires, the numbering of categories in the Annotated Questionnaire does not match the Business Location topic methodology note.

Glossary

Active fire safety measures: Systems that require some amount of action or motion in order to work effectively in the event of a fire (for example, fire extinguisher or sprinkler system).

Arbitration: Process of dispute resolution between a government agency responsible for issuing permits and an applicant seeking a permit. Arbitration may be used when there are disagreements or conflicts related to the issuance of a permit, such as when an application is denied or when conditions attached to a permit are contested.

Cadaster: An official register showing details of ownership, boundaries, and value of real property in a district, made for taxation purposes.

Commercial building: Buildings where commercial activities take place. Commercial buildings include office buildings, retail space, warehouses, and more.

Commercial construction: A property where the land is vacant of all buildings and the owner plans on constructing offices dedicated solely to conducting business (with no residential dwellings on site).

Conciliation: A form of alternative dispute resolution that is often used as an alternative to traditional litigation or arbitration. In conciliation, a neutral third party, called a conciliator, is appointed to facilitate the negotiation and mediation process between the parties. The conciliator does not have the power to make a final decision, but instead works to facilitate communication and understanding between the parties in order to reach a mutually acceptable agreement.

Contractual law: Law that involves agreements between people, businesses, and groups and carries legal responsibilities if the agreement is breached.

Dedicated green management teams: Teams in building and planning departments that are dedicated to helping builders plan and build green buildings.

Digitalized documents: All scanned (digitalized) pdf files are uploaded online and can be accessed anytime by anyone with an internet connection.

Digitized documents: Information and data that have been transformed (digitized) from a physical format to a digital one. All physical copies of deeds and cadastral plans are scanned and converted to a pdf file and are saved on a computer.

Direct surveying: Geodesic and topographic surveys that are conducted in situ (on-site surveying).

Discounted development application: A discount on the development application fee provided to builders as an incentive for adopting green building measures.

Expedited permitting: Allows a municipality to offer a significant incentive for green buildings at little or no cost because this strategy only requires a shift in permitting priority.

Environmental scoping: A more detailed process than environmental screening that aims to identify the key environmental issues and potential impacts that need to be addressed in a comprehensive environmental impact assessment.

Environmental screening: The activity of deciding which matters will be investigated as part of the environmental assessment (EIA), once a decision has been made that an EIA is required (that is, once a screening decision has been made).

Fire safety measures: A set of precautions and systems put in place to reduce the risk of fires and ensure the safety of occupants in a building. These measures are typically required by building codes and regulations, and may include both passive and active fire safety systems.

Floor-to-Area density (FAR) bonus: A zoning incentive offered by local governments to encourage developers to build more densely on a given parcel of land than the zoning code would otherwise allow.

Full environmental impact assessment: Evaluation of the effects of public and private projects on the environment. The assessment will be proportionate to the potential risks and impacts of the project, and will assess, in an integrated way, all relevant direct, indirect, and cumulative environmental and social risks and impacts throughout the project life cycle. Key stages in the environmental assessment process include screening, alternatives, preliminary assessment, scoping, mitigation, main EIA study and environmental impact statement, review, and monitoring.

Geographic Information System (GIS): A computer-based system designed to capture, store, analyze, manipulate, and present spatial or geographic data. It is a fully digital geographic representation of the plot of land, showing both the spatial information and the different attributes.

Green building standards: A model code that contains minimum requirements for increasing the environmental and health performance of buildings, sites, and structures.

Guarantee: Either the government or another authorized agency provides a legal guarantee that the person listed on the title has clear and undisputed ownership rights to that property.

Guarantee program: Incentive for green buildings that provides financial support to building owners, developers, or lenders to encourage the construction or renovation of buildings that meet certain environmental standards. The guarantee program provides a guarantee or insurance policy that the building will perform as intended and meet specified environmental standards. The guarantee may cover the cost of energy savings or other environmental benefits that the building will provide over a certain period of time, typically several years.

Housing development project: One or more buildings that collectively contain ten or more new or additional housing units on one or more parcels or lots under common ownership or control, including contiguous parcels.

Indirect surveying: The method of measuring land features and boundaries using indirect methods, such as aerial photography, satellite imagery, or remote sensing techniques.

List of requirements: Includes all the documents and steps necessary to obtain a building permit.

Mediation: Dispute resolution process that involves a neutral third party, called a mediator, facilitating negotiations between two or more parties involved in a permitting process. The goal of mediation is to help the parties reach a mutually acceptable agreement or settlement, without the need for a formal hearing or legal proceeding.

Mixed surveying: A combination of on-site surveying of land and indirect surveying.

National building code: The set of standards established at national level and enforced by local government for the structural safety of buildings.

Net metering: An electricity billing mechanism that allows consumers who generate some or all of their own electricity to use that electricity anytime, instead of when it is generated.

Out-of-court compensation mechanism: A compensation scheme established by law to compensate people who suffer loss or damage, through no fault of their own, because of an error at the land registry.

Passive fire safety measures: Systems that compartmentalize a building through the use of fire-resistance-rated walls/floors, doors, and gap-filling measures.

Phased inspections: Inspections that are carried out at specific stages during construction.

Private title insurance: Private title insurance guarantees indemnity to the new owner of a property if there is a defect in the title or encumbrances are discovered in the property later on.

Public consultation: Effective community engagement through disclosure of project-related information, consultation, and effective feedback in particular with affected communities, and in providing project-based grievance mechanisms. Such information will be disclosed in a timely manner, in an accessible place, and in a form and language understandable to project-affected parties and other interested parties.

Qualification exam: Any examination that one needs to pass in order to being able to practice legally as an engineer or architect.

Quality control: The strength of quality control and safety mechanisms during the construction process, the liability and insurance regimes, and professional certification requirements to conduct the construction.

Random/unscheduled technical inspection: Inspections that can occur at any time or at any stage during construction).

Registration of deeds: A system whereby a register of documents is maintained relating to the transfer of rights in land.

Registration of title: A system whereby a register of ownership of land is maintained based on the parcel rather than the owner or the deeds transfer.

Regulatory relief: A nonfinancial incentive for green buildings that involves simplified regulatory processing or reduced regulatory processing for builders if green building elements are adopted in the construction.

Risk-based type inspections: The law assigns risk by outlining the classification of buildings by type, by occupancy or intended usage, and by size such as floor area and wall height among other relevant criteria.

Simplified environmental impact assessment: Environmental permit involving environmental study with limited scope.

State guarantee: The title is guaranteed by the state and in the event of a defect in the title, it is the state that will compensate for the loss.

Strategic environmental assessment: A systematic examination of environmental and social risks and impacts, and issues associated with a policy, plan, or program, typically at the national level but also in smaller areas. The examination of environmental and social risks and impacts will include consideration of the full range of environmental and social risks and impacts.

Unique identifier: A unique identification number used by both the land registry and the cadaster to identify the same property in their databases.

Zoning plan: The plan of area maintained in the office of the competent authority showing the permitted use of land and such other restrictions on the development of land as may be prescribed in the zoning regulations.

PROPERTY TRANSFER QUESTIONNAIRE

The tables that follow present all indicators (including their components, if applicable) under each pillar, with a reference to the corresponding question number in parenthesis. The questions are listed before each table for ease of reference.

For Y/N questions, the Y response accounts for the score and is considered as the good practice, unless otherwise indicated with the sign “Y/N; N – good practice”.

In the tables that follow, “AND” means all referenced questions must have a good practice response to obtain a score on the indicator.

In the tables that follow, “OR” means one or more referenced questions must have a good practice response to obtain a score on the indicator.

Certain questions are marked as “not scored,” which indicates that they do not affect the score in any way. The purpose of these questions is to further inform and refine the questions design for subsequent years of the rollout, as needed, as well as to substantiate and provide further information for the scored questions.

PILLAR I—QUALITY OF REGULATIONS FOR BUSINESS LOCATION	
Parameters	
Business Location	The largest (most populous) city in the economy. The parameter is used in cases where regulations may not be applicable at a national level and vary across states or regions. Geographical location determines selection of appropriate property registry in charge of property transfer. For Pilar I, if regulations differ across states within an economy, the experts will be asked to provide information regarding regulations of the largest city.

1.1 PROPERTY TRANSFER AND LAND ADMINISTRATION

1.1.1 Property Transfer Standards

- 1. Is there a legal obligation to verify the compliance of documents necessary for a property transaction with the law? (Y/N)**
- 2. Please specify who is responsible to check that the sale deed is in compliance with the legal framework: (*not scored*)**
 - Notary
 - Lawyer
 - Registrar
 - Interested parties
- 3. Is the control of the legality of documents done consistently in practice? (Y/N) (*not scored*)**
- 4. Does the legal system require verification of the identity of each party engaged in a property transaction? (Y/N)**
- 5. Who is held responsible for verifying the identity of the parties to a property transfer? (*not scored*)**
 - Notary

- 5b. Lawyer
- 5c. Registrar
- 5d. Interested parties

- 6. **Is the verification of identity of parties done systematically in practice? (Y/N) *(not scored)***
- 7. **Does the legal framework require that all property sale transactions be registered at the land registry to make them opposable to third parties? (Y/N)**
- 8. **Is the law implemented in practice? (Y/N) *(not scored)***
- 9. **By law, which of the following documents, if obtained online, would have the same legal value as a paper-based one?**
 - 9a. Property title certificate
 - 9b. Title search certificate
 - 9c. Tax certificate
 - 9d. Company profile document
 - 9e. Cadastral plans

1.1.2 Land Dispute Mechanisms

- 10. **According to the legal framework, is arbitration offered as an out-of-court resolution mechanism for land disputes? (Y/N)**
- 11. **According to the legal framework, are conciliation and mediation offered as an out-of-court resolution mechanism for land disputes? (Y/N)**
- 12. **By law, does the land registry have an out-of-court compensation mechanism to allow for compensation payments to parties who suffer losses due to an error in title registration? (Y/N)**
- 13. **By law, is the property title subject to a guarantee? (Y/N)**

1.1.3 Land Administration System

- 14. **Does the legal framework specify who can obtain information on land ownership at the immovable property registration agency? (Y/N)**
- 15. **Which parties can obtain information on land ownership at the immovable property registry? *(not scored)***
 - 15a. Only intermediaries (notaries, lawyers, etc.)
 - 15b. Interested parties only
 - 15c. Anyone who pays the official fee
 - 15d. Freely accessible to anyone
 - 15e. Information is not publicly available
 - 15f. Other (please specify):
- 16. **By law, is there a cadaster/mapping agency in your economy? (Y/N)**
- 17. **Does the legal framework specify who can consult cadastral plans of private land plots in [B-READY largest city]? (Y/N)**

18. Which parties can consult cadastral plans of private land plots in [B-READY largest city]? (not scored)

- 18a. Only intermediaries (notaries, lawyers, etc.)?
- 18b. Interested parties only
- 18c. Anyone who pays the official fee
- 18d. Freely accessible by anyone
- 18e. Information is not publicly available
- 18f. Other (please specify):

1.1 PROPERTY TRANSFER AND LAND ADMINISTRATION			
1.1.1 Property Transfer Standards			
Indicators	FFP	SBP	Total Points
Legal Obligation to Check Compliance of Documents with the Law (1)	1	1	2
Legal Obligation to Verify Identities of Parties (4)	1	1	2
Legal Obligation to Register Sales Transactions (7)	1	1	2
Legal Provision on the Legality of Online Documents (9)	1	1	2
- Property title certificate (9a)	0.2	0.2	0.4
- Title search certificate (9b)	0.2	0.2	0.4
- Tax certificate (9c)	0.2	0.2	0.4
- Company profile document (9d)	0.2	0.2	0.4
- Cadastral plans (9e)	0.2	0.2	0.4
Total Points	4	4	8
1.1.2 Land Dispute Mechanisms			
Indicators	FFP	SBP	Total Points
Legal Provisions for Arbitration as an Alternative Land Disputes Resolution Mechanism (10)	1	1	2
Legal Provisions for Conciliation and Mediation as Alternative Land Disputes Resolution Mechanisms (11)	1	1	2
Legal Provisions to Provide Out of Court Compensation for Losses Due to Erroneous Information from the Land Registry (12)	1	1	2
Legal Provisions for Protection of Property Title (13)	1	1	2
Total Points	4	4	8
1.1.3 Land Administration System			
Indicators	FFP	SBP	Total Points
Disclosure of Land Registry Information (14)	1	1	2
Infrastructure for Land Administration (16)	1	1	2
Disclosure of Cadastral Information (17)	1	1	2
Total Points	3	3	6

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

1.3 Restrictions on Owning and Leasing Property

1.3.2 Domestic Firms–Leasehold

19. By law, are there any restrictions to lease or own property for domestic firms? (Y/N; N – good practice) (not scored)

20. Please specify whether restrictions apply to lease or ownership or both? (*not scored*)

20a. Lease

20b. Ownership

21. For each of the following, please indicate whether or not there are any legal restrictions to lease a property for domestic firms.

21a. Area of the land

21b. Duration

21c. Location of property

21d. Agricultural land

21e. Height of building

21f. Other (please specify)

1.3.1 Domestic Firms–Ownership

22. For each of the following, please indicate whether or not there are any legal restrictions to own a property for domestic firms.

22a. Area of the land

22b. Location of property

22c. Agricultural land

22d. Height of building

22e. Other (please specify)

1.3.4 Foreign Firms–Leasehold

23. By law, are there any restrictions to lease or own a property for foreign firms? (Y/N; N – good practice) (*not scored*)

24. Please specify whether restrictions apply to lease or ownership or both? (*not scored*)

24a. Lease

24b. Ownership

25. For each of the following, please indicate whether or not there are any legal restrictions to lease a property for foreign firms.

25a. Area of the and

25b. Duration

25c. Location of property

25d. Agricultural land

25e. Height of building

1.3.3 Foreign Firms–Ownership

26. For each of the following, please indicate whether or not there are any legal restrictions to own a property for foreign firms.

26a. Area of the and

26b. Duration

26c. Location of property

26d. Agricultural land

26e. Height of building

1.3 RESTRICTIONS ON OWNING AND LEASING PROPERTY			
1.3.2 Domestic Firms–Leasehold			
Indicators	FFP	SBP	Total Points
Legal Restrictions to Lease a Property for Domestic Firms	5	n/a	5
- Area of the land (21a)	1	n/a	1
- Duration (21b)	1	n/a	1
- Location of property (21c)	1	n/a	1
- Agricultural land (21d)	1	n/a	1
- Height of building (21e)	1	n/a	1
Total Points	5	n/a	5
1.3.1 Domestic Firms–Ownership			
Indicators	FFP	SBP	Total Points
Legal Restrictions to Own a Property for Domestic Firms	4	n/a	4
- Area of the land (22a)	1	n/a	1
- Location of property (22b)	1	n/a	1
- Agricultural land (22c)	1	n/a	1
- Height of building (22d)	1	n/a	1
Total Points	4	n/a	4
1.3.4 Foreign Firms–Leasehold			
Indicators	FFP	SBP	Total Points
Legal Restrictions to Lease a Property for Foreign Firms	5	n/a	5
- Area of the land (25a)	1	n/a	1
- Duration (25b)	1	n/a	1
- Location of property (25c)	1	n/a	1
- Agricultural land (25d)	1	n/a	1
- Height of building (25e)	1	n/a	1
Total Points	5	n/a	5
1.3.3 Foreign Firms–Ownership			
Indicators	FFP	SBP	Total Points
Legal Restrictions to Own a Property for Foreign Firms	5	n/a	5
- Area of the land (26a)	1	n/a	1
- Duration (26b)	1	n/a	1
- Location of property (26c)	1	n/a	1
- Agricultural land (26d)	1	n/a	1
- Height of building (26e)	1	n/a	1
Total Points	5	n/a	5

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

PILLAR II–QUALITY OF PUBLIC SERVICES AND TRANSPARENCY OF INFORMATION FOR BUSINESS LOCATION	
Parameters	
Business Location	The largest (most populous) city in the economy. The parameter is used in cases where regulations may not be applicable at a national level and vary across states or regions. The land registry, the tax authorities, and the cadastral services of the largest city will be considered for all questions under Pillar II. For all questions in Pillar II, the experts will be asked to provide their response

	accounting for this specific parameter unless specified otherwise in the question per se.
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2.1 AVAILABILITY AND RELIABILITY OF DIGITAL SERVICES

2.1.1 Property Transfer–Digital Public Services

27. Can due diligence checking for transfer of ownership be conducted online? (Y/N) *(not scored)*
28. What type of due diligence checking for transferring property ownership can be conducted online?
- 28a. Title search
 - 28b. Encumbrances
 - 28c. Outstanding taxes
 - 28d. Bankruptcy search
 - 28e. Company profile
29. Please specify if the information on due diligence requested online are:
- 29a. Accurate (precise, no errors)
 - 29b. Current (latest information)
 - 29c. Detailed (all information required are provided)
 - 29d. Verifiable (information obtain can be confirmed)
30. If due diligence checking can be conducted online, is there a single platform where all these checks can be done without being redirected to different websites? (Y/N) *(not scored)*
31. Is there a fully functional online platform to register the transfer of property ownership? (Y/N)
32. Please indicate whether the following processes are available on the online platform to register the transfer of property ownership:
- 32a. Downloading documents
 - 32b. Uploading documents
 - 32c. Getting notifications
 - 32d. Processing payments
33. Is there an online platform where complaints about services and/or suggestions for improvements at the immovable property registry can be filed? (Y/N)
34. Are the responses to complaints from the immovable property registry publicly available on this platform? (Y/N)
35. Is there an online platform where complaints about services and/or suggestions for improvements at the cadaster/mapping agency can be filed? (Y/N)
36. Are the responses to complaints from the cadaster/mapping agency publicly available on this platform? (Y/N)

2.1.2 Property Transfer–Digital Land Management and Identification System

37. Is there a comprehensive and fully functional electronic database for checking encumbrances (liens, mortgages, restrictions, charges, etc.)? (Y/N) *(not scored)*

38. For each of the following please indicate whether or not the following searches can be done.

- 38a. Liens
- 38b. Mortgages
- 38c. Easements
- 38d. Restrictions

39. Which of the following group(s) can access this database? (*not scored*)

- 39a. Accessible online to registered users
- 39b. Accessible only by professionals (lawyers/notaries)
- 39c. Accessible only by land registry staff
- 39d. Accessible to anyone at the land registry premises

40. Which of the following best describes the format that land title certificates are kept at the immovable property registry?

- 40a. Digitized (digital format such as scanned title)
- 40b. Digitalized (titles can be viewed and accessed over the internet)
- 40c. Paper format

41. Which of the following best describes the format that cadastral certificates are kept at the cadaster/mapping agency?

- 41a. Digitized (digital format such as scanned title)
- 41b. Digitalized (titles can be viewed and accessed over the internet)
- 41c. Paper format

42. Which of the following best describes the method used for cadastral surveying?

- 42a. Direct (in situ surveying)
- 42b. Indirect (high resolution pictures)
- 42c. Mixed (in situ surveying + high resolution pictures)

43. Is there an electronic national database for verifying the accuracy of government-issued identity documents of parties engaged in property transactions? (Y/N)

2.1.3 Property Transfer–Coverage of the Land Registry and Mapping Agency

44. Are all privately held land plots formally registered at the immovable property registry in [B-READY largest city]? (Y/N)

45. Are all privately held land plots formally registered at the immovable property registry in [B-READY economy]? (Y/N)

46. For each of the following, please indicate whether or not the following are reasons that privately held plots are not registered at the immovable property registry: (*not scored*)

- 46a. Not mandatory by law to register titles
- 46b. Registration fees too high
- 46c. Cumbersome process
- 46d. Inconsistent legal framework
- 46e. Informal payments
- 46f. Poor public land service management
- 46g. Poor infrastructure
- 46h. Customary land
- 46i. Other reason (please specify)

47. Are all privately held land plots formally mapped (surveyed and registered in the cadaster) in [B-READY largest city]? (Y/N)
48. Are all privately held land plots formally mapped (surveyed and registered in cadaster) in [B-READY economy]? (Y/N)
49. For each of the following, please indicate whether or not the following are reasons that privately held plots are not mapped at the mapping agency (cadaster) (*not scored*)
- 49a. Lack of financial resources
 - 49b. Informal payments
 - 49c. Lack of infrastructure
 - 49d. Poor public land service management
 - 49e. Lack of surveyors
 - 49f. Lack of political will
 - 49g. Most land is agricultural land
 - 49h. Most lands belong to communities
 - 49i. Conflict
 - 49j. Other reasons

2.1 AVAILABILITY AND RELIABILITY OF DIGITAL SERVICES			
2.1.1 Property Transfer–Digital Public Services			
Indicators	FFP	SBP	Total Points
Online Platform Encumbrance Checking	1	1	2
- Title search (ownership) (28a)	0.2	0.2	0.4
- Encumbrances (liens, charges) (28b)	0.2	0.2	0.4
- Outstanding taxes (tax agency) (28c)	0.2	0.2	0.4
- Bankruptcy search (28d)	0.2	0.2	0.4
- Company profile (28e)	0.2	0.2	0.4
Single Online Platform for Encumbrance Checking	1	1	2
- Accurate (precise, no errors) (29a)	0.25	0.25	0.5
- Current (latest information) (29b)	0.25	0.25	0.5
- Detailed (all information provided) (29c)	0.25	0.25	0.5
- Verifiable (information obtained can be confirmed) (29d)	0.25	0.25	0.5
Online Platform for Property Transfer (31)	1	1	2
Processes Available Online for Property Transfer	1	1	2
- Downloading forms (32a)	0.25	0.25	0.5
- Uploading documents(32b)	0.25	0.25	0.5
- Getting notifications (32c)	0.25	0.25	0.5
- Processing payment (32d)	0.25	0.25	0.5
Complaint Mechanisms for Immovable Property Registry	1	1	2
- Online platform for complaints (33)	0.5	0.5	1
- Responses to complains made publicly available (34)	0.5	0.5	1
Complaint Mechanisms for Cadaster	1	1	2
- Online platform for complaints (35)	0.5	0.5	1
- Responses to complains made publicly available (36)	0.5	0.5	1
Total Points	6	6	12
2.1.2 Property Transfer–Digital Land Management and Identification System			
Indicators	FFP	SBP	Total Points
Infrastructure Database for Checking Encumbrances	1	1	2

- Liens (38a)	0.25	0.25	0.5
- Mortgages (38b)	0.25	0.25	0.5
- Easements (38c)	0.25	0.25	0.5
- Restrictions (38d)	0.25	0.25	0.5
Format of Land Title Certificates	1	1	2
- Titles are digitalized (40a) OR	1 OR	1 OR	2 OR
- Titles are digitized (40b)	0.5	0.5	1
<i>Score of 1 if the titles are digitalized (accessible on the cloud) or 0.5 point if they are digitized (pdf saved on a computer)</i>			
Format of Cadastral Plans	1	1	2
- Titles are digitalized – accessible on the cloud (41a) OR	1 OR	1 OR	2 OR
- Titles are digitized – pdf saved on a computer (41b)	0.5	0.5	1
Method to Conduct Cadastral Surveying (42a OR 42c)	1	1	2
Infrastructure Database for Checking Identification (43)	1	1	2
Total Points	5	5	10
2.1.3 Property Transfer–Coverage of the Land Registry and Mapping Agency			
Indicators	FFP	SBP	Total Points
Property Registration Coverage at Main Business City Level (44)	1	1	2
Property Registration Coverage at National Level (45)	1	1	2
Cadastral Coverage at Main City Level (47)	1	1	2
Cadastral Coverage at National Level (48)	1	1	2
Total Points	4	4	8

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

2.2 INTEROPERABILITY OF SERVICES

2.2.1 Interoperability of Services for Property Transfer

50. Which of the following best describes the format in which information is recorded by the immovable property registration agency and the cadaster/mapping agency in [B-READY largest city]:

50a. A single database containing both legal and geographical information

50b. Different but linked databases (where information is automatically updated and shared between the two institutions)

50c. Separate databases

51. Is the immovable property registration agency linked to an agency, other than the cadaster? (Y/N)

52. Please specify the agency(ies) linked to the land registry: (not scored)

52a. Beneficial ownership agency

52b. Business registry

52c. Tax agency

52d. Other (please specify)

53. Is there a Geographical Information System (GIS) used by the land administration agency in [B-READY largest city]? (Y/N)

54. Do the immovable property registration and the cadastral/mapping agencies in [B-READY largest city] use the same unique identifier to search for properties? (Y/N)

2.2 INTEROPERABILITY OF SERVICES			
2.2.1 Interoperability of Services for Property Transfer			
Indicators	FFP	SBP	Total Points
Interoperability between Land Registry and Cadaster (50a OR 50b)	1	1	2
Interoperability between Land Registry and Other Services (51)	1	1	2
Existence of a Geographic Information System (GIS) (53)	1	1	2
Existence of a Unique Identifier between Land Registry and Cadaster (54)	1	1	2
Total Points	4	4	8

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

2.3 TRANSPARENCY OF INFORMATION

2.3.1 Immovable Property (includes gender)

55. Is the list of documents required to complete all types of property transactions available online and up to date (all latest changes are provided)? (Y/N)

56. Which best indicates the availability of an online list that indicates the required documents? (*not scored*)

56a. Available online and regularly updated

56b. Available online but not regularly updated

57. Is the applicable fee schedule for all types of property transactions at the immovable property registration agency available online and up to date (all latest changes are provided)? (Y/N)

58. Which best indicates the availability of the updated fee schedule online? (*not scored*)

58a. Available online and regularly updated

58b. Available online but not regularly updated

59. Does the land registry publish online the time it will take to deliver a legally binding document proving property ownership? (Y/N)

60. Is the timeframe to deliver a legally binding document proving property ownership respected in practice? (Y/N) (*not scored*)

61. Is the applicable fee schedule to access cadastral plans publicly available online and up to date (all the latest changes are provided)?

61a. Available online and regularly updated

61b. Available online but not regularly updated

62. Is the cadastral plan available online for free? (Y/N) (*not scored*)

63. Does the cadaster/mapping agency publish online the time it will take to deliver a certified most updated cadastral plan (for example, 5 working days to obtain a certified most updated cadastral plan)? (Y/N)

- 64. Is the time published by the cadaster to deliver a certified most updated cadastral plan respected in practice? (Y/N) *(not scored)***
- 65. Are there official, updated, and publicly available online statistics tracking the number and type of transactions at the immovable property registry in [B-READY largest city]? (Y/N) *(not scored)***
- 66. How many years of statistics tracking number and type of transactions at the immoveable property registry are available?**
 66a. Available for 1 year
 66b. Available for 2 years
 66c. Available for 3 years
 66d. Available for 4 years
 66e. Available for 5 or more years
 66f. Not publicly available
- 67. Are there official, updated and publicly available online statistics tracking the number and types of land disputes at the national level? (Y/N) *(not scored)***
- 68. How many years of statistics tracking the number and type of land disputes are available?**
 68a. Available for 1 year
 68b. Available for 2 years
 68c. Available for 3 years
 68d. Available for 4 years
 68e. Available for 5 or more years
 68f. Not publicly available
- 69. Are there official, updated, and publicly available statistics tracking the average time it takes to resolve land disputes? (Y/N) *(not scored)***
- 70. How many years of statistics tracking the average time it takes to resolve land disputes are available?**
 70a. Available for 1 year
 70b. Available for 2 years
 70c. Available for 3 years
 70d. Available for 4 years
 70e. Available for 5 years or more
 70f. Not publicly available
- 71. Does the land registry in [B-READY largest city] collect data separately on male and female ownership? (Y/N)**
- 72. Which of the below data are collected separately for male and female land ownership? *(not scored)***
 72a. Sole ownership
 72b. Joint ownership
 72c. Other (please specify)
- 73. Are these data available for the most recent calendar year (2022)? (Y/N) *(not scored)***
- 74. Are these data anonymized? (Y/N) *(not scored)***

75. Are these data publicly available online? (Y/N) (not scored)

2.3 TRANSPARENCY OF INFORMATION			
2.3.1 Immovable Property (includes gender)			
Indicators	FFP	SBP	Total Points
Publication of Property Transactions Requirements (55)	1	1	2
Transparency of Property Transactions Costs (57)	1	1	2
Service Standards at the Land Registry (59)	1	1	2
Transparency of Cadaster Costs (61a)	1	1	2
Service Standards at the Cadaster (63)	1	1	2
Availability of Statistics on Land Transactions	1	1	2
- Available for one year (66a) OR	0.2 OR	0.2 OR	0.4 OR
- Available for two years (66b) OR	0.4 OR	0.4 OR	0.8 OR
- Available for three years (66c) OR	0.6 OR	0.6 OR	1.2 OR
- Available for four years (66d) OR	0.8 OR	0.8 OR	1.6 OR
- Available for five years or more (66e)	1	1	2
Availability of Statistics on Number and Type of Land Disputes	1	1	2
- Available for one year (68a) OR	0.2 OR	0.2 OR	0.4 OR
- Available for two years (68b) OR	0.4 OR	0.4 OR	0.8 OR
- Available for three years (68c) OR	0.6 OR	0.6 OR	1.2 OR
- Available for four years (68d) OR	0.8 OR	0.8 OR	1.6 OR
- Available for five years or more (68e)	1	1	2
Availability of Statistics on Average Time Taken to Resolve Land Disputes	1	1	2
- Available for one year (70a) OR	0.2 OR	0.2 OR	0.4 OR
- Available for two years (70b) OR	0.4 OR	0.4 OR	0.8 OR
- Available for three years (70c) OR	0.6 OR	0.6 OR	1.2 OR
- Available for four years (70d) OR	0.8 OR	0.8 OR	1.6 OR
- Available for five years or more (70e)	1	1	2
Availability of Sex-Disaggregated Data on Property Ownership (72)	1	1	2
Total Points	9	9	18

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

PILLAR III—OPERATIONAL EFFICIENCY OF ESTABLISHING A BUSINESS LOCATION	
Parameters	
Business Location	The largest (most populous) city in the economy. The parameter is used in cases where regulations may not be applicable at a national level and vary across states or regions. Geographical location determines selection of appropriate property registry in charge of property transfer. For all questions under Pillar III, the experts will be asked to provide their response accounting for this specific parameter unless specified otherwise in the question per se.
Value of Property	For estimation of cost of property transfer, a parameter of value of property is provided (based on 100 times GNI [gross national income] per capita). This value of property is provided in local currency. For all questions under Pillar III, the experts will be asked to provide their response accounting for this specific parameter, unless specified otherwise in the question per se.

The scores for Pillar III indicators are calculated using the Normal Cumulative Density Function (CDF) transformation method on a scale of 0 to 100, where 0 and 100 represent the lowest and highest possible scores, respectively. The best and worst performers are identified based on the 5th and 95th percentiles of the collected data.

3.1 PROPERTY TRANSFER AND LAND ADMINISTRATION

3.1.1 Major Constraints on Access to Land

The data for Pillar III on Major constraints on access to land is collected through firm level surveys, using the following question: To what degree is Access to Land an obstacle to the current operations of this establishment? (0 - no obstacle, 1 - minor obstacle, 2 - moderate obstacle, 3 - major obstacle to 4 - very severe obstacle)

3.1.2 Time to Obtain a Property Transfer and 3.1.3 Cost to Obtain a Property Transfer

This section will measure the time and costs of transferring a property, including the transfer of state-owned land use rights (where applicable). This includes but is not limited to conducting all relevant due diligence, signing of the sale deed (or state-owned Land use rights transfer contract) and registering the sale deed (or land use rights transfer contract) at the land registry, making the transaction opposable to third parties.

Further information (based on the scope of the topic):

- Both selling and buying companies are owned by private nationals
- Type of property under consideration is a commercial property

76. Please indicate what is the legal form of land ownership in [B-READY largest city] (*not scored*)

- 76a. Full title
- 76b. Lease
- 76c. State-owned land use right
- 76d. Right of occupancy

77. What is the type of property registration system in place in [B-READY largest city]: (*not scored*)

- 77a. Registration of deeds
- 77b. Registration of title
- 77c. Both

78. Please indicate which type of property registration system is used the most in [B-READY economy] (*not scored*)

- 78a. Registration of deeds
- 78b. Registration of title system

Due Diligence Process

When completing the “due diligence” table, please consider only the processes that are applicable in [B-READY largest city] based on the legal ownership and registration system in place or commonly done in practice. For the connection with the parameters above, please indicate the typical characteristics. Please leave blank the rows that are not applicable when doing the due diligence checking. While providing cost estimates please keep parameter of value of property in mind.

79. On average, how many calendar days does it take to complete each of the following steps: (*not scored*)

- 79a. Encumbrance checking
- 79b. Title search (to confirm ownership)
- 79c. Obtain authorization to transfer state owned land
- 79d. Outstanding taxes (property or other taxes)
- 79e. Bankruptcy
- 79f. Utilities (outstanding bills)
- 79g. Company profile
- 79h. Cadastral plan
- 79i. Zoning plan
- 79j. Building certificate from municipal council
- 79k. Inform the local council of sale and selling price
- 79l. Drainage certificate from water authority
- 79m. Identification survey from licensed surveyor
- 79n. Other (please specify)

If this step can be done simultaneously with another, please indicate which one(s).

80. On average, what is the cost (in local currency) to complete each of the following steps: *(not scored)*

- 80a. Encumbrance checking
- 80b. Title search (to confirm ownership)
- 80c. Obtain authorization to transfer state owned land
- 80d. Outstanding taxes (property or other taxes)
- 80e. Bankruptcy
- 80f. Utilities (outstanding bills)
- 80g. Company profile
- 80h. Cadastral plan
- 80i. Zoning plan
- 80j. Building certificate from municipal council
- 80k. Inform the local council of sale and selling price
- 80l. Drainage certificate from water authority
- 80m. Identification survey from licensed surveyor
- 80n. Other (please specify)

Signing of the Sale Deed

When completing the “signing of the sale deed” table, please consider only the processes that are applicable in [B-READY largest city] based on the legal ownership and registration system in place. While providing cost estimates please keep parameter of value of property in mind.

81. On average, how many calendar days does it take to complete each of the following steps: *(not scored)*

- 81a. Drafting of the sale contract by notary/lawyer
- 81b. Meeting with parties and signing of sale deed (or land use right transfer contract) in the notary/lawyer’s office
- 81c. Other (please specify)

If this step can be done simultaneously with another, please indicate which one(s)

82. On average, what is the cost (in local currency) to complete each of the following steps: *(not scored)*

- 82a. Drafting of the sale contract by notary/lawyer

82b. Meeting with parties and signing of sale deed (or land use right transfer contract) in the notary/lawyer's office

Registration of Sale Deed

When completing the “registration of the sale deed” table, please consider only the processes that are applicable in [B-READY largest city] based on the legal ownership and registration system in place. While providing cost estimates please keep parameter of value of property in mind.

Note: Registration of the sale deed (or state own land transfer contract) at the land registry until registration is complete and transaction is opposable to third parties.

83. On average, how many calendar days does it take to complete each of the following steps: (not scored)

83a. Payment of transfer tax (tax authority)

83b. Payment of registration fees (land registry)

83c. Payment of stamp duty (when applicable)

83d. Registering the sale deed at the land registry

If this step can be done simultaneously with another, please indicate which one(s)

84. On average, what is the cost (in local currency) to complete each of the following steps: (not scored)

84a. Payment of transfer tax (tax authority)

84b. Payment of registration fees (land registry)

84c. Payment of stamp duty (when applicable)

84d. Registering the sale deed at the land registry

Summary of Time and Cost

85. What is the total time to complete the entire process to transfer the ownership of a commercial property from one domestic company to another domestic company (calendar days)?

86. What is the total cost to complete the entire property transfer process between two domestic companies (in local currency)?

3.1 PROPERTY TRANSFER AND LAND ADMINISTRATION			
3.1.1 Major Constraints on Access to Land			
Indicators	FFP	SBP	Total Points
Major Constraints on Access to Land (ES)	100 (100%)	n/a	100 (100%)
Total Points	100	n/a	100
3.1.2 Time to Obtain a Property Transfer			
Indicators	FFP	SBP	Total Points
Time to Obtain a Property (85) <i>Also corroborated with 79, 81, 83</i>	100 (100%)	n/a	100 (100%)
3.1.3 Cost to Obtain a Property Transfer			
Indicators	FFP	SBP	Total Points
Cost to Obtain a Property (86)	100 (100%)	n/a	100 (100%)

<i>Also corroborated with 80, 82, 84</i>			
Total Points	100	n/a	100

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent).
FFP = Firm Flexibility Point; SBP = Social Benefits Point.

BUILDING PERMITS QUESTIONNAIRE

The tables that follow present all indicators (including their components, if applicable) under each pillar, with a reference to the corresponding question number in parenthesis. The questions are listed before each table for ease of reference.

For Y/N questions, the Y response accounts for the score and is considered as the good practice, unless otherwise indicated with the sign “Y/N; N – good practice”.

In the tables that follow, “AND” means all referenced questions must have a good practice response to obtain a score on the indicator.

In the tables that follow, “OR” means one or more referenced questions must have a good practice response to obtain a score on the indicator.

Certain questions are marked as “not scored,” which indicates that they do not affect the score in any way. The purpose of these questions is to further inform and refine the questions design for subsequent years of the rollout, as needed, as well as to substantiate and provide further information for the scored questions.

PILLAR I—QUALITY OF REGULATIONS FOR BUSINESS LOCATION	
Parameters	
Business Location	The largest (most populous) city in the economy. The parameter is used in cases where regulations may not be applicable at a national level and vary across states or regions. Geographic location determines the relevant regulatory framework governing building and environmental permits. In many economies, legislation governing building and environmental permits is defined at city and municipal level. For Pillar I, if regulations differ across states within an economy, the experts will be asked to provide information regarding regulations of the largest city.

1.2 Building, Zoning, and Land Use

1.2.1 Building Standards

- 1. Is there a National Building Code and/or a unified set of building standards applicable to all construction in [B-READY largest city]? (Y/N)**
- 2. Please indicate whether the National Building Code and/or a unified set of building standards provide clear provisions or guidelines for each of the following:**
 - Natural disaster resistant construction (e.g., floods, storms, earthquakes, etc.)
 - Building classification according to certain criteria (e.g., usage; size)
 - Active and passive fire safety measures
 - Soil testing requirements for certain permanent building types
 - Structural strength (materials to be used)
 - Sanitation facilities
- 3. Does the regulatory framework require permits for the handling, removal, and disposal of regulated construction materials (such as asbestos, lead, mercury-containing devices, polychlorinated biphenyls [PCB]) that pose health risks? (Y/N)**

- 4. Which of the below materials are regulated?**
 - 4a. Asbestos
 - 4b. Lead-containing pipes, components, paints
 - 4c. Mercury-containing fluorescent lamps, thermostats, and electric devices
 - 4d. Polychlorinated biphenyls (PCB) in electric transformers, fluorescent light ballasts, caulk, and masonry joints
- 5. Which agency is responsible for issuing permits? (*not scored*)**
- 6. Which of the below materials are required to be inspected/tested by law?**
 - 6a. Asbestos
 - 6b. Lead-containing pipes, components, paints
 - 6c. Mercury-containing fluorescent lamps, thermostats, and electric devices
 - 6d. Polychlorinated biphenyls (PCB) in electric transformers, fluorescent light ballasts, caulk, and masonry joints
- 7. Which agency is responsible for the inspections/testing? (Y/N) (*not scored*)**
- 8. Does the law require verification of compliance of building plans with existing building regulations? (Y/N) (*not scored*)**
- 9. According to the law, who is responsible for verifying compliance of building plans with existing building regulations?**
 - 9a. Public agency (i.e., technical department of the municipality)
 - 9b. Private and external firms of certified architects and/or civil engineers (third party professionals to be hired by the builder)
 - 9c. The architect/engineer who prepared the plans submits an attestation to the permit-issuing agency
 - 9d. Public agency: somebody other than an architect or engineer
- 10. The person who is responsible for conducting the verification of compliance of building plans in the public agency is: (*not scored*)**
 - 10a. Certified/licensed engineer
 - 10b. Certified/licensed architect
 - 10c. A representative of the public agency who is neither an architect nor engineer
- 11. Does the law require verification of compliance with structural and building safety aspects? (Y/N) (*not scored*)**
- 12. What types of technical inspections for structural safety (if any) are required by law to be carried out during construction? (Y/N)**
 - 12a. None
 - 12b. Random/unscheduled inspections
 - 12c. Phased inspections
 - 12d. Risk-based inspections
- 13. If inspections during construction are mandated by law, are they implemented in practice? (Y/N) (*not scored*)**
- 14. Is a final inspection required by law before a building can be used or occupied? (Y/N)**

15. If final inspection before building occupancy is mandated by law, is it implemented in practice?
(Y/N) *(not scored)*
16. Is liability for structural defects in [B-READY largest city] defined by law once a building is in use or occupied?
- 16a. Yes
 - 16b. No
 - 16c. No, liability is defined in the contract between the involved parties
17. If there are structural problems in a building once it is in use, are the responsible architects or engineers legally held liable according to the law? (Y/N)
18. What is the length of time for which an architect or an engineer can be held liable according to the law? *(not scored)*
- 18a. Less than 1 year
 - 18b. 1 year to less than 2 years
 - 18c. 2 years to less than 5 years
 - 18d. 5 years or more
19. According to the law, is the professional or agency conducting technical inspections during construction held liable for structural defects or problems once the building is in use? (Y/N)
20. What is the length of time for which the professional or agency conducting technical inspections during construction can be held liable according to the law? *(not scored)*
- 20a. Less than 1 year
 - 20b. 1 year to less than 2 years
 - 20c. 2 years to less than 5 years
 - 20d. 5 years or more
21. According to the law, is the construction company held liable for structural defects or problems once the building is in use? (Y/N)
22. What is the length of time for which the construction company can be held liable according to the law? *(not scored)*
- 22a. Less than 1 year
 - 22b. 1 year to less than 2 years
 - 22c. 2 years to less than 5 years
 - 22d. 5 years or more
23. What type of qualification is legally required to conduct technical supervisions/inspections of construction projects?
- 23a. Being an accredited architect or engineer
 - 23b. Having a minimum number of years of practical experience
 - 23c. Being a registered member of the order (association) of architects or civil engineers
 - 23d. Having to pass a qualification exam
24. Please specify the minimum number of years of practical experience required by law *(not scored)*
25. When leasing a building in [B-READY largest city], please select which of the following applies by law when obtaining a new use and occupancy permit: *(not scored)*
- 25a. All new leases require a new use and occupancy permit

- 25b. A new use and occupancy permit is required only when there is a change of building use
- 25c. No new use and occupancy permit is required when leasing a building, the original permit is sufficient

26. Does the building regulation/code/standard have any provisions to dispute the decision of the building authority? (Y/N)

1.2.2 Building Energy Standards

27. Are there legally required minimum energy-efficiency performance standards in the building code or any other building regulations? (Y/N)

28. How often are these standards enforced in practice? (*not scored*)

- 28a. Very often
- 28b. Somewhat often
- 28c. Not very often
- 28d. Not often at all

29. Is proof of compliance with energy-efficiency standards included as a precondition for obtaining a building permit? (Y/N)

30. Are energy-efficiency standards verified as part of the building plans review process? (Y/N) (*not scored*)

31. Please indicate which elements of the energy-efficiency performance standards are verified as part of the building plans review process?

- 31a. Thermal transmittance or insulation calculations for building envelope
- 31b. Solar heat gain calculations for building envelope
- 31c. Glazing factors for fenestration
- 31d. Heating/cooling demand calculations
- 31e. Daylighting and orientation
- 31f. Permanent shading
- 31g. Air barrier, air leakage or air infiltration
- 31h. Efficiency of heating and cooling equipment and controls
- 31i. Efficiency of water heating equipment and controls
- 31j. Efficiency of lighting fixtures and controls
- 31k. Insulation and heat traps

32. Are there any incentives provided to builders in order to promote green building standards? (Y/N)

33. Among the following financial incentives, which of these are mandated by law? (*not scored*)

- 33a. Property tax incentives
- 33b. Grants/subsidies/loan programs
- 33c. Net metering
- 33d. Discounted development application

34. Among the following financial incentives, which of carried out in practice? (*not scored*)

- 34a. Property tax incentives
- 34b. Grants/subsidies/loan programs
- 34c. Net metering

34d. Discounted development application

35. Among the following non-financial incentives, which of these are mandated by law? (not scored)

- 35a. Floor-to-Area density (FAR) bonus
- 35b. Expedited permitting
- 35c. Business planning assistance
- 35d. Marketing assistance
- 35e. Regulatory relief
- 35f. Guarantee program
- 35g. Dedicated green management teams in building and planning departments

36. Among the following non-financial incentives, which of these are carried out in practice? (not scored)

- 36a. Floor-to-Area density (FAR) bonus
- 36b. Expedited permitting
- 36c. Business planning assistance
- 36d. Marketing assistance
- 36e. Regulatory relief
- 36f. Guarantee programs
- 36g. Dedicated green management teams in building and planning departments

1.2.3 Zoning and Land Use Regulations

37. Do formal land use planning/zoning regulations exist in [B-READY largest city]? (Y/N) (not scored)

38. Do the formal land use planning/zoning regulations incorporate any of the below:

- 38a. Requirements for trunk infrastructure availability (water, electricity, sanitation)
- 38b. Maps that identify areas allocated to residential, commercial, agricultural, recreational, public/institutional, mixed use
- 38c. Hazard maps that identify areas in which building is not permitted due to natural hazards
- 38d. Hazard maps that identify minimum separation between residential and hazardous occupancies;
- 38d. Maps that identify areas in which building is not permitted in relation to natural resources

1.2 BUILDING, ZONING, AND LAND USE			
1.2.1 Building Standards			
Indicators	FFP	SBP	Total Points
Building Codes/Standards Applicable to All Constructions (1)	1	1	2
Clear Provisions or Guidelines Regarding Safety Standards (2)	n/a	1	1
- Natural disaster resistant construction (e.g., floods, storms, earthquakes, etc.) (2a)	n/a	0.2	0.2
- Building classification according to certain criteria (e.g., usage; size) (2b)	n/a	0.2	0.2
- Active and passive fire safety measures (2c)	n/a	0.2	0.2
- Soil testing requirements for certain permanent building types (2d)	n/a	0.2	0.2
- Structural strength (materials to be used) (2e)	n/a	0.2	0.2
Regulation of Health Risk Related to Construction Materials (3)	n/a	1	1
List of Regulated Materials	n/a	1	1
- Asbestos (4a)	n/a	0.25	0.25
- Lead-containing pipes, components, paints (4b)	n/a	0.25	0.25

- Mercury-containing fluorescent lamps, thermostats, and electric devices (4c)	n/a	0.25	0.25
- Polychlorinated biphenyls (PCB) in electric transformers, fluorescent light ballasts, caulk, and masonry joints (4d)	n/a	0.25	0.25
Materials Required to be Inspected/Tested by Law? (6)	n/a	1	1
- Asbestos (6a)	n/a	0.25	0.25
- Lead-containing pipes, components, paints (6b)	n/a	0.25	0.25
- Mercury-containing fluorescent lamps, thermostats, and electric devices (6c)	n/a	0.25	0.25
- Polychlorinated biphenyls (PCB) in electric transformers, fluorescent light ballasts, caulk, and masonry joints (6d)	n/a	0.25	0.25
Responsibility for Compliance with Legal Requirements (9a AND/OR 9b)	1	1	2
Type of Inspections Carried Out during Construction (12c OR 12d)	1	1	2
Final Inspection Required by Law (14)	1	1	2
Liability for Structural Flaws/Problems (16 OR 17 OR 19 OR 21) <i>Score assigned if either/all 16,17,19 or 21 selected</i>	1	1	2
Qualifications to Conduct Technical Supervision/Inspections	1	1	2
- Is an architect or engineer (23a)	0.25	0.25	0.5
- Years of practical experience (23b)	0.25	0.25	0.5
- Member of association of architects or engineers (23c)	0.25	0.25	0.5
- Pass an exam (23d)	0.25	0.25	0.5
Ability to Dispute Building Permit Decisions (26)	1	1	2
Total Points	7	11	18
1.2.2 Building Energy Standards			
Indicators	FFP	SBP	Total Points
Mandatory Minimum Energy-Efficiency Performance Standards (27)	n/a	1	1
Precondition to Provide Proof of Design Compliance with the Energy-Efficiency Performance Standards (29)	n/a	1	1
Energy-Efficiency Performance Standards are Verified (31)	n/a	1	1
- Thermal transmittance or insulation calculations (31a)	n/a	0.1	0.1
- Solar heat gain calculations for building envelope (31b)	n/a	0.1	0.1
- Glazing factors for fenestration (31c)	n/a	0.1	0.1
- Heating/cooling demand calculations (31d)	n/a	0.1	0.1
- Daylighting and orientation (31e)	n/a	0.1	0.1
- Permanent shading (31f)	n/a	0.1	0.1
- Air barrier, air leakage or air infiltration (31g)	n/a	0.1	0.1
- Efficiency of heating and cooling equipment and controls (31h)	n/a	0.1	0.1
- Efficiency of water heating equipment and controls (31i)	n/a	0.1	0.1
- Efficiency of lighting fixtures and controls (31j)	n/a	0.1	0.1
Incentives to Promote Green Building Standards (32)	n/a	1	1
Total Points	n/a	4	4
1.2.3 Zoning and Land Use Regulations			
Indicators	FFP	SBP	Total points

Land Use and Zoning Regulations (38)	5	5	10
- Requirements for trunk infrastructure availability (water, electricity, sanitation) (38a)	1	1	2
- Maps that identify areas allocated to residential, commercial, agricultural, recreational, public/institutional, mixed use (38b)	1	1	2
- Hazard maps that identify areas in which building is not permitted due to natural hazards (38c)	1	1	2
- Hazard maps that identify minimum separation between residential and hazardous occupancies (38d)	1	1	2
- Maps that identify areas in which building is not permitted in relation to natural resources (38e)	1	1	2
Total Points	5	5	10

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

PILLAR II–QUALITY OF PUBLIC SERVICES AND TRANSPARENCY OF INFORMATION FOR BUSINESS LOCATION	
Parameters	
Business Location	The largest (most populous) city in the economy. The parameter is used in cases where regulations may not be applicable at a national level and vary across states or regions. Geographic location determines the relevant regulatory framework governing building and environmental permits. In many economies, legislation governing building and environmental permits is defined at city and municipal level. For all questions in Pillar II, the experts will be asked to provide their response accounting for this specific parameter unless specified otherwise in the question per se.

2.1 AVAILABILITY AND RELIABILITY OF DIGITAL SERVICES

2.1.4 Building Permits–Digital Public Services

39. Is there an online platform for issuing building authorizations (for example, an online platform that can be used for planning approvals, constructions permits, and occupancy permits)? (Y/N)

40. Which of the following best describes the level of integration for the online platform?

- 40a. The online platform does not integrate any relevant authorizations from agencies outside of the planning/building departments
- 40b. The online platform integrates some relevant authorizations from agencies outside of the planning/building departments
- 40c. The online platform integrates authorizations from all relevant agencies from organizations outside of the planning/building departments.
- 40d. None of the above

41. Please indicate if the online platform allows the following electronic features:

- 41a. Online payment
- 41b. Online communication
- 41c. Online notification
- 41d. Online submission
- 41e. Auto-generated checklist

42. Please indicate whether or not an electronic system allows for submitting and issuing each of the following permits:

- 42a. Building permits
42b. Occupancy permits

43. Can final decisions on building permits be disputed online? (Y/N)

2.1 AVAILABILITY AND RELIABILITY OF DIGITAL SERVICES			
2.1.4 Building Permits–Digital Public Services			
Indicators	FFP	SBP	Total Points
Online Platform for Issuing Building Authorizations	1	1	2
- Online platform for building authorizations and integration of all relevant authorizations from organizations outside of the planning/building departments (40a) OR	1 OR	1 OR	2 OR
- Online platform for building authorizations and integration of some relevant authorizations from organizations outside of the planning/building departments (40b)	0.5	0.5	1
Online Permitting Systems with Several Functionalities	1	1	2
- Online payment (41a)	0.2	0.2	0.4
- Online communication (41b)	0.2	0.2	0.4
- Online notification (41c)	0.2	0.2	0.4
- Online submission (41d)	0.2	0.2	0.4
- Auto-generated checklist (41e)	0.2	0.2	0.4
Online Permitting Systems to Submit Building and Occupancy Permits	1	1	2
- Building permit can be obtained online (42a)	0.5	0.5	1
- Occupancy permit can be obtained online (42b)	0.5	0.5	1
Mechanism Available to File a Dispute Online on the Final Decision on Building Permits (43)	1	1	2
Total Points	4	4	8

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

2.2 INTEROPERABILITY OF SERVICES

2.2.2 Interoperability of Services for Building Permits

44. Are spatial plans and zoning requirement available to all stakeholders in the form of a Geographic Information System (GIS) or other spatial data platforms?

- 44a. Yes, available through an online portal for information purposes, but the online extract is not valid for official procedures
44b. Yes, available from a central location (e.g., national spatial planning system, GIS, or registry of urban plans) and can be digitally exchanged for processing construction-related permits
44c. Not available in a digital form from a central location but can be provided in a digital form on an ad hoc basis to any interested party (e.g., USB media, CD disk)
44d. Not available

45. Are the GIS and/or national spatial platforms integrated between the permit-issuing agency and other stakeholder agencies (i.e., cadaster, land registries, municipal departments, utility service providers, etc.)?

- 45a. Yes, with all relevant stakeholders
45b. Yes, but not with all relevant stakeholders
45c. No

2.2 INTEROPERABILITY OF SERVICES			
2.2.2 Interoperability of Services for Building Permits			
Indicators	FFP	SBP	Total Points
Availability of Spatial Plans and Zoning Requirements to All Stakeholders (44b)	1	1	2
Integration of GIS or National Spatial Platforms (45a AND 45b)	1	1	2
Total points	2	2	4

Note: FFP = Firm Flexibility Point; GIS = Geographic Information System; SBP = Social Benefits Point.

2.3 TRANSPARENCY OF INFORMATION

2.3.2 Building, Zoning and Land use

46. Are planning and building control regulations publicly accessible? (Y/N)

47. How are planning and building control regulations made available? (not scored)

- 47a. Available online and up to date, free of charge
- 47b. Available online, but not up to date, free of charge
- 47c. Available on request, free of charge
- 47d. Available online for a fee
- 47e. Hard copies/electronic version available at agency for a fee

48. Are the requirements to obtain any type of building related permits published online? (Y/N)

49. Which of the following information to obtain building related permits online to the general public?

- 49a. All required pre-approvals of the drawings/plans by the relevant agencies (i.e., electrical, water, sewerage, environmental, etc.)
- 49b. List of required documents to submit to request and obtain a building permit (i.e., land ownership certificate, types of drawings and plans, etc.)
- 49c. Requirements to obtain occupancy permit

50. Is the applicable fee schedule for all types of construction available online and up to date?

- 50a. Yes, available online and updated
- 50b. Available online but not updated
- 50c. No, not available to the public

51. Are there official, updated and publicly available online statistics tracking the number of issued building permits? (Y/N)

52. How many years of statistics tracking the number of issued building permits are available? (Not scored)

- 52a. Available for 1 year
- 52b. Available for 2 years
- 52c. Available for 3 years
- 52d. Available for 4 years
- 52e. Available for 5 or more years

53. Are there official, updated, and publicly available online statistics tracking the type of issued building permits? (Y/N) *(Not scored)*
54. How many years of statistics tracking the type of issued building permits are available? *(Not scored)*
- 54a. Available for 1 year
- 54b. Available for 2 years
- 54c. Available for 3 years
- 54d. Available for 4 years
- 54e. Available for 5 years or more
55. Does [B-READY largest city] have a city master plan/zoning plan which has been updated in the last 10 years? (Y/N)
56. Are there clear, defined steps to modifying the zoning/land use plan in [B-READY largest city]? (Y/N)
57. How is adherence to zoning regulations verified before submitting building permit application in [B-READY largest city]?
- 57a. Through zoning maps of city accessible to builder online to verify that the project's intended location is in compliance with zoning regulations
- 57b. Permit issuing authority checks the zoning compliance after receiving building permit application with no involvement from builder
- 57c. Builder obtains urban planning approval from planning agency before obtaining building permit

2.3 TRANSPARENCY OF INFORMATION			
2.3.2 Building, Zoning and Land Use			
Indicators	FFP	SBP	Total Points
Public Accessibility of Planning and Building Control Regulations (46)	1	1	2
Public Online Availability of Requirements to Obtain All Types of Building Related Permits (48)	1	1	2
Public Online Availability of Requirements Needed to Obtain Occupancy Permit (49)	1	1	2
- All required pre-approvals of the drawings/plans by the relevant agencies (i.e., electrical, water, sewerage, environmental, etc.) (49a)	0.33	0.33	0.66
- List of required documents to submit to request and obtain a building permit (i.e., land ownership certificate, types of drawings and plans, etc.) (49b)	0.33	0.33	0.66
- Requirements to obtain occupancy permit (49c)	0.33	0.33	0.66
Applicable Fee Schedules for All Types of Construction Publicly Available and Up to Date (50a)	1	1	2
Availability of Official, Updated and Publicly Available Online Statistics Tracking the Number of Issued Building Permits (51)	1	1	2
Updated City Master Plan/Zoning Plan (55)	1	1	2
Steps to Modify Zoning/Land Use Plan (56)	1	1	2
Adherence to Zoning Regulations (57a OR 57b)	1	1	2
Total Points	8	8	16

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

PILLAR III—OPERATIONAL EFFICIENCY OF ESTABLISHING A BUSINESS LOCATION	
Parameters	
Business Location	The largest (most populous) city in the economy. The parameter is used in cases where regulations may not be applicable at a national level and vary across states or regions. Geographical location determines the selection of regulatory framework at municipal and sub-national level. For all questions under Pillar III, the experts will be asked to provide their response accounting for this specific parameter unless specified otherwise in the question per se.
Largest Municipality	The largest municipality with the largest number of customers served. The selection of municipality affects the responses provided by experts on the operational efficiency of services provided. For all questions under Pillar III, the experts will be asked to identify the largest municipality and to provide their response accounting for this specific parameter unless specified otherwise in the question per se.
Type and Size of Building	Building regulations, type and level of pre-approvals, documents to be submitted and fees vary depending on the type of construction being permitted (typically classified as residential, commercial or industrial). The size of building affects the cost of permitting and in some cases, it can affect the number of inspections to be conducted during construction. Some specific parameters to be considered for the operational efficiency of obtaining a building permit in practice: <ul style="list-style-type: none"> - Type of building: commercial building, in particular, an office building - Size of commercial building: 1,800 square meters (19,375 square feet), 360 square meters per floor (3,875 square feet) - Floors: 5 floors (each floor will be 3 meters (9 ft and 10 inches) high) - Land plot: 6,500 sq feet (603.8 square meters)

The scores for Pillar III indicators are calculated using the Normal Cumulative Density Function (CDF) transformation method on a scale of 0 to 100, where 0 and 100 represent the lowest and highest possible scores, respectively. The best and worst performers are identified based on the 5th and 95th percentiles of the collected data.

3.2 CONSTRUCTION PERMITS

3.2.1 Time to Obtain Construction-Related Permits

The data for Pillar III on the operational efficiency in obtaining a construction-related permit is collected through firm level surveys, using the following questions:

Over the last two years, did this establishment apply for a construction-related permit? *(not scored)*

Time to obtain construction-related permits: in reference to the most recent application, approximately how many days did it take to obtain the construction-related permit from the date of the application to the day the permit was granted?

3.2.2 Time to Obtain a Building Permit and 3.2.3 Cost to Obtain a Building Permit

This section measures the time and cost to obtain a building and a construction-related permit. Please provide responses to the questions in this section based on the information below on location, type and size of building, etc.

When answering the questions listed below, please take into consideration the following assumptions:

When providing:

- the time, please consider the time for each step and whether they can be done simultaneously with another process.
- the costs for each step, when applicable, please provide the official costs only.

Please fill out the information below for all steps officially required and/or commonly done in practice to obtain a building permit to construct an office building. Please consider only what is applicable in [B-READY city] based on the regulatory framework to obtain building permits.

Preparation of Building Permits

58. On average, how many calendar days does it take to complete each of the following steps: (*not scored*)

- 58a. Obtain ownership/property certificate
- 58b. Obtain a topographical survey
- 58c. Obtain a geotechnical investigation
- 58d. Urban planning approval
- 58e. Technical conditions from utility providers
- 58f. Submit application to permitting authorities and obtain building permit
- 58g. Inspections by any agency prior to building permit
- 58h. Other step(s) (please specify)

If this step can be done simultaneously with another, please indicate which one(s)

59. On average, what does it cost (in local currency) to complete each of the following steps: (*not scored*)

- 59a. Obtain ownership/property certificate
- 59b. Obtain a topographical survey
- 59c. Obtain a geotechnical investigation
- 59d. Urban planning approval
- 59e. Technical conditions from utility providers
- 59f. Submit application to permitting authorities and obtain building permit
- 59g. Inspections by any agency prior to building permit
- 59h. Other step(s) (please specify)

Occupancy Permit

60. On average, how many calendar days does it take to complete each of the following steps: (*not scored*)

- 60a. Submit use and occupancy permit application
- 60b. Review of application and site plan by permitting authority
- 60c. Schedule and receive inspection by permitting authority
- 60d. Receive occupancy permit
- 60e. Other step(s) (please specify)

If this step can be done simultaneously with another, please indicate which one(s)

61. On average, what does it cost (in local currency) to complete each of the following steps: (*not scored*)

- 61a. Submit use and occupancy permit application
- 61b. Review of application and site plan by permitting authority
- 61c. Schedule and receive inspection by permitting authority

- 61d. Receive occupancy permit
 61e. Other step(s) (please specify)

Summary of Time and Cost

62. What is the total time to complete the entire process to obtain a building permit for a commercial property-office building type (calendar days)?
63. What is the total cost to complete the entire process of obtaining a building permit for a commercial property-office building type (in local currency)?

3.2 CONSTRUCTION PERMITS			
3.2.1 Time to Obtain Construction-Related Permits			
Indicators	FFP	SBP	Total Points
Time to Obtain Construction-Related Permits (ES)	100 (100%)	n/a	100 (100%)
Total Points	100	n/a	100
3.2.2 Time to Obtain a Building Permit			
Indicators	FFP	SBP	Total Points
Time to Obtain a Building Permit (62) <i>Further corroborated with data from 58a–58h</i>	100 (100%)	n/a	100 (100%)
Total Points	100	n/a	100
3.2.3 Cost to Obtain a Building Permit			
Indicators	FFP	SBP	Total Points
Cost to Obtain a Building Permit (63) <i>Further corroborated with data from 59a–59h</i>	100 (100%)	n/a	100 (100%)
Total Points	100	n/a	100

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent).
 FFP = Firm Flexibility Point; SBP = Social Benefits Point.

ENVIRONMENTAL PERMITS QUESTIONNAIRE

The tables that follow present all indicators (including their components, if applicable) under each pillar, with a reference to the corresponding question number in parenthesis. The questions are listed before each table for ease of reference.

For Y/N questions, the Y response accounts for the score and is considered as the good practice, unless otherwise indicated with the sign “Y/N; N – good practice”.

In the tables that follow, “AND” means all referenced questions must have a good practice response to obtain a score on the indicator.

In the tables that follow, “OR” means one or more referenced questions must have a good practice response to obtain a score on the indicator.

Certain questions are marked as “not scored,” which indicates that they do not affect the score in any way. The purpose of these questions is to further inform and refine the questions design for subsequent years of the rollout, as needed, as well as to substantiate and provide further information for the scored questions.

PILLAR I–QUALITY OF REGULATIONS FOR BUSINESS LOCATION	
Parameters	
Business Location	The largest (most populous) city in the economy. Geographical location determines the relevant regulatory framework governing environmental permits. For Pillar I, if regulations differ across states within an economy, the experts will be asked to provide information regarding regulations of the largest city.
Type and Size of Project	The type and size of project (housing development project) determines the type of environmental permitting required. A specific parameter of the construction of a new residential dwelling housing development project is provided, with a total surface area of residential housing development project of 10 acres (40,468 sqm). The type of residence considered is detached single family house with 1, 2, and 3 bedrooms, each with its own driveway, and the estimated number of houses are 100 single family homes, with an estimated 600 residents.

1.4 ENVIRONMENTAL PERMITS

1.4.1 Environmental Permits for Construction

- 1. Does the legal framework in [B-READY economy] clearly define environmental risks in new building construction projects? (Y/N)**
- 2. What types of environmental risks, if any, are defined in the legal framework regarding new building construction projects? (not scored)**
 - 2a. Projects that may affect biodiversity and natural resources threatening the protection, conservation, maintenance and restoration of natural habitats and biodiversity, including ecosystems, protected areas, and forests.
 - 2b. Projects that may contribute to greenhouse gas emissions or are vulnerable to climate change impacts.
 - 2c. Projects that may affect cultural heritage sites or artifacts, including archaeological and historic sites.

- 2d. Projects that may cause physical or biological hazards, such as contamination of air, water, or soil, or noise pollution.
 - 2e. Projects that may require land acquisition, resettlement, and/or rehabilitation of affected communities.
 - 2f. Projects that may pose occupational health and safety risks to workers, such as exposure to hazardous materials or dangerous working conditions.
 - 2g. Projects that may require pest management measures, such as the use of pesticides or other chemicals.
 - 2h. Projects that may generate or release pollutants, such as wastewater, solid waste, or air emissions, and require measures to prevent or abate pollution.
 - 2i. Projects that may affect water resources, including water quality, quantity, and access, and require measures to manage and conserve water resources.
- 3. Is it mandatory by law that an environmental impact assessment (EIA) must be conducted by a qualified professional or professional agency? (Y/N)**
- 4. In practice, who prepares and conducts the environmental impact assessment (EIA)? (*not scored*)**
- 4a. Project owner
 - 4b. Professional agency or independent expert
 - 4c. It is not conducted in practice
 - 4d. Other, please specify:
- 5. Based on the legal framework, for a housing development project as described earlier, what criteria would trigger an environmental impact assessment (EIA)?**
- 5a. Size of project
 - 5b. Geographical location
 - 5c. Nature of industry
 - 5d. Other (please specify)
- 6. Based on the existing legal framework, does the environmental impact assessment (EIA) process include each of the following mandatory requirements:**
- 6a. Scoping (Identification of the scope of the assessment, including the issues to be addressed and the potential environmental impacts of the proposed project)
 - 6b. Impact assessment (Identification and evaluation of the potential positive and negative environmental impacts of the proposed project, including direct and indirect impacts, short-term and long-term impacts, and cumulative impacts)
 - 6c. Mitigation measures (Development of measures to avoid, minimize, or compensate for the negative environmental impacts of the proposed project, and enhancement of positive impacts)
 - 6d. Public participation (Consultation with the public and other stakeholders to obtain their views on the proposed project and the potential environmental impacts, and consideration of their concerns and suggestions in the decision-making process)
 - 6e. Monitoring and follow-up (Implementation of a monitoring program to verify the accuracy of the impact predictions, and to ensure that the mitigation measures are effective in reducing the negative environmental impacts)
- 7. According to the legal framework, what type of review is the EIA subject to?**
- 7a. Internal review (undertaken by the responsible authority or other government agency, with or without formal guidelines and procedure)
 - 7b. External review (undertaken by an independent body, separate from and/or outside government agencies, with an open and transparent procedure for public comment)

8. Is public participation with concerned stakeholders mandatory by law for environmental impact assessments (EIAs)? (Y/N)
9. Does the legal framework for EIAs include the following activities and approaches that enable stakeholders to contribute to the decision-making?
 - 9a. Information in a form and language understandable to project-affected parties and other interested parties
 - 9b. Clear and accessible information (in an accessible place, online, in gazettes, media etc.)
 - 9c. Surveys and polls to capture inputs and feedback from the stakeholders
 - 9d. Capacity buildings (training, resources, and technical assistance to stakeholders, as needed)
10. Are there any national or local regulations or standards related to pollution and waste management in construction activities that are applicable in [B-READY largest city]? (Y/N)
11. Have these regulations or standards been updated or revised in the past five years to reflect new environmental and technological developments related to pollution and waste management in construction activities? (Y/N)
12. Have penalties or fines been established in [B-READY largest city] to enforce compliance with regulations or standards regarding pollution and waste management? (Y/N)

1.4.2 Dispute Mechanisms for Construction-Related Environmental Permits

13. According to the legal framework can environmental permits in [B-READY economy] be disputed by any party? (Y/N)
14. According to the legal framework, is arbitration offered as an out-of-court resolution mechanism for disputing environmental permits in [B-READY economy]? (Y/N)
15. According to the legal framework are conciliation and mediation offered as an out-of-court resolution mechanism for disputes in [B-READY economy]? (Y/N)
16. Which agency/body is responsible for handling such disputes in [B-READY largest city]? (*not scored*)
 - 16a. Independent tribunal or arbitrator dedicated to handle environmental permits.
 - 16b. Regulator
 - 16c. Environment Ministry/Department providing environmental permits
 - 16d. Other, please specify

1.4 ENVIRONMENTAL PERMITS			
1.4.1 Environmental Permits for Construction			
Indicators	FFP	SBP	Total Points
Existence of National Environmental Regulations during Construction (10)	n/a	1	1
Update or Revision of National Environmental Regulations during Construction (11)	n/a	1	1
Penalties or Fines in Place for Non-Compliance with the Regulations (12)	n/a	1	1
Environmental Risks as Defined by Legal Framework (1)	n/a	1	1

Qualified Professional/Professional Agency to Conduct EIA (3)	n/a	1	1
Criteria that Trigger an EIA	n/a	1	1
- Extent (size) of project (5a)	n/a	0.33	0.33
- Nature of industry (5b)	n/a	0.33	0.33
- Geographical location (5c)	n/a	0.33	0.33
Requirements for an EIA Process	n/a	1	1
- Scoping and baseline studies (6a)	n/a	0.2	0.2
- Impact assessment (6b)	n/a	0.2	0.2
- Mitigation measures (6c)	n/a	0.2	0.2
- Public participation (6d)	n/a	0.2	0.2
- Monitoring and follow-up (6e)	n/a	0.2	0.2
Legal Responsibility for Checking Compliance	n/a	1	1
- Internal review (7a)	n/a	0.5	0.5
- External review (7b)	n/a	0.5	0.5
Legal Framework Mandates Public Consultations with Concerned Stakeholders (8)	n/a	1	1
Public Consultations Requirement Elements	n/a	1	1
- Information in a form and language understandable to project-affected parties and other interested parties (9a)	n/a	0.25	0.25
- Clear and accessible information (in an accessible place, online, in gazettes, media etc.) (9b)	n/a	0.25	0.25
- Surveys and polls to capture inputs and feedback from the stakeholders (9c)	n/a	0.25	0.25
- Capacity buildings (training, resources, and technical assistance to stakeholders, as needed) (9d)	n/a	0.25	0.25
Total Points	n/a	10	10
1.4.2 Dispute Mechanisms for Construction-Related Environmental Permits			
Indicators	FFP	SBP	Total Points
Ability to Dispute Environmental Clearances and Permits (13)	1	1	2
Out of Court Resolution Mechanisms for Environmental Disputes	1	1	2
- Arbitration (14)	0.33	0.33	0.66
- Conciliation (15)	0.33	0.33	0.66
- Mediation (15)	0.33	0.33	0.66
Total Points	2	2	4

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

*Shared indicators between property transfer, building permits and environmental permits

PILLAR II-QUALITY OF PUBLIC SERVICES AND TRANSPARENCY OF INFORMATION FOR BUSINESS LOCATION	
Parameters	
Business Location	The largest (most populous) city in the economy. The parameter is used in cases where regulations may not be applicable at a national level and vary across states or regions. Geographical location determines the agency governing environmental permits, as well as the type of permits required. For all questions in Pillar II, the experts will be asked to provide their response accounting for this specific parameter unless specified otherwise in the question per se.
Type and Size of Project	The type and size of project (housing development project) determines the type of environmental permitting required. A specific parameter of the construction of a new residential dwelling housing development project is provided, with a total surface area of residential housing development project of 10 acres (40,468 sqm). The type of residence considered is detached single family house with 1, 2, and 3 bedrooms, each with its own

	driveway, and the estimated number of houses are 100 single family homes, with an estimated 600 residents.
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2.1 AVAILABILITY AND RELIABILITY OF DIGITAL SERVICES

2.1.5 Environmental Permits–Digital Public Services

17. Please indicate whether there is an electronic system that facilitates the processing of environmental permits in [B-READY largest city] for each of the following:

- 17a. Online payment
- 17b. Online communication
- 17c. Online notification
- 17d. Online submission
- 17e. Auto-generated checklist

18. Can final decisions on environmental permits be disputed online? (Y/N)

2.1 AVAILABILITY AND RELIABILITY OF DIGITAL SERVICES			
2.1.5 Environmental Permits–Digital Public Services			
Indicators	FFP	SBP	Total Points
Online Environmental Permitting Systems with Several Functionalities	1	1	2
- Online payment (17a)	0.2	0.2	0.4
- Online communication (17b)	0.2	0.2	0.4
- Online notification (17c)	0.2	0.2	0.4
- Online submission (17d)	0.2	0.2	0.4
- Auto-generated checklist (17e)	0.2	0.2	0.4
File Dispute Online on Environmental Licensing (18)	1	1	2
Total Points	2	2	4

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

2.3 TRANSPARENCY OF INFORMATION

2.3.3 Environmental Permits

19. Are the requirements for submitting an application to obtain an environmental permit for constructing a building with moderate environmental risk in [B-READY largest city] available online? (Y/N)

20. Is the applicable fee schedule for obtaining any type of environmental permits in [B-READY largest city] available online?

- 20a. Yes, available online and regularly updated
- 20b. Yes, available online but not regularly updated
- 20c. Yes, available but only as hard copy
- 20d. No, not available in any format

21. Are there official, updated and publicly available online statistics that track the number of EIAs in [B-READY economy]? (Y/N) (not scored)

22. How many years of statistics tracking the number and type of EIAs in [B-READY economy] are available?

- 22a. Available for 1 year
- 22b. Available for 2 years
- 22c. Available for 3 years
- 22d. Available for 4 years
- 22e. Available for 5 years or more
- 22f. Not publicly available

2.3 TRANSPARENCY OF INFORMATION			
2.3.3 Environmental Permits			
Indicators	FFP	SBP	Total Points
Public Online Availability of Environmental Licensing Requirements for Moderate-Risk Construction Project (19)	1	1	2
Applicable and Up-to-Date Fee Schedule for Environmental Clearances (20)	1	1	2
Total Points	2	2	4

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

PILLAR III—OPERATIONAL EFFICIENCY OF ESTABLISHING A BUSINESS LOCATION	
Parameters	
Business Location	The largest (most populous city) in the economy. The parameter is used in cases where regulations may not be applicable at a national level and vary across states or regions. Geographical location determines the agency governing environmental permits, as well as the type of clearances required. For all questions in Pillar III, the experts will be asked to provide their response accounting for this specific parameter unless specified otherwise in the question per se.
Type and Size of Project	The type and size of project (housing development project of 10 acres, 100 houses, 600 residents) determines the type of environmental permitting required and cost.

The scores for Pillar III indicators are calculated using the Normal Cumulative Density Function (CDF) transformation method on a scale of 0 to 100, where 0 and 100 represent the lowest and highest possible scores, respectively. The best and worst performers are identified based on the 5th and 95th percentiles of the collected data.

3.3 ENVIRONMENTAL PERMIT

3.3.1 Time to Obtain an Environmental Permit and 3.3.2 Cost to Obtain an Environmental Permit

This section of the questionnaire measures the time and cost to obtain environmental permits related to a construction project. This includes but is not limited to conducting all relevant procedures related to obtaining environment permits. Please provide responses to the questions in this section based on the parameters and information provided below.

When providing:

- the time, please consider the time for each process and whether they can be done simultaneously with another process

- the costs for each process, when applicable, please provide costs in local currency and the official costs only

The data for Pillar III on the Operational Efficiency of Environmental Permits will be collected primarily through expert consultations using the following parameters and questions:

23. For this housing development project what kind of environmental permits would be required?
(not scored)

Note: Based on the type of environmental assessment or permit you have selected in question 23, please select only relevant processes that would be required according to your economy's environmental regulation.

- 23a. Self-declaration of compliance with environmental regulations
- 23b. Certificate of Environmental permits
- 23c. Simplified Environmental Impact Assessment (i.e., environmental permit involving environmental study with limited scope)
- 23d. Full Environmental Impact Assessment (see glossary for definition)
- 23e. No permits requirements apply to such project
- 23f. Other permits, please specify

Environmental Permit

24. On average, how many calendar days does it take to complete each of the following steps: (not scored)

- 24a. Development of the Terms of Reference (TOR)
- 24b. Obtain approval of the TOR
- 24c. Hire a registered environmental expert or company to prepare the EIA
- 24d. Environmental Scoping/screening
- 24e. Preparation of the environmental study report
- 24f. Obtain environmental permit/authorization
- 24g. Other, please specify

If this step can be done simultaneously with another, please indicate which one(s)

25. On average, what is the cost to complete each of the following steps: (not scored)

- 25a. Development of the Terms of Reference (TOR)
- 25b. Obtain approval of the TOR
- 25c. Hire a registered environmental expert or company to prepare the EIA
- 25d. Environmental Scoping/screening
- 25e. Preparation of the environmental study report
- 25f. Obtain environmental permit/authorization
- 25g. Other, please specify

In answering the questions below, please take into consideration the following parameters:

- Location: [B-READY city]
- Project description: a housing development project which is not located in an area that is environmentally sensitive
- Total surface of the development: 10 acres (40,468.6 sqm)
- Type of residence: Detached single-family house with 1, 2 and 3 bedrooms, each with its own driveway
- Estimated number of houses: 100
- Estimated number of residents in the housing development project: 600

26. For a project as described in the parameters above, is a wastewater runoff clearance required?
(Y/N) *(not scored)*

27. On average, how many calendar days does it take to obtain the wastewater runoff clearance? *(not scored)*

28. On average, what is the cost to obtain the wastewater runoff clearance? *(not scored)*

Public Participation and Reporting

29. On average, how many calendar days does it take to complete this step? *(not scored)*

29a. Public consultation during the scoping of the project

29b. Public consultation during preparation of environmental assessments (including EIA)

29c. Public consultation after completion of environmental assessments (including EIA)

29d. Other, please specify

If this step can be done simultaneously with another, please indicate which one(s)

30. On average, what is the cost to complete this step? *(not scored)*

30a. Public consultation during the scoping of the project

30b. Public consultation during preparation of environmental assessments (including EIA)

30c. Public consultation after completion of environmental assessments (including EIA)

30d. Other, please specify

Monitoring of EIA Implementation

31. Is there a post-audit of the EIA implementation? (Y/N) *(not scored)*

32. On average, how many calendar days does it take to complete the post-audit implementation?
(not scored)

33. On average, what is the cost to complete the post-audit implementations? *(not scored)*

Environment Management Plan (EMP)

34. Based on the law, and the type of environmental permit required, would an Environmental Management Plan (EMP) be required? (Y/N) *(not scored)*

35. On average, how many calendar days does it take to complete this step? *(not scored)*

35a. Preparation of the EMP

35b. Monitoring of the EMP implementation

35c. Obtain final clearance

35d. Other steps

If this step can be done simultaneously with another, please indicate which one(s)

36. On average, what is the cost to complete this step? *(not scored)*

36a. Preparation of the EMP

36b. Monitoring of the EMP implementation

36c. Obtain final clearance

36d. Other steps

Summary of Time and Cost

37. What is the total time to complete all these processes?

Note: Please consider the time indicated above for all EIA or EIA process, public participation and report, monitoring of EIA Implementation and Environmental Management plan (if applicable). Please also consider the simultaneity of steps - that is whether certain steps can be completed at the same time. For instance, if two steps can be completed within the same day, then the total time for both steps will only be 1 day.

38. What is the total cost to complete the entire process (in local currency)?

Note: Please consider the cost indicated above for all EIA or EIA process, public participation and report, monitoring of EIA Implementation and Environmental Management plan (if applicable).

3.3 ENVIRONMENTAL PERMIT			
3.3.1 Time to Obtain an Environmental Permit			
Indicators	FFP	SBP	Total Points
Time to Obtain an Environmental Permit (37) <i>Further corroborated with data from 24, 27, 29, 32, 35</i>	100 (50%)	n/a	100 (50%)
3.3.2 Cost to Obtain an Environmental Permit			
Indicators	FFP	SBP	Total Points
Cost to Obtain an Environmental Permit (38) <i>Further corroborated with data from 25, 28, 30, 33, 36</i>	100 (50%)	n/a	100 (50%)
Total Points	100	n/a	100

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent). FFP = Firm Flexibility Point; SBP = Social Benefits Point.

CHAPTER 4. UTILITY SERVICES–METHODOLOGY NOTE

I. MOTIVATION

By providing essential services—electricity, water, and digital connectivity—utilities play an important role in supporting economic and social development. Without these services, businesses cannot function, and households cannot lead quality lives. Yet, more than 30 percent of businesses globally identify electricity supply as a major constraint to their operations, according to the World Bank Enterprise Surveys.¹ Disruptions in electricity supply impair firm productivity, revenues, and economic growth.² Similarly, inadequate water supply can lead to decreased firm productivity, deterioration of machinery, and reduced profits.³

Access to reliable internet is another critical element in today’s digitalized world, where the use of digital technologies improves productivity.⁴ However, as of 2021, just over 15 percent of people globally had fixed broadband subscriptions, and only 1.4 percent in the least developed countries.⁵ The provision of basic utility services should be effective and reliable. Facilitating timely access to such services in an environmentally sustainable manner is instrumental for economic growth.⁶

The effectiveness of regulatory frameworks, good governance, transparency, and operational efficiency of utility services are pivotal elements of a good business environment.⁷ An effective regulatory framework, for example, is a fundamental steppingstone for the provision of high-quality utility services. Furthermore, the reliability and sustainability of utility services should be maintained through monitoring the quality of service supply and connection safety, fostering public accountability and safety.⁸ Interoperability through agency coordination and digitalization of utilities can also help improve the quality of public services and the customer experience.

In this context, the Utility Services topic measures the effectiveness of regulatory frameworks, and the quality of governance and transparency of service delivery mechanisms, as well as the operational efficiency of providing electricity, water, and internet services. The measures capture firms’ experiences with either public or private utilities. In particular, the topic measures commercial electricity and water connections. For the internet, the topic focuses only on high-speed fixed broadband internet connections, given more intense data usage by firms.

II. INDICATORS

The Utility Services topic measures connections and subsequent service supply for three key utilities—Electricity, Water, and Internet—across the three different dimensions, here referred to as pillars. The first pillar assesses the effectiveness of regulation pertaining to electricity, water, and internet services, covering de jure features of a regulatory framework that are necessary for the efficient deployment of connections, reliable service, safety, and environmental sustainability of provision and use of utility services. The second pillar measures the quality of governance and transparency in the provision of utility services, thus assessing the de facto provision of utility services. The third pillar measures the time required to obtain Electricity, Water, and Internet connections (operational efficiency), as well as the reliability of utility service supply. Each pillar is divided into categories—defined by common features that inform the grouping into a particular category—and each category is further divided into subcategories. Each subcategory consists of several indicators, each of which may, in turn, consist of several components. Relevant points are assigned to each indicator and subsequently aggregated to obtain the number of points for each subcategory, category, and pillar. Table 1 summarizes all three pillars and their respective categories for the three areas measured: Electricity, Water, and Internet.

Table 1. Summary Table of all Three Pillars for the Utility Services Topic

Pillar I—Quality of Regulations on Utility Services (33 indicators)	
1.1	Electricity (10 indicators)
1.1.1	Regulatory Monitoring of Tariffs and Service Quality (2 indicators)
1.1.2	Utility Infrastructure Sharing and Quality Assurance Mechanisms (2 indicators)
1.1.3	Safety of Utility Connections (3 indicators)
1.1.4	Environmental Sustainability (3 indicators)
1.2	Water (12 indicators)
1.2.1	Regulatory Monitoring of Tariffs and Service Quality (2 indicators)
1.2.2	Utility Infrastructure Sharing and Quality Assurance Mechanisms (2 indicators)
1.2.3	Safety of Utility Connections (3 indicators)
1.2.4	Environmental Sustainability (5 indicators)
1.3	Internet (11 indicators)
1.3.1	Regulatory Monitoring of Tariffs and Service Quality (2 indicators)
1.3.2	Utility Infrastructure Sharing and Quality Assurance Mechanisms (4 indicators)
1.3.3	Safety of Utility Connections (3 indicators)
1.3.4	Environmental Sustainability (2 indicators)
Pillar II—Quality of the Governance and Transparency of Utility Services (43 indicators)	
2.1	Electricity (15 indicators)
2.1.1	Digital Services and Interoperability (4 indicators)
2.1.2	Availability of Information and Transparency (6 indicators)
2.1.3	Monitoring of Service Supply (includes gender and environment) (3 indicators)
2.1.4	Enforcement of Safety Regulations and Consumer Protection Mechanisms (2 indicators)
2.2	Water (15 indicators)
2.2.1	Digital Services and Interoperability (4 indicators)
2.2.2	Availability of Information and Transparency (6 indicators)
2.2.3	Monitoring of Service Supply (includes gender and environment) (3 indicators)
2.2.4	Enforcement of Safety Regulations and Consumer Protection Mechanisms (2 indicators)
2.3	Internet (13 indicators)
2.3.1	Digital Services and Interoperability (4 indicators)
2.3.2	Availability of Information and Transparency (5 indicators)
2.3.3	Monitoring of Service Supply (includes gender and environment) (2 indicators)
2.3.4	Enforcement of Safety Regulations and Consumer Protection Mechanisms (2 indicators)
Pillar III—Operational Efficiency of Utility Service Provision (6 indicators)	
3.1	Electricity (2 indicators)
3.1.1	Time to Obtain a Connection (1 indicator)
3.1.2	Reliability of Supply (1 indicator)
3.2	Water (2 indicators)
3.2.1	Time to Obtain a Connection (1 indicator)
3.2.2	Reliability of Supply (1 indicator)
3.3	Internet (2 indicators)
3.3.1	Time to Obtain a Connection (1 indicator)
3.3.2	Reliability of Supply (1 indicator)

1. PILLAR I. QUALITY OF REGULATIONS ON UTILITY SERVICES

Table 2 shows the structure for Pillar I, Quality of Regulations on Utility Services. Each of this pillar's subcategories will be discussed in more detail as they relate to each of the three areas measured: Electricity, Water, and Internet.

Table 2. Pillar I—Quality of Regulations on Utility Services

1.1	Electricity
1.1.1	Regulatory Monitoring of Tariffs and Service Quality
1.1.2	Utility Infrastructure Sharing and Quality Assurance Mechanisms

1.1.3	Safety of Utility Connections
1.1.4	Environmental Sustainability
1.2	Water
1.2.1	Regulatory Monitoring of Tariffs and Service Quality
1.2.2	Utility Infrastructure Sharing and Quality Assurance Mechanisms
1.2.3	Safety of Utility Connections
1.2.4	Environmental Sustainability
1.3	Internet
1.3.1	Regulatory Monitoring of Tariffs and Service Quality
1.3.2	Utility Infrastructure Sharing and Quality Assurance Mechanisms
1.3.3	Safety of Utility Connections
1.3.4	Environmental Sustainability

Each subcategory is divided into several indicators, each of which may, in turn, have several components.

1.1.1, 1.2.1, and 1.3.1 Regulatory Monitoring of Tariffs and Service Quality (Electricity, Water, Internet)

The reliable provision of utility services has been linked to the presence of strong regulatory systems. Regulatory agencies are key to improving sector performance and consumer outcomes, such as quality and affordability.⁹ Where regulators work well, they enable the efficient management of electricity, water, and internet services.¹⁰ In particular, setting and reviewing tariffs is central to the protection of consumers and investors. Similarly, developing standards and monitoring the quality of the service supplied is essential to ensuring adequate provision of service.¹¹ Because competitive market structure across all the digital infrastructure supply chain benefits consumers by lowering prices and raising service quality, regulators should also prevent anticompetitive practices.¹² Therefore, Subcategories 1.1.1, 1.2.1, and 1.3.1—Regulatory Monitoring of Tariffs and Service Quality comprise six indicators: two for Electricity (Subcategory 1.1.1), two for Water (Subcategory 1.2.1), and two for Internet (Subcategory 1.3.1) (table 3).

Table 3. Subcategories 1.1.1, 1.2.1, and 1.3.1—Regulatory Monitoring of Tariffs and Service Quality

	Indicators	Components
Electricity		
1	Monitoring of Tariffs	Regulator has the final decision-making power in setting/approving tariffs
2	Monitoring of Service Quality	i) Setting standards to ensure the quality of electricity service supply ii) Monitoring standards to ensure the quality of electricity service supply
Water		
3	Monitoring of Tariffs	Regulator has the final decision-making power in setting/approving tariffs
4	Monitoring of Service Quality	i) Setting standards to ensure the quality of water service supply ii) Monitoring standards to ensure the quality of water service supply
Internet		
5	Monitoring of Tariffs	i) Regulator oversees wholesale connectivity tariffs ii) Ex post regulation for anticompetitive practices
6	Monitoring of Service Quality	i) Setting standards to ensure the quality of internet service ii) Monitoring standards to ensure the quality of internet service

1.1.2, 1.2.2, and 1.3.2 Utility Infrastructure Sharing and Quality Assurance Mechanisms (Electricity, Water, Internet)

Utility infrastructure—such as poles, ducts, or pipes—tends to be expensive and requires a long time to construct. In this regard, regulations and standards promoting infrastructure-sharing among different utility providers, including common excavation plans or “dig once” policies, enhance interoperability and lessen the time and cost to receive a utility connection. Similarly, time limits for approvals of agencies involved in the utility connection process improve the predictability of administrative processes.¹³ Furthermore, regulations that facilitate access to government or privately owned infrastructure result in more efficient and faster broadband network expansion.¹⁴ In addition, regulations that promote infrastructure sharing among telecom connectivity service providers improve broadband affordability and access.¹⁵

Service interruptions and delays in service restoration are disruptive and costly to businesses as well as local economies. Hence, established mechanisms on quality assurance help protect consumers from inadequate utility service supply and hold utilities accountable, with utilities facing penalties when failing to meet minimum performance standards.¹⁶ Established quality standards coupled with a system of incentives to compel utilities to meet the set standards help ensure the quality of electricity, water, and internet service provision.¹⁷ Therefore, Subcategories 1.1.2, 1.2.2, and 1.3.2–Utility Infrastructure Sharing and Quality Assurance Mechanisms comprise eight indicators: two for Electricity (Subcategory 1.1.2), two for Water (Subcategory 1.2.2), and four for Internet (Subcategory 1.3.2) (table 4).

Table 4. Subcategories 1.1.2, 1.2.2, and 1.3.2–Utility Infrastructure Sharing and Quality Assurance Mechanisms

	Indicators	Components
Electricity		
1	Joint Planning and Construction	i) Provisions on adherence to common excavation plans or “dig once” policies ii) Timelines for approval processes
2	Mechanisms on Service Quality Assurance	Existence in the regulatory framework of financial deterrence mechanisms such as compensations or penalties paid by service provider to discourage supply disruption
Water		
3	Joint Planning and Construction	i) Provisions on adherence to common excavation plans or “dig once” policies ii) Timelines for approval processes
4	Mechanisms on Service Quality Assurance	Existence in the regulatory framework of financial deterrence mechanisms such as compensations or penalties paid by service provider to discourage supply disruption
Internet		
5	Joint Planning and Construction	i) Provisions on adherence to common excavation plans or “dig once” policies ii) Timelines for approval processes
6	Rights of Way	i) Regulations on equal access to government-owned infrastructure ii) Regulations on rights of way for digital infrastructure service providers
7	Open Infrastructure	i) Passive or active infrastructure sharing between broadband operators ii) Utility partnerships for infrastructure sharing (such as leasing excess capacity of fiber optic infrastructure or other voluntary market arrangements) iii) Local loop unbundling and line access iv) Asymmetric regulations for dominant carriers, such as price-caps or rate-of-return regulations and remedial actions if negotiated solutions are not reached
8	Mechanisms on Service Quality Assurance	Existence in the regulatory framework of financial deterrence mechanisms such as compensations or penalties paid by service provider to discourage supply disruption

Note: ISPs = Internet Service Providers.

1.1.3, 1.2.3, and 1.3.3 Safety of Utility Connections (Electricity, Water, Internet)

Professional certification reduces uncertainty and sets minimum quality standards.¹⁸ A robust system of qualification and licensing for professionals involved in construction is important to ensure a higher degree of compliance with codes and regulations.¹⁹ Similarly, in the electricity sector, the importance of engineer qualifications to protect public health, welfare and safety is well recognized.²⁰ It is crucial to ensure that electricity connections and installation of water supply pipes comply with regulations, as failure to adhere to the set processes can result in public health hazards.²¹

Inspections can certify that installations are compliant with safety and quality standards.²² Construction defects can be expensive to repair, and they can cause investor uncertainty.

Sound liability policies facilitate more transparent agreements that reflect responsibilities and attributions among the involved parties.²³ Clear and transparent liability regimes provide assurance that risks will be managed, adequately remediated and compensated in case of an accident.²⁴ Internet liability regimes that mandate safeguards to prevent personal data protection breaches, are vital elements for creating an enabling environment for digital transactions with limited cyber vulnerabilities.²⁵

Broadband connections do not generally pose physical safety risks analogous to water and electricity connections. The adoption and use of digital technologies by firms, however, does depend on reliability of a digital ecosystem. This is made possible through regulatory oversight, effective security measures, and robust state capacity to respond to cyberthreats. For this reason, cybersecurity safeguards and capabilities are needed to protect online data and communications as well as to ensure network resilience.²⁶

Therefore, Subcategories 1.1.3, 1.2.3, and 1.3.3–Safety of Utility Connections comprise nine indicators: three for Electricity (Subcategory 1.1.3), three for Water (Subcategory 1.2.3), and four for Internet (Subcategory 1.3.3) (table 5).

Table 5. Subcategories 1.1.3, 1.2.3 and 1.3.3–Safety of Utility Connections

	Indicators	Components
Electricity		
1	Professional Certifications	i) Requirement to have minimum number of years of practical experience ii) Education qualification iii) Accreditation by/membership with the national order (association) of engineers iv) Pass a qualification exam <i>A combination of the requirements (two or more) to ensure professional qualification of practitioners performing installations is assessed.</i>
2	Inspection Regimes	i) Internal installation works ii) External installation works are of adequate quality and comply with the regulation <i>For each of these two components, the indicators assess whether there is either a requirement for the connection works to be carried out by certified contractors who attest to the quality of internal and external installations or a legal obligation to conduct a third-party inspection</i>
3	Liability Regimes	Liability of the parties besides investors (such as engineer/company that designed the plans for the connection professional or agency that conducted technical inspections; or the professional or company that performed installation works) in cases of faults discovered when the connection was in use
Water		
4	Professional Certifications	i) Requirement to have minimum number of years of practical experience ii) Education qualification iii) Accreditation by/membership with the national order (association) of engineers iv) Pass a qualification exam <i>A combination of the requirements (two or more) to ensure professional qualification of practitioners performing installations is assessed.</i>
5	Inspection Regimes	i) Internal installation works ii) External installation works are of adequate quality and comply with the regulation <i>For each of these two components, the indicators assess whether there is either a requirement for the connection works to be carried out by certified contractors who attest to the quality of internal and external installations or a legal obligation to conduct a third-party inspection</i>
6	Liability Regimes	Liability of the parties besides investors (such as engineer/company that designed the plans for the connection professional or agency that conducted technical inspections; or the professional or company that performed installation works) in cases of faults discovered when the connection was in use
Internet		
7	Liability Regimes	i) Liability and a legal right to pursue compensation for personal data protection breaches ii) Provisions on data breach incident reporting
8	Cybersecurity Coordination	i) Carrying out risk-assessment strategies ii) Carrying out cybersecurity audits, drills, exercises, or trainings iii) Leading collective efforts against cyber threats iv) Enforcing cybersecurity laws and regulations
9	Cybersecurity Safeguards	i) Cybersecurity protection or minimum standards and safeguards ii) Modus operandi for incidents response in case of a major cyberattack or the compromise of service availability

1.1.4 Environmental Sustainability (Electricity)

Power generation is a major source of air pollution; hence, it is imperative to reduce the levels of pollutants from the combustion of fossil fuels that are released into the atmosphere.²⁷ Similarly, doubling the global rate of energy efficiency has been established as a key target by the United Nations 2030 Sustainable Development Agenda sustainable development.²⁸ Standards for sustainable transmission and distribution, including smart meter roll-out programs and smart grid technologies, can facilitate efficient operation of network systems, minimizing costs and environmental impact.²⁹ Requirements to switch to energy-efficient appliances, and to use energy efficiency labelling fortify sustainable practices.³⁰ In turn, enforcement and deterrence mechanisms ensure compliance with the set standards, while financial and nonfinancial incentives increase adoption rates of energy efficiency practices.³¹ Therefore, Subcategory 1.1.4–Environmental Sustainability (Electricity) comprises three indicators (table 6).

Table 6. Subcategory 1.1.4–Environmental Sustainability (Electricity)

	Indicators	Components
1	Sustainability of Electricity Provision	i) Environmental standards for electricity generation ii) Enforcement of environmental standards for electricity generation iii) Environmental standards for electricity transmission and distribution iv) Enforcement of standards for electricity transmission and distribution
2	Sustainability of Electricity Use	i) Requirements for businesses to adhere to energy-saving practices ii) Enforcement mechanisms to foster businesses' compliance with energy-saving standards
3	Incentives to Adopt Energy-Saving Practices	Financial and nonfinancial incentives for businesses to adopt energy-saving practices

1.2.4 Environmental Sustainability (Water)

Improving Water quality, increasing Water-use efficiency and safe Water reuse are imperative to sustainable development.³² Efficient Water supply and use may be achieved, inter alia, through smart meters that allow to rapidly identify and repair Water leakages. Water demand management practices include measures to promote the use of Water-efficient appliances, including through labelling programs.³³ Enforcement and deterrence mechanisms ensure compliance with these standards. Furthermore, financial incentives, such as tax credits or subsidized interest rates, and nonfinancial incentives, such as awareness raising initiatives, facilitate adherence to Water-saving practices and adoption of Water-efficient technologies.³⁴ Further, before being discharged to surface Waters or land, wastewater should be isolated and treated. To this end, wastewater treatment requirements, such as the minimum type of treatment to be provided and maximum emission limits, are of paramount importance. In addition, legal wastewater management frameworks should be administered by a central authority, promoting an integrated approach to permitting for wastewater discharge.³⁵ Recognizing wastewater as a resource, it should be reused and recycled whenever possible.³⁶ Therefore, Subcategory 1.2.4–Environmental Sustainability (Water) comprises five indicators (table 7).

Table 7. Subcategory 1.2.4–Environmental Sustainability (Water)

	Indicators	Components
1	Sustainability of Water Provision	i) Standards for Water quality ii) Enforcement of standards for Water quality iii) Environmental standards for efficient Water supply iv) Enforcement standards for Water supply efficiency
2	Sustainability of Water Use	i) Requirements for businesses to adhere to Water-saving practices ii) Enforcement mechanism to foster businesses' compliance with Water-saving standards
3	Incentives to Adopt Water-Saving Practices	i) Financial incentives for businesses to adopt Water-saving practices ii) Nonfinancial incentives for businesses to adopt Water-saving practices
4	Sustainability of Wastewater Treatment	i) Existence of entity regulating wastewater discharge ii) Wastewater treatment standards that require to isolate wastewater (discharge limits, conditions for discharges)

5	Wastewater Reuse	Regulation on wastewater reuse, such as guidelines for the use of reclaimed Water, effluent quality limits and treatment process/type
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1.3.4 Environmental Sustainability (Internet)

The information and communication technology (ICT) sector is a large consumer of energy and is responsible for approximately 2.8 percent of global greenhouse gases.³⁷ Although environmental sustainability of provision of Internet services in most jurisdictions is still underregulated, the sector is under increasing pressure to adopt energy efficiency standards. The most energy intensive subsectors that enable Internet traffic are already adopting internationally recognized standards to offset carbon emissions. Therefore, Subcategory 1.3.4–Environmental Sustainability (Internet) comprises two indicators (table 8).

Table 8. Subcategory 1.3.4–Environmental Sustainability (Internet)

	Indicators	Components
1	Environmental Reporting or Disclosure Standards for Digital Connectivity Infrastructure	Mandatory or voluntary environmental reporting or disclosure standards for digital connectivity infrastructure and data infrastructure (such as energy consumption, CO ₂ equivalents, use of renewable energy, energy intensity, e-waste metrics, or Water consumption existence for digital connectivity infrastructure)
2	Emissions and Energy Efficiency of Infrastructure	National targets for emissions or energy efficiency of electronic communication networks, including data centers (for example, or power usage effectiveness or renewable energy use)

2. PILLAR II. QUALITY OF THE GOVERNANCE AND TRANSPARENCY OF UTILITY SERVICES

Table 9 shows the structure for Pillar II, the Quality of the Governance and Transparency of Utility Services. Each of this pillar’s subcategories will be discussed in more detail as they relate to each of the three areas measured: Electricity, Water, and Internet.

Table 9. Pillar II–Quality of the Governance and Transparency of Utility Services

2.1	Electricity (15 indicators)
2.1.1	Digital Services and Interoperability (4 indicators)
2.1.2	Availability of Information and Transparency (6 indicators)
2.1.3	Monitoring of Service Supply (includes gender and environment) (3 indicators)
2.1.4	Enforcement of Safety Regulations and Consumer Protection Mechanisms (2 indicators)
2.2	Water (15 indicators)
2.2.1	Digital Services and Interoperability (4 indicators)
2.2.2	Availability of Information and Transparency (6 indicators)
2.2.3	Monitoring of Service Supply (includes gender and environment) (3 indicators)
2.2.4	Enforcement of Safety Regulations and Consumer Protection Mechanisms (2 indicators)
2.3	Internet (13 indicators)
2.3.1	Digital Services and Interoperability (4 indicators)
2.3.2	Availability of Information and Transparency (5 indicators)
2.3.3	Monitoring of Service Supply (includes gender and environment) (2 indicators)
2.3.4	Enforcement of Safety Regulations and Consumer Protection Mechanisms (2 indicators)

Each subcategory is divided into several indicators, each of which may, in turn, have several components.

2.1.1, 2.2.1, and 2.3.1 Digital Services and Interoperability (Electricity, Water, Internet)

Online applications for utility services enhance customer experience of receiving electricity, water, and internet connections, eliminating the need for in-person visits. The ability to track and review online applications also improves service quality, transparency, and customer experience. Digitalization of utility applications improves public administration and government efficiency as well as lowers corruption.³⁸ Web-based platforms for making online payments for utility services enhance efficiency and cost

effectiveness. Digital platforms also reduce delays associated with applying for new connections and payment of monthly fees.³⁹

Interoperability of utility systems facilitates the process of issuing new connections across electricity, water, and internet services. A shared infrastructure database allows for identification of previously established infrastructure networks prior to starting new projects.⁴⁰ In addition, an online unified platform with information about planned infrastructure works is essential for effective coordination of network expansion.⁴¹ The presence of a web-based system or agency to facilitate agency coordination for excavation permit applications and approvals expedites information exchange and connection processes.⁴²

Therefore, Subcategories 2.1.1, 2.2.1, 2.3.1–Digital Services and Interoperability comprise twelve indicators: four for Electricity (Subcategory 2.1.1), four for Water (Subcategory 2.2.1), and four for Internet (Subcategory 2.3.1) (table 10).

Table 10. Subcategory 2.1.1, 2.2.1, and 2.3.1–Digital Services and Interoperability

	Indicators	Components
Electricity		
1	Electronic Application	i) The availability of online application for new commercial connections ii) The availability of online tracking of the applications
2	Electronic Payment	i) The possibility of paying online the fee for a new connection ii) The possibility of paying online for monthly tariffs
3	Information on Existing Infrastructure and Planned Works	i) The existence of a national/local infrastructure databases of existing infrastructure networks (such as “dial before you dig” or GIS) of different utilities ii) A database for submitting the information about the planned works
4	Coordination Mechanisms for Excavation Permits	The existence of a web-based system or the agency in place that facilitates coordination for excavation permit applications and approvals
Water		
5	Electronic Application	i) The availability of online application for new commercial connections ii) The availability of online tracking of the applications
6	Electronic Payment	i) The possibility of paying online the fee for a new connection ii) The possibility of paying online for monthly tariffs
7	Information on Existing Infrastructure and Planned Works	i) The existence of a national/local infrastructure databases of existing infrastructure networks (such as “dial before you dig” or GIS) of different utilities ii) A database for submitting the information about the planned works
8	Coordination Mechanisms for Excavation Permits	The existence of a web-based system or the agency in place that facilitates coordination for excavation permit applications and approvals
Internet		
9	Electronic Application	i) The availability of online application for new commercial connections ii) The availability of online tracking of the applications
10	Electronic Payment	i) The possibility of paying online the fee for a new connection ii) The possibility of paying online for monthly tariffs
11	Information on Existing Infrastructure and Planned Works	i) The existence of a national/local infrastructure databases of existing infrastructure networks (such as “dial before you dig” or GIS) of different utilities ii) A database for submitting the information about the planned works
12	Coordination Mechanisms for Excavation Permits	The existence of a web-based system or the agency in place that facilitates coordination for excavation permit applications and approvals

Note: GIS = Geographic Information System.

2.1.2, 2.2.2, and 2.3.2 Availability of Information and Transparency (Electricity, Water, Internet)

Transparency in provision of utility services is crucial for reducing transaction costs and improving predictability to users, as well as fostering accountability among utility services providers.⁴³ Online information on documents, requirements, time limits, and fee schedules to obtain a utility connection allows

businesses to better understand the processes. Lack of such information may lead to incomplete applications, unnecessary back-and-forth with the utility, and higher rejection rates. Transparency of regulatory information, such as fee schedules, is associated with greater regulatory efficiency, lower compliance costs, and a better overall regulatory environment.⁴⁴

Online availability of tariffs, advance notification of tariff changes, and transparency of tariff determination mechanisms are three important elements of transparent service provision that allow firms to calculate costs, anticipate expenses, and, thus, plan operations efficiently. When tariffs and tariff changes lack transparency, end users may overpay for services or choose a service that does not meet their needs.⁴⁵ Furthermore, transparency of the billing system and formula prescribing how end-user tariffs are set enable businesses to contest charges, if necessary.⁴⁶

Public availability of planned outages or their notifications to customers improves predictability of service provision.⁴⁷ Internet interruptions adversely impact both businesses and customers.⁴⁸ Similarly, unpredictable electricity and water services may lead to spoilage and damaged inventory, thereby posing financial risks to business.⁴⁹ Transparency of planned outages contributes to a more predictable business environment. Availability of information on the entity in charge of managing complaints, documents and steps required to file a complaint as well as criteria for filing complaints are important accountability elements.⁵⁰

Furthermore, regular monitoring and publishing of utility performance KPIs improves service predictability and transparency.⁵¹ End users should be able to compare a utility's actual performance against the performance goals set in its accountability framework.⁵² Therefore, Subcategories 2.1.2, 2.2.2, and 2.3.2—Availability of Information and Transparency comprise seventeen indicators: six for Electricity (Subcategory 2.1.2), six for Water (Subcategory 2.2.2), and five for Internet (Subcategory 2.3.2) (table 11).

Table 11. Subcategory 2.1.2, 2.2.2, and 2.3.2—Availability of Information and Transparency (Electricity, Water, Internet)

	Indicators	Components
Electricity		
1	Connection Requirements	i) The required documents ii) Procedures iii) Connection cost iv) Stipulated connection time standards
2	Tariffs and Tariff Setting	i) Tariffs are published online ii) Customers are notified in advance of tariff changes at least one billing cycle in advance iii) Tariff-setting formula calculating the monthly tariff is publicly available
3	Planned Outages	Planned outages are available online or communicated to customers
4	Complaint Mechanisms	i) Entity in charge of managing the complaints ii) Required documents iii) Steps necessary to make a complaint iv) Criteria or scope of complaint mechanism
5	Service Quality Indicators	Online availability of KPIs on duration and frequency of electricity outages
6	Sustainability Indicators	Online availability of KPIs on environmental sustainability of electricity
Water		
7	Connection Requirements	i) The required documents ii) Procedures iii) Connection cost iv) Stipulated connection time standards
8	Tariffs and Tariff Setting	i) Tariffs are published online ii) Customers are notified in advance of tariff changes at least one billing cycle in advance iii) Tariff-setting formula calculating the monthly tariff is publicly available
9	Planned Outages	Planned outages are available online or communicated to customers

10	Complaint Mechanisms	i) Entity in charge of managing the complaints ii) Required documents iii) Steps necessary to make a complaint iv) Criteria or scope of complaint mechanism
11	Service Quality Indicators	Online availability of KPIs on reliability and quality of water services.
12	Sustainability Indicators	Online availability of KPIs on environmental sustainability of water supply
Internet		
13	Connection Requirements	i) The required documents ii) Procedures iii) Connection cost iv) Stipulated connection time standards
14	Tariffs and Tariff Setting	i) Tariffs are published online ii) Customers are notified in advance of tariff changes at least one billing cycle in advance iii) Tariff-setting formula calculating the monthly tariff is publicly available.
15	Planned Outages	Planned outages are available online or communicated to customers
16	Complaint Mechanisms	i) Entity in charge of managing the complaints ii) Required documents iii) Steps necessary to make a complaint iv) Criteria or scope of complaint mechanism
17	Service Quality Indicators	Online availability of KPIs on reliability and quality of Internet supply

Note: KPI = Key Performance Indicator.

2.1.3, 2.2.3, and 2.3.3 Monitoring of Service Supply (includes gender and environment)

Measuring data on quality of provision of public services helps to establish “what works” in achieving the set objectives, to identify functional competences, and to enhance public accountability.⁵³ Reliability of electricity supply can be monitored through the System Average Interruption Duration Index (SAIDI) and the System Average Interruption Frequency Index (SAIFI).⁵⁴ Reliability of water supply can be monitored by measuring average hours of service per day, or number of customers with interrupted supply.⁵⁵ Water quality can be maintained through regular monitoring of percentage of water receiving chemical treatment as well as percentage of water unsuitable for consumption.⁵⁶ Quality of the internet supply can be monitored through average download and upload speeds or latency times.⁵⁷

Environmental sustainability of electricity supply can be monitored through percentage of energy used from renewable sources. Environmental sustainability of water supply can be assessed through monitoring the percentage of disposal of sludge from the water treatment or percentage of wastewater that has been reused.⁵⁸

Sex-disaggregated data promote gender parity, allowing service providers to identify areas where opportunities for women lag behind.⁵⁹ Sex-disaggregated customer survey results enable utilities to analyze issues of customer satisfaction from a gender-specific perspective, identifying potential bottlenecks and obstacles faced by female customers or women entrepreneurs.⁶⁰ Therefore, Subcategories 2.1.3, 2.2.3, and 2.3.3—Monitoring of Service Supply (includes gender and environment) comprise eight indicators: three for Electricity (Subcategory 2.1.3), three for Water (Subcategory 2.2.3), and two for Internet (Subcategory 2.3.3) (table 12).

Table 12. Subcategory 2.1.3, 2.2.3, and 2.3.3—Monitoring of Service Supply (includes gender and environment)

	Indicators	Components
Electricity		
1	Reliability and Quality of Electricity Supply	Existence of KPIs on the duration and frequency of electricity outage
2	Sustainability of Electricity Supply	Existence of KPIs on sustainability of electricity supply

3	Access to Electricity for Women Entrepreneurs	Sex-disaggregated customer survey results, including consumer satisfaction surveys, and complaint submissions
Water		
4	Reliability and Quality of Water Supply	i) Existence of KPIs on the reliability of water supply ii) Existence of KPIs on the quality of water
5	Sustainability of Water Supply	Existence of KPIs on sustainability of water supply
6	Access to Water for Women Entrepreneurs	Sex-disaggregated customer survey results, including consumer satisfaction surveys, and complaint submissions
Internet		
7	Reliability and Quality of Internet Supply	Existence of KPIs on the reliability and quality of internet service
8	Access to Internet for Women Entrepreneurs	Sex-disaggregated customer survey results, including consumer satisfaction surveys, and complaint submissions

Note: KPI = Key Performance Indicator.

2.1.4, 2.2.4, and 2.3.4 Enforcement of Safety Regulations and Consumer Protection Mechanisms

The way in which regulations are implemented and enforced determines if a regulatory system is working as intended.⁶¹ To ensure safety of utility connections as per the regulatory framework, quality checks that certify electricity and water installations must be implemented in practice, either through third-party inspections or by hiring certified contractors. Similarly, implementation of cybersecurity measures and safeguards is necessary for firms to safely undertake digital activities and e-transactions. Given that even brief security breaches can negatively affect businesses, there is a clear need for strong safety measures.⁶²

Furthermore, existence of a complaint mechanism contributes to the enforcement of regulations, benefiting businesses by allowing them to report inadequate service supply and escalate complaints and appeals.⁶³ In addition, it benefits businesses by allowing them to report inadequate service supply. A strong primary complaint mechanism at utility level enables resolution of issues without engaging in costly and lengthy dispute resolution processes. However, a secondary complaint mechanism is also important for escalating complaints and appeals, if needed. Therefore, Subcategories 2.1.4, 2.2.4, and 2.3.4—Enforcement of Safety Regulations and Consumer Protection Mechanisms comprise six indicators: two for Electricity (Subcategory 2.1.4), two for Water (Subcategory 2.2.4), and two for Internet (Subcategory 2.3.4) (table 13).

Table 13. Subcategory 2.1.4, 2.2.4, and 2.3.4—Enforcement of Safety Regulations and Consumer Protection Mechanisms

	Indicators	Components
Electricity		
1	Implementation of Inspections for Electricity Connections	i) Internal installations works ii) External installations works <i>For each of these two components, the indicator assesses whether the connection works are carried out by certified contractors who attest to the quality of installation or if a third-party inspection is implemented in practice.</i>
2	Independent Complaint Mechanism	The existence of complaint mechanism independent from the utility to escalate complaints.
Water		
3	Implementation of Inspections for Water Connections	i) Internal installations works ii) External installations works <i>For each of these two components, the indicator assesses whether the connection works are carried out by certified contractors who attest to the quality of installation or if a third-party inspection is implemented in practice.</i>
4	Independent Complaint Mechanism	The existence of complaint mechanism independent from the utility to escalate complaints
Internet		
5	Cybersecurity Protocols	i) Reporting of cybersecurity breaches ii) Response to reported cyberattacks or cybersecurity breaches iii) Cybersecurity incident response drills, trainings, or exercise iv) Cybersecurity audits

6	Independent Complaint Mechanism	The existence of complaint mechanism independent from the utility to escalate complaints.
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3. PILLAR III. OPERATIONAL EFFICIENCY OF UTILITY SERVICE PROVISION

Table 14 shows the structure for Pillar III, the Operational Efficiency of Utility Service Provision. Each of this pillar's subcategories will be discussed in more detail as they relate to each of the three areas measured: Electricity, Water, and Internet.

Table 14. Pillar III–Operational Efficiency of Utility Service Provision

3.1	Electricity
3.1.1	Time to Obtain a Connection
3.1.2	Reliability of Supply
3.2	Water
3.2.1	Time to Obtain a Connection
3.2.2	Reliability of Supply
3.3	Internet
3.3.1	Time to Obtain a Connection
3.3.2	Reliability of Supply

3.1.1, 3.2.1, and 3.3.1 Time to Obtain a Connection (Electricity, Water, Internet)

It is important for businesses to receive utility services in a timely manner to jumpstart their operations or productions. Delays in obtaining permits could lead to higher transaction costs and fewer connections.⁶⁴ A straightforward process that requires less time to receive an electricity connection positively impacts firm revenues, lowers connection rates, and limits bribes.⁶⁵ Therefore, Subcategories 3.1.1, 3.2.1 and 3.3.1–Time to Obtain Utility Connections comprise three indicators, one for each of the Electricity (Subcategory 3.1.1), Water (Subcategory 3.2.1), and Internet (Subcategory 3.3.1) (table 15).

Table 15. Subcategories 3.1.1, 3.2.1, and 3.3.1–Time to Obtain a Connection

	Indicators	Components
1	Time to Obtain a Connection (Electricity)	The period in days between the completed and submitted application and the connection provision
2	Time to Obtain a Connection (Water)	
3	Time to Obtain a Connection (Internet)	

3.1.2, 3.2.2, and 3.3.2 Reliability of Service (Electricity, Water, Internet)

Economies that do not monitor electricity outages tend to experience high instances of electricity interruptions.⁶⁶ Reliability of utility services also impacts end-user behavior. Reliable electricity services enable predictable production processes and business planning as well as boost firms' productivity.⁶⁷ Similarly, reliable water services benefit a wide range of firms as they depend on a steady water supply for heating, cooling, cleaning, or using water as production input.⁶⁸ Quality of Internet services is another critical element for businesses. Service disruptions as well as other issues, such as high latency, throughput, jitter, or recovery times, lead to firms losing a competitive edge in their industries. Interruptions of Internet supply also impede firms' ability to expand customer base, use data intensive applications or engage with clients and suppliers.⁶⁹ Therefore, Subcategories 3.1.2, 3.2.2 and 3.3.2–Reliability of Utility Services comprise three indicators, one for each of the Electricity (Subcategory 3.1.3), Water (Subcategory 3.2.3), and Internet (Subcategory 3.3.3) (table 16).

Table 16. Subcategories 3.1.2, 3.2.2, and 3.3.2–Reliability of Service

	Indicators	Components
1	Reliability of Supply (Electricity)	i) Number of power outages experienced by firms in a typical month ii) Average duration of outages

		iii) Losses due to electrical outages as a percentage of annual sales iv) Percentage of firms owning or sharing a generator
2	Reliability of Supply (Water)	Percentage of firms not experiencing water insufficiencies
3	Reliability of Supply (Internet)	Percentage of firms not experiencing internet disruptions

III. DATA SOURCES

4.1 Data Collection Sources

The data for Pillar I and Pillar II are collected through consultations with private sector experts. Private sector experts include lawyers working in the areas of Electricity, Water, and Internet, as well as practitioners, such as construction companies, contractors, engineers, water specialists, broadband technicians, network architects, and engineers.

The data for Pillar III are collected through Enterprise Surveys. Enterprise Surveys provide representative data on time to receive utility connections, on service disruptions and associated losses experienced by businesses in practice. A representative sample of companies captures the variation of user experience within each economy. Businesses with different characteristics, such as size, region, and sector participate in the surveys. For more details on the collection of data by the Enterprise Surveys, please refer to the Overview chapter of this Methodology Handbook.

4.2 Screening and Selection of Experts

The Utility Services topic has three questionnaires, one for each topic: Electricity, Water, and Internet. Each questionnaire targets experts in their respective areas of expertise. In order to select potential experts to participate in the questionnaires, screener questionnaires for Electricity, Water and Internet have been developed (table 17).

Table 17. Screener Questionnaire and Respondent Criteria

Relevant Experts' Professions	
Electricity	Construction companies, contractors, engineers, lawyers, etc.
Water	Construction companies, contractors, engineers, lawyers, water specialists, etc.
Internet	Broadband technicians, network architects, network engineers, information technology project managers, software development, IT directors/managers, help desk/ hardware technicians, ICT policy experts, lawyers, regulatory compliance specialists, etc.
Relevant Areas of Specialization	
Electricity	Civil engineer, construction contracting, construction law, electrical contracting, electrical engineering, energy law, general expertise in obtaining or providing electricity connections, etc.
Water	Civil engineering, construction contracting, construction law, general expertise in obtaining water connections, water regulations, etc.
Internet	Broadband installation, IT system administration, IT security/cybersecurity, IT hardware maintenance and administration, network and telecommunications, web/software, ICT law/regulatory compliance (infrastructure investment/ownership/licensing; commercial disputes/regulator disputes; cybersecurity/liability/data protection/consumer protection, etc.
Assessment of the Experts' Knowledge and Experience Related to Commercial Electricity, Water and Internet Connections and Associated Regulations, Services, and Processes	
Electricity	Experience with submitting applications for electricity connections to the utility, carrying out electricity installation in new commercial buildings, submitting payment for electricity services, carrying out inspections of electricity connections; knowledge of commercial electricity tariffs; engagement with complaint mechanism for electricity services; knowledge of the regulations governing inspections for electricity connections, the regulations on quality of electricity supply, as well as the environmental standards related to electricity provision and use
Water	Experience with submitting applications for water connections to the utility, carrying out water installations in new commercial buildings, submitting payment for water services, carrying out

	inspections of water connections; knowledge of commercial water tariffs; engagement with complaint mechanism for water services, knowledge of the regulations governing inspections for water connections, and the regulations on quality of water supply and safety of water connection, as well as the environmental standards related to water provision and wastewater
Internet	Experience with broadband installation to new buildings, network maintenance and management, quality of service monitoring and network traffic analysis, quality of service complaints and resolution, energy-efficient networking and environmental standards related to provision of internet services, cybersecurity management and analytics, cybersecurity policy and compliance, invoice management and payments for broadband services, negotiation of contracts for new broadband connection agreements, negotiation of contracts for new broadband infrastructure agreements (spectrum, rights of way management, infrastructure sharing, utility partnership or interconnection agreements), broadband competition, compensation or consumer complaint disputes

Note: ICT = Information and Communication Technology; IT = Information Technology.

Thus, the information provided in the screener questionnaires allows the team to better understand the experts' professions; areas of specialization and experts' knowledge or experience related to commercial Electricity, Water, and Internet connections and related regulations, services, and processes. Ultimately, this will allow the team to select the experts to respond to the relevant questionnaires.

IV. PARAMETERS

To ensure comparability of the data from expert consultations across economies, the Utility Services topic uses general and specific parameters. A parameter refers to an assumption that is made about the characteristics of location, utility provider and the specific characteristics of utility connection. Questionnaire respondents are presented with these parameters and assumptions and asked to evaluate a standardized scenario that permits comparability across locales, jurisdictions, and economies.

5.1 General Parameters

Electricity, Water, and Internet connections share the same general parameters. In many economies, there are subnational jurisdictions that require a specific business location to be specified in order for experts to identify the relevant regulatory framework to be assessed. Similarly, many economies have multiple utility providers and the assessment of performance of utility service provision requires identifying the relevant provider.

5.1.1 Business Location

Justification:

Geographic location determines the availability of electricity, water, and internet connections, in addition to the type of connections and construction required. For instance, geographic location determines the type of electricity connection: overhead versus underground, as well as the level of voltage (connection to high-, medium-, or low-voltage network). In the case of water connections, availability of a piped network depends on the location. For the internet, deployment of specific technologies and, ultimately, availability of high-speed internet also depend on location. These factors may affect the affordability or feasibility of utility services and the time it takes to obtain new connections. Thus, business location is an essential parameter for assessing efficiency of the utility service provision. The largest city is chosen based on the population size as detailed in the Overview chapter of this Methodology Handbook.

Application:

For Pillar I, the parameter is used in cases where regulations are not applicable at a national level, varying across states or regions. For the economies where regulations differ across states, regulations for the largest city are measured. For Pillar II, the parameter is used to determine the relevant utility service provider and is important for identifying a geographical area of provision of utility services.

5.1.2 Utility–Largest Utility Provider

Justification:

In some cities, there could be one or several utility providers. The Utility Services topic aims to capture the most common practice; hence, the largest utility provider in the largest city is considered (in terms of customers served or market share). In the case of internet connections, amid a competitive nature of the market of Internet Service Providers (ISPs), the largest ISP (in terms of market share in the largest city) that offers high-speed fixed broadband packages (minimum of 25 Mbps [Megabits per second] download speed) is considered.

Application:

The parameter of the largest utility provider in the largest city is relevant to all measures of Pillar II, as the provision of utility services varies depending on the utility. The parameter does not apply to the indicator on System for Excavation Permit Approval, where the existence of infrastructure management system would typically be available for all utilities. The parameter also does not apply to the indicator on tariff transparency, in cases where tariffs are published on regulatory agency websites.

5.2 Specific Parameters

Utility-specific parameters are also necessary to ensure that estimates specific to the connection, such as information on the time and cost to obtain utility connections provided by experts, are comparable across economies. Utility connections can range widely depending on the type, usage, or size of the connection. In order to specify the type of connection that the dataset intends to capture, parameters of load capacity, water consumption and download/upload speed are designed for electricity, water and internet connections, respectively.

5.2.1 Internet–Speed (25 Mbps–download speed; 3 Mbps–upload speed)

Justification:

Internet connections are usually categorized and priced based on the data usage and speed requirements. Typically, firms have higher data usage and internet speed requirements than households. A wide range of connection “packages” or “bundles” are usually available to firms in most markets.⁷⁰ For example, a call center with more than 10 employees uploading and downloading data simultaneously may require a speed at least 12 times faster than a small physical commercial establishment with 3 to 5 employees.⁷¹

Application:

A specific parameter of at least 25 Megabits per second (Mbps) of download speed and 3 Mbps of upload speed is considered to ensure data comparability when measuring time and cost of installation of a new internet connection across all surveyed economies. The 25 Mbps parameter covers firms operating in sectors with medium data usage, including education, e-commerce, construction, or basic manufacturing. In this regard, the Utility Services topic focuses on businesses with medium internet data use. For example, a business with 5 employees that email, exchange files, use cloud-based software (for inventory management, financial accounting and paying taxes and payroll) and videoconference simultaneously. Such a business could have 10 devices (PCs, tablets, TVs) connected through a small local network and host a website server. This parameter also ensures data representativeness and comparability.

V. TOPIC SCORING

The Utility Services topic has three pillars: Pillar I–Quality of Electricity, Water, and Internet Regulations; Pillar II–Quality of the Governance and Transparency of Utility Services; and Pillar III–Operational Efficiency of Utility Service Provision. The total points for each pillar are further rescaled to values from 0 to 100, and subsequently aggregated into the total topic score. Each pillar contributes one-third to the total topic score. Table 18 shows the scoring for the Utility Services topic. The scores distinguish between

benefits to the firm (captured as firm flexibility points) and benefits to society's broader interests (captured as social benefits points). For further scoring details, please see Annex A, which complements this section.

Table 18. Aggregate Scoring Overview

Pillar	Title	Number of Indicators	Score			Rescaled Points (0–100)	Weight
			Firm Flexibility Points	Social Benefits Points	Total Points		
I	Quality of Regulations on Utility Services	33	25	33	58	100	0.33
II	Quality of the Governance and Transparency of Utility Services	43	39	43	82	100	0.33
III	Operational Efficiency of Utility Service Provision	6	100	n/a	100	100	0.33

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent).

6.1 Pillar I—Quality of Regulations on Utility Services

Pillar I covers 33 indicators with a total score of 58 points (25 points on firm flexibility and 33 points on social benefits) (table 19). The scoring for each category under this pillar is as follows:

- 6.1.1** *Electricity* has 10 indicators with a total maximum score of 18 points (8 points on firm flexibility and 10 points on social benefits). Specifically, the *Regulatory Monitoring of Tariffs and Service Quality* Subcategory has 2 indicators; the *Utility Infrastructure Sharing and Quality Assurance Mechanisms* Subcategory has 2 indicators; the *Safety of Utility Connections* Subcategory has 3 indicators, and *Environmental Sustainability* has 3 indicators.
- 6.1.2** *Water* has 12 indicators with a total maximum score of 20 points (8 points on firm flexibility and 12 points on social benefits). Specifically, the *Regulatory Monitoring of Tariffs and Service Quality* Subcategory has 2 indicators; the *Utility Infrastructure Sharing and Quality Assurance Mechanisms* Subcategory has 2 indicators; the *Safety of Utility Connections* Subcategory has 3 indicators, and *Environmental Sustainability* has 5 indicators.
- 6.1.3** *Internet* has 11 indicators with a total maximum score of 20 points (9 points on firm flexibility and 11 points on social benefits). Specifically, the *Regulatory Monitoring of Tariffs and Service Quality* Subcategory has 2 indicators; the *Utility Infrastructure Sharing and Quality Assurance Mechanisms* Subcategory has 4 indicators; the *Safety of Utility Connections* Subcategory has 3 indicators, and *Environmental Sustainability* has 2 indicators.

A regulatory framework that ensures regulatory monitoring, efficiency of connection processes, adequate quality of service supply and promotes the safety of connections benefits both firms (firm flexibility) and society/customers (social benefits). Hence, across Electricity, Water, and Internet, equal points are assigned on firm flexibility and social benefits in *Regulatory Monitoring of Tariffs and Service Quality*, *Utility Infrastructure Sharing and Quality Assurance Mechanisms*, and *Safety of Utility Connections* Subcategories. For *Environmental Sustainability* Subcategories, the positive impact for society is derived from enhanced environmental sustainability and improved adherence to environmental standards. Most of the measures under *Environmental Sustainability* Subcategories have either a neutral impact on firms, wherein requirements are imposed on other actors (such as utilities, data centers), or an ambiguous impact and hence are not scored.

Table 19. Aggregate Scoring Pillar I

Pillar I– Quality of Regulations on Utility Services		No. of Indicators	FFP	SBP	Total Points	Rescaled Points
1.1	Electricity	10	8	10	18	33.33
1.1.1	Regulatory Monitoring of Tariffs and Service Quality	2	2	2	4	8.33
1.1.2	Utility Infrastructure Sharing and Quality Assurance Mechanisms	2	2	2	4	8.33
1.1.3	Safety of Utility Connections	3	3	3	6	8.33
1.1.4	Environmental Sustainability	3	1	3	4	8.33
1.2	Water	12	8	12	20	33.33
1.2.1	Regulatory Monitoring of Tariffs and Service Quality	2	2	2	4	8.33
1.2.2	Utility Infrastructure Sharing and Quality Assurance Mechanisms	2	2	2	4	8.33
1.2.3	Safety of Utility Connections	3	3	3	6	8.33
1.2.4	Environmental Sustainability	5	1	5	6	8.33
1.3	Internet	11	9	11	20	33.33
1.3.1	Regulatory Monitoring of Tariffs and Service Quality	2	2	2	4	8.33
1.3.2	Utility Infrastructure Sharing and Quality Assurance Mechanisms	4	4	4	8	13.33
1.3.3	Safety of Utility Connections	3	3	3	6	8.33
1.3.4	Environmental Sustainability	2	0	2	2	3.33
Total		33	25	33	58	100.00

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

6.2 Pillar II–Quality of the Governance and Transparency of Utility Services

Pillar II covers 43 indicators with a total score of 82 points (39 points on firm flexibility and 43 points on social benefits) (table 20). The scoring for each category under the pillar is as follows:

- 6.2.1** *Electricity* has 15 indicators with a total maximum score of 28 points (13 points on firm flexibility and 15 points on social benefits). Specifically, the *Digital Services and Interoperability* Subcategory has 4 indicators; the *Availability of Information and Transparency* Subcategory has 6 indicators; the *Monitoring of Service Supply (includes gender and environment)* Subcategory has 3 indicators, and *Enforcement of Safety Regulations and Consumer Protection Mechanisms* has 2 indicators.
- 6.2.2** *Water* has 15 indicators with a total maximum score of 28 points (13 points on firm flexibility and 15 points on social benefits). Specifically, the *Digital Services and Interoperability* Subcategory has 4 indicators; the *Availability of Information and Transparency* Subcategory has 6 indicators; the *Monitoring of Service Supply (includes gender and environment)* Subcategory has 3 indicators, and *Enforcement of Safety Regulations and Consumer Protection Mechanisms* has 2 indicators.
- 6.2.3** *Internet* has 13 indicators with a total maximum score of 26 points (13 points on firm flexibility and 13 points on social benefits). Specifically, the *Digital Services and Interoperability* Subcategory has 4 indicators; the *Availability of Information and Transparency* Subcategory has 5 indicators; the *Monitoring of Service Supply (includes gender and environment)* Subcategory has 2 indicators, and *Enforcement of Safety Regulations and Consumer Protection Mechanisms* has 2 indicators.

A regulatory framework that promotes digital services and interoperability of utility services benefits both firms (firm flexibility) and society (social benefits). Hence, across Electricity, Water, and Internet, equal

points are assigned to both categories. A regulatory framework that ensures transparency of utility services benefits both firms (firm flexibility) and society (social benefits). Monitoring is equally important, hence the score for the most part is allocated equally between firm flexibility and social benefits, except for the measures on KPIs to monitor environmental sustainability of electricity and water supply. These measures do not directly impact firms and, thus, are scored on social benefits only. The enforcement of regulations including the implementation of inspections in water and electricity, cybersecurity protocols in internet, and the existence of an independent complaint mechanisms improve public safety and accountability, extending benefits to firms and society as a whole. Hence, equal points are assigned in this subcategory across Water, Electricity, and Internet.

Table 20. Aggregate Scoring Pillar II

Pillar II–Public Services: Quality of Governance and Transparency of Utility Services		No. of Indicators	FFP	SBP	Total Points	Rescaled Points
2.1	Electricity	15	13	15	28	33.33
2.1.1	Digital Services and Interoperability	4	4	4	8	8.33
2.1.2	Availability of Information and Transparency	6	5	6	11	8.33
2.1.3	Monitoring of Service Supply (includes gender and environment)	3	2	3	5	8.33
2.1.4	Enforcement of Safety Regulations and Consumer Protection Mechanisms	2	2	2	4	8.33
2.2	Water	15	13	15	28	33.33
2.2.1	Digital Services and Interoperability	4	4	4	8	8.33
2.2.2	Availability of Information and Transparency	6	5	6	11	8.33
2.2.3	Monitoring of Service Supply (includes gender and environment)	3	2	3	5	8.33
2.2.4	Enforcement of Safety Regulations and Consumer Protection Mechanisms	2	2	2	4	8.33
2.3	Internet	13	13	13	26	33.33
2.3.1	Digital Services and Interoperability	4	4	4	8	8.33
2.3.2	Availability of Information and Transparency	5	5	5	10	8.33
2.3.3	Monitoring of Service Supply (includes gender and environment)	2	2	2	4	8.33
2.3.4	Enforcement of Safety Regulations and Consumer Protection Mechanisms	2	2	2	4	8.33
Total		43	39	43	82	100.00

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point; KPI = Key Performance Indicator.

6.3 Pillar III–Operational Efficiency of Utility Service Provision

Pillar III covers 6 indicators with points ranging from 0 to 100 (table 21). The points under this pillar are assigned to firm flexibility only, as the indicators measure the outcomes of service provision to firms. For example, long times to obtain electricity, water, and internet connections as well as service disruptions have adverse impacts on firms, thus hampering firm flexibility.

6.3.1 *Electricity* has 2 indicators with a total maximum score of 33.33 points. Specifically, the *Time to Obtain a Connection* Subcategory has 1 indicator, and the *Reliability of Supply* Subcategory has 1 indicator.

6.3.2 *Water* has 2 indicators with a total maximum score of 33.33 points. Specifically, the *Time to Obtain a Connection* Subcategory has 1 indicator, and the *Reliability of Supply* Subcategory has 1 indicator.

6.3.3 *Internet* has 2 indicators with a total maximum score of 33.33 points. Specifically, the *Time to Obtain a Connection* Subcategory has 1 indicator, and the *Reliability of Supply* Subcategory has 1 indicator.

Table 21. Aggregate Scoring Pillar III

Pillar III—Operational Efficiency of Utility Service Provision		No. of Indicators	Rescaled Points
3.1	Electricity	2	33.33
3.1.1	Time to Obtain a Connection	1	16.67
3.1.2	Reliability of Supply	1	16.67
3.2	Water	2	33.33
3.2.1	Time to Obtain a Connection	1	16.67
3.2.2	Reliability of Supply	1	16.67
3.3	Internet	2	33.33
3.3.1	Time to Obtain a Connection	1	16.67
3.3.2	Reliability of Supply	1	16.67
Total		6	100.00

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- ⁵⁴ IEEE (2004).
- ⁵⁵ IBNET Benchmark database.
- ⁵⁶ WAREG-European Water Regulators (2017).
- ⁵⁷ Kelly and Rossotto (2012).
- ⁵⁸ Alegre et al. (2006); Hristov and Chirico (2019).

- ⁵⁹ Pangare, Miletto, and Thuy (2019).
- ⁶⁰ ADB (2012).
- ⁶¹ OECD (2018).
- ⁶² Kelly and Rossotto (2012).
- ⁶³ Transparency International (2016).
- ⁶⁴ Hamman (2014).
- ⁶⁵ Geginat and Ramalho (2015).
- ⁶⁶ Arlet (2017).
- ⁶⁷ Fedderke (2006); Grimm, Hartwig, and Lay (2012); Khandker et al. (2014); Kirubi et al. (2009).
- ⁶⁸ World Bank (2017b).
- ⁶⁹ Chen (2019).
- ⁷⁰ ITU and UNESCO (2021).
- ⁷¹ Francom (2020).

ANNEX A. UTILITY SERVICES–SCORING SHEET

This document outlines the scoring approach for the Utility Services topic. For every indicator, a Firm Flexibility Point (FFP) and/or a Social Benefits Point (SBP) are assigned, along with a clarification on the detailed scoring for each such indicator and a note on the relevant background literature.

PILLAR I–QUALITY OF REGULATIONS ON UTILITY SERVICES					
1.1 ELECTRICITY					
1.1.1 Regulatory Monitoring of Tariffs and Service Quality					
Indicators	FFP	SBP	Total Points	Rescaled Points	Background Literature
Monitoring of Tariffs	1	1	2	4.17	AfDB (2021); Brown et al. (2006); Cubbin and Stern (2006); Rana et al. (2022); Foster and Rana (2020); OECD (2021a); Pérez-Arriaga et al. (2017); World Bank (2019)
Monitoring of Service Quality	1	1	2	4.17	AfDB (2021); Brown et al. (2006); Cubbin and Stern (2006); Rana et al. (2022); Foster and Rana (2020); OECD (2021a); Pérez-Arriaga et al. (2017); World Bank (2019)
Total Points for Subcategory 1.1.1	2	2	4	8.33	
1.1.2 Utility Infrastructure Sharing and Quality Assurance Mechanisms					
Joint Planning and Construction	1	1	2	4.17	Martínez Garza Fernández et al. (2020); OECD (2003, 2012); RWI (n.d.)
Mechanisms on Service Quality Assurance	1	1	2	4.17	Costello (2012); Foster and Rana (2020)
Total Points for Subcategory 1.1.2	2	2	4	8.33	
1.1.3 Safety of Utility Connections					
Professional Certifications	1	1	2	2.78	IFC, World Bank, and MIGA (2013); IEEE (2022); ISSA (n.d); Leland (1979)
Inspection Regimes	1	1	2	2.78	Boyne et al. (2002); IEC (2016); IFC, World Bank, and MIGA (2013); World Bank (2017b)
Liability Regimes	1	1	2	2.78	IFC, World Bank, and MIGA (2013); Wilson et al. (2009)
Total Points for Subcategory 1.1.3	3	3	6	8.33	

1.1.4 Environmental Sustainability					
Sustainability of Electricity Provision	n/a	1	1	2.08	Banerjee et al. (2017); Barreira et al. (2017); Gonzalez (2022); OECD (2009, 2015); Sinton et al. (2017); UN (2015); UNEP (n.d.)
Sustainability of Electricity Use	n/a	1	1	2.08	AfDB (2021); Barreira et al. (2017); Geller et al. (2006); IEA (2008); OECD (2009); UNEP (n.d.)
Incentives to Adopt Energy-Saving Practices	1	1	2	4.17	Barreira et al. (2017); De la Rue du Can et al. (2014); Geller et al. (2006); UNEP (n.d.)
Total Points for Subcategory 1.1.4	1	3	4	8.33	
Total Points for Category 1.1	8	10	18	33.33	
1.2 WATER					
1.2.1 Regulatory Monitoring of Tariffs and Service Quality					
Monitoring of Tariffs	1	1	2	4.17	AfDB (2021); Brown et al. (2006); Cubbin and Stern (2006); Foster and Rana (2020); OECD (2021a); Pérez-Arriaga et al. (2017); World Bank (2019)
Monitoring of Service Quality	1	1	2	4.17	Brown et al. (2006); Foster and Rana (2020); OECD (2021a); Pérez-Arriaga et al. (2017); World Bank (2019)
Total Points for Subcategory 1.2.1	2	2	4	8.33	
1.2.2 Utility Infrastructure Sharing and Quality Assurance Mechanisms					
Joint Planning and Construction	1	1	2	4.17	Martínez Garza Fernández et al. (2020); OECD (2003, 2012); RWI (n.d.)
Mechanisms on Service Quality Assurance	1	1	2	4.17	Foste and Rana (2020); Molinos-Senante and R. Sala-Garrido (2017)
Total Points for Subcategory 1.2.2	2	2	4	8.33	
1.2.3 Safety of Utility Connections					
Professional Certifications	1	1	2	2.78	Alegre et al. (2006) ; Leland (1979)
Inspection Regimes	1	1	2	2.78	Boyne et al. (2002); IFC, World Bank, and MIGA (2013); World Bank (2017b)
Liability Regimes	1	1	2	2.78	IFC, World Bank, and MIGA (2013); Wilson et al. (2009)
Total Points for Subcategory 1.2.3	3	3	6	8.33	
1.2.4 Environmental Sustainability					
Sustainability of Water Provision	n/a	1	1	1.39	Alegre et al. (2006); Britton, (2013); Danilenko et al. (2014); OECDa; OECD (2009); Pinto et al. (2017); UN (2015); WHO (2017)

Sustainability of Water Use	n/a	1	1	1.39	Fan et al. (2019); OECD (2009); Pinto et al. (2017); Colorado WaterWise (n.d.)
Incentives to Adopt Water Saving Practices	1	1	2	2.78	OECD (2011, 2021b); Onyenankeya, Onyenankeya, and Osunkunle (2021)
Sustainability of Wastewater Treatment	n/a	1	1	1.39	Corcoran et al. (2010) ; UNEP (2015)
Wastewater Reuse	n/a	1	1	1.39	Corcoran et al. (2010); EU (2020); IWA (2018)
Total Points for Subcategory 1.2.4	1	5	6	8.33	
Total Points for Category 1.2	8	12	20	33.33	
1.3 INTERNET					
1.3.1 Regulatory Monitoring of Tariffs and Service Quality					
Monitoring of Tariffs	1	1	2	4.17	ITU and World Bank (2020); Kelly and Rossotto (2012); World Bank Group (2018)
Monitoring of Service Quality	1	1	2	4.17	ITU and World Bank (2020); Kelly and Rossotto (2012); World Bank Group (2018)
Total Points for Subcategory 1.3.1	2	2	4	8.33	
1.3.2 Utility Infrastructure Sharing and Quality Assurance Mechanisms					
Joint Planning and Construction	1	1	2	3.33	Martínez Garza Fernández et al. (2020); OECD (2003, 2012); RWI (n.d.)
Rights of Way	1	1	2	3.33	ITU and World Bank (2020); OECD (2008, 2018)
Open Infrastructure	1	1	2	3.33	ITU and UNESCO (2021); ITU and World Bank (2020); OECD (2008, 2018)
Mechanisms on Service Quality Assurance	1	1	2	3.33	ITU (2017); ITU and the World Bank (2020)
Total Points for Subcategory 1.3.2	4	4	8	13.33	
1.3.3 Safety of Utility Connections					
Liability Regimes	1	1	2	2.78	EU Council (2016); ITU (2018); OECD (2013a); World Bank (2017a)
Cybersecurity Coordination	1	1	2	2.78	ITU (2018); World Bank (2016, 2017a, 2021b)
Cybersecurity Safeguards	1	1	2	2.78	ITU (2018); World Bank (2016, 2017a, 2021b)
Total Points for Subcategory 1.3.3	3	3	6	8.33	
1.3.4 Environmental Sustainability					
Environmental Reporting or Disclosure Standards for Digital Connectivity Infrastructure	n/a	1	1	1.67	Belkhir and Elmeligi (2018); ITU and World Benchmarking Alliance (2022)
Emissions and Energy Efficiency of Infrastructure	n/a	1	1	1.67	ITU and World Benchmarking Alliance (2022)

Total Points for Subcategory 1.3.4	n/a	2	2	3.33	
Total Points for Category 1.3	9	11	20	33.33	
Total Points for Pillar I	25	33	58	100.00	

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent). FFP = Firm Flexibility Point; SBP = Social Benefits Point.

PILLAR II–QUALITY OF THE GOVERNANCE AND TRANSPARENCY OF UTILITY SERVICES					
2.1 ELECTRICITY					
2.1.1 Digital Services and Interoperability					
Indicators	FFP	SBP	Total Points	Rescaled Points	Background Literature
Electronic Application	1	1	2	2.08	Ha (2022); Katz (2017)
Electronic Payment	1	1	2	2.08	Popa and Prostean (2013)
Information on Existing Infrastructure and Planned Works	1	1	2	2.08	ITU (2019); OGC et al. (2018); UNESCAP (2019)
Coordination Mechanisms for Excavation Permits	1	1	2	2.08	FPISC (2017); IFC, World Bank, and MIGA (2013); UNESCAP (2019); Yu, Zhang, and Li (2013)
Total Points for Subcategory 2.1.1	4	4	8	8.33	
2.1.2 Availability of Information and Transparency					
Connection Requirements	1	1	2	1.52	Balabanyan (2021); ECRB (2021); Geginat and Saltane (2014)
Tariffs and Tariff Settings	1	1	2	1.52	Balabanyan (2021); Body of European Regulators for Electronic Communications (2009); Foster and Rana (2020)
Planned Outages	1	1	2	1.52	Balabanyan (2021); ECRB (2021); Liberty Mutual (2022)
Complaint Mechanisms	1	1	2	1.52	Transparency International (2016); ECRB (2018)
Service Quality Indicators	1	1	2	1.52	Banerjee et al. (2017); World Bank (2021a)
Sustainability Indicators	n/a	1	1	0.76	Kelly and Rossotto (2012)
Total Points for Subcategory 2.1.2	5	6	11	8.33	
2.1.3 Monitoring of Service Supply (includes gender and environment)					
Reliability and Quality of Electricity Supply	1	1	2	3.33	AfDB (2021); Banerjee et al. (2017); Bird (2005); IEEE (2004)
Sustainability of Electricity Supply	n/a	1	1	1.66	Hristov and Chirico (2019)
Access to Electricity for Women Entrepreneurs	1	1	2	3.33	ADB (2012); Pangare et al. (2019)
Total Points for Subcategory 2.1.3	2	3	5	8.33	
2.1.4 Enforcement of Safety Regulations and Consumer Protection Mechanisms					

Implementation of Inspections for Electricity Connections	1	1	2	4.17	IFC, World Bank, and MIGA (2013); OECD (2018); Scaddan (2011)
Independent Complaint Mechanism	1	1	2	4.17	Transparency International (2016); ECRB (2018)
Total Points for Subcategory 2.1.4	2	2	4	8.33	
Total Points for Category 2.1	13	15	28	33.33	
2.2 WATER					
2.2.1 Digital Services and Interoperability					
Electronic Application	1	1	2	2.08	Ha (2022); Katz (2017)
Electronic Payment	1	1	2	2.08	Popa and Prostean (2013)
Information on Existing Infrastructure and Planned Works	1	1	2	2.08	ITU (2019); OGC et al. (2018); UNESCAP (2019)
Coordination Mechanisms for Excavation Permits	1	1	2	2.08	FPISC (2017); IFC, World Bank, and MIGA (2013); UNESCAP (2019); Yu, Zhang, and Li (2013)
Total Points for Subcategory 2.2.1	4	4	8	8.33	
2.2.2 Availability of Information and Transparency					
Connection Requirements	1	1	2	1.52	Balabanyan (2021); Geginat and Saltane (2014); World Bank (2017b)
Tariffs and Tariff Settings	1	1	2	1.52	Balabanyan (2021); Body of European Regulators for Electronic Communications (2009)
Planned Outages	1	1	2	1.52	Balabanyan (2021); Mwitirehe, Cheruiyot, and Ruranga (2022)
Complaint Mechanisms	1	1	2	1.52	Transparency International (2016)
Service Quality Indicators	1	1	2	1.52	WAREG-European Water Regulators (2017)
Sustainability Indicators	n/a	1	1	0.76	Kelly and Rossotto (2012)
Total Points for Subcategory 2.2.2	5	6	11	8.33	
2.2.3 Monitoring of Service Supply (includes gender and environment)					
Reliability and Quality of Water Supply	1	1	2	3.33	Alegre et al. (2006); Danilenko et al. (2014); Hristov (2019); IBNET (n.d.); WAREG-European Water Regulators (2017); OECD; OECD (2015); UNECE and WHO (2019)
Sustainability of Water Supply	n/a	1	1	1.67	Alegre et al. (2006); Hristov and Chirico (2019)
Access to Water for Women Entrepreneurs	1	1	2	3.33	ADB (2012); Pangare et al. (2019)
Total Points for Subcategory 2.2.3	2	3	5	8.33	
2.2.4 Enforcement of Safety Regulations and Consumer Protection Mechanisms					

Implementation of Inspections for Water Connections	1	1	2	4.17	IFC, World Bank, and MIGA (2013); OECD (2018); World Bank (2017b)
Independent Complaint Mechanism	1	1	2	4.17	Transparency International (2016)
Total Points for Subcategory 2.2.4	2	2	4	8.33	
Total Points for Category 2.2	13	15	28	33.33	
2.3 INTERNET					
2.3.1 Digital Services and Interoperability					
Electronic Application	1	1	2	2.08	Kelly and Rossotto (2012)
Electronic Payment	1	1	2	2.08	Popa and Prostean (2013)
Information on Existing Infrastructure and Planned Works	1	1	2	2.08	ITU (2019); OGC et al. (2018); UNESCAP (2019)
Coordination Mechanisms for Excavation Permits	1	1	2	2.08	FPISC (2017); IFC, World Bank, and MIGA (2013); UNESCAP (2019); Yu, Zhang, and Li (2013)
Total Points for Subcategory 2.3.1	4	4	8	8.33	
2.3.2 Availability of Information and Transparency					
Connection Requirements	1	1	2	1.67	Balabanyan (2021); Geginat and Saltane (2014)
Tariffs and Tariff Settings	1	1	2	1.67	Balabanyan (2021); Body of European Regulators for Electronic Communications (2009)
Planned Outages	1	1	2	1.67	Balabanyan (2021); Kelly and Rossotto (2012)
Complaint Mechanisms	1	1	2	1.67	Transparency International (2016)
Service Quality Indicators	1	1	2	1.67	Kelly and Rossotto (2012); WAREG-European Water Regulators (2017); World Bank (2021a); Chetty et al (2011); Chetty et al (2012)
Total Points for Subcategory 2.3.2	5	5	10	8.33	
2.3.3 Monitoring of Service Supply (includes gender and environment)					
Reliability and Quality of Internet Supply	1	1	2	4.17	Kelly and Rossotto (2012)
Access to Internet for Women Entrepreneurs	1	1	2	4.17	ADB (2012); Pangare et al. (2019)
Total Points for Subcategory 2.3.3	2	2	4	8.33	
2.3.4 Enforcement of Safety Regulations and Consumer Protection Mechanisms					
Cybersecurity Protocols	1	1	2	4.17	ITU (2018); Kelly and Rossotto (2012); World Bank (2017a)
Independent Complaint Mechanism	1	1	2	4.17	Transparency International (2016)
Total Points for Subcategory 2.3.4	2	2	4	8.33	

Total Points for Category 2.3	13	13	26	33.33	
Total Points for Pillar II	39	43	82	100.00	

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent). FFP = Firm Flexibility Point; SBP = Social Benefits Point.
KPI = Key Performance Indicator.

PILLAR III—OPERATIONAL EFFICIENCY OF UTILITY SERVICE PROVISION					
3.1 Electricity					
3.1.1 Time to Obtain a Connection					
Indicators	FFP	SBP	Total Points	Rescaled Points	Background Literature
Time to Obtain an Electricity Connection (from the moment the client submits the connection request until the service is received)	50	n/a	50	16.67	Geginat and Ramalho (2015); Hamman (2014)
3.1.2 Reliability of Supply					
Reliability of Electricity Supply	50	n/a	50	16.67	Alby, Dethier, and Straub (2013); Allcott (2016); Arlet (2017); Blimpo and Cosgrove-Davies (2019); Cole et al. (2018); Escribano et al. (2010); Fedderke and Bogetic (2006); Grimm et al. (2012); Karen, Mansur, and Wang (2015); Khandker et al. (2014); Kirubi et al. (2009)
Total Points for Category 3.1	100	n/a	100	33.33	
3.2 Water					
3.2.1 Time to Obtain a Connection					
Time to Obtain a Water Connection (from the moment the client submits the connection request until the service is received)	50	n/a	50	16.67	Alegre et al. (2006); World Bank (2017b); Hamman (2014)
3.2.2 Reliability of Supply					
Reliability of Water Supply	50	n/a	50	16.67	Chen (2019); Escribano (2010); Sjöstrand et al. (2021); World Bank (2017b)
Total Points for Category 3.2	100	n/a	100	33.33	
3.3 Internet					
3.3.1 Time to Obtain a Connection					
Time to Obtain an Internet Connection (from the moment the client submits the connection request until the service is received)	50	n/a	50	16.67	Hamman (2014); ITU and the World Bank (2020); Kelly and Rossotto (2012)
3.3.2 Reliability of Supply					
Reliability of Internet Supply	50	n/a	50	16.67	Ericsson (2013)
Total Points for Category 3.3	100	n/a	100	33.33	

Total Points for Pillar III	100	n/a	100	100.00	
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Note: n/a = not applicable – refers to the cases when the impact on firms or society is either ambiguous or nonexistent. FFP = Firm Flexibility Point; SBP = Social Benefits Point.

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ANNEX B. UTILITY SERVICES–ANNOTATED QUESTIONNAIRE

Annex B consists of a Glossary and Annotated Questionnaires for Utility Services (Electricity, Water, Internet). The Annotated Questionnaires provide the mapping between each indicator and the corresponding question(s). Due to the presence of multiple questionnaires, the numbering of categories in the Annotated Questionnaires does not match the numbering in the main chapter of the Utility Services Methodology Note.

Glossary

Backbone/backhaul infrastructure: The wholesale portions of the telecommunications network that comprise, respectively, the core network and the intermediate links (or middle mile) and that are used by internet service provider subnetworks to connect to the internet.

Bandwidth: The maximum amount of data an internet connection can handle at any moment, measured in Megabits per second (Mbps).

Block tariff: A tariff, wherein users pay different charges for different consumption levels. For example, if the consumption amounts to block 1+block 2+half of block 3, the customer will be charged: $\text{tariff 1} \times \text{block 1 consumption} + \text{tariff 2} \times \text{block 2 consumption} + \text{tariff 3} \times (\text{block 3 consumption})/2$.

Cloud-based DDoS protection: A commercial cybersecurity service that is an alternative to on-premises cybersecurity meant to mitigate or avoid distributed denial of service (DDoS) attacks on network infrastructure.

Cybersecurity: The measures implemented to protect networks, devices, and data from unauthorized access or criminal use.

Deterrence mechanism: The process of discouraging an event or activity. Deterrence mechanisms may include fines or penalties, inspections, reporting requirements or public disclosure of violations.

“Dig once” policy: The approach that allows for the coordination between public works departments, public utility companies, and internet service providers to avoid the duplication of infrastructure or civil engineering works.

Effluent limitation: A restriction on the amount of a pollutant that can be released into a Water body.

Electricity/power outage: The loss of the electrical power from the power grid; occurs when there is equipment malfunction from the failure of adequate supply of power. If power outages are planned (“load shedding”), this is considered a power outage.

Energy efficiency requirements for electricity transmission and distribution: Standards and regulations for environmentally sustainable transportation of electricity (such as energy-efficiency requirements for electricity transmission and distribution utilities; requirement by law to roll-out smart meters to commercial customers free of charge; development of “smart grids”).

Enforcement mechanism: Methods used to encourage compliance with regulations or laws.

Environmental standards for electricity generation: Standards and regulations for environmentally sustainable electric power generation (for example, energy efficiency requirements for electricity generation plants; percentage of total electricity generation to be met with renewables; requirements for reduction on emissions of local air pollutants for fossil fuel plants).

External installation/connection works: The connection works outside the private property premises.

Firm Flexibility Point (FFP): A way to score indicators if it affects the benefits or costs of running a business.

Fixed Internet connection: A new connection or any change to an existing connection that requires an application. It includes cable modem internet connections, DSL internet connections of at least 256 Kbit/s or higher, fiber and other fixed broadband technology connections such as satellite broadband, Ethernet LANs, fixed-wireless access, Wireless Local Area Network, WiMAX, or others. It does not include internet access through mobile phone hot spots or Wi-Fi phone tethering.

FMIK: Frecuencia Media de Interrupción—medium frequency of interruptions for installed KVA (kilovolt-amperes).

Geographic Information System (GIS): The database containing geographic data (that is, descriptions of phenomena for which location is relevant), combined with software tools for managing, analyzing, and visualizing those data.

Internal installation/connection works: The connection works inside the private property premises.

Internet interruption/outage: The interruptions to internet services, both partial (such as slowdown in connections due to congestion, limited bandwidth, or high latency) and total disruptions (outage, blackout, or shutdown). It excludes disruptions caused by electricity outages.

Internet service provider: The company (public or private) that provides commercial internet connections and subsequent internet services.

Jitter: The variation in time from the moment a signal is transmitted to the moment it is received over a network connection.

Joint excavation: Joint planning or construction with different entities in digging channels in the ground for electricity, water, and internet providers to build structures and facilities underground to connect consumers to services (such installation includes cable, electrical/sewer/water/internet lines and conduit).

Key Performance Indicators (KPI): The quantifiable measure of performance over time for a specific objective.

KVA: kilovolt-amperes.

kWh: kilowatt hour

Latency: The delays in data transfer due to unreliable networks.

LCU: local currency unit.

Load shedding: The deliberate shutdown of electric power in a part or parts of a power-distribution system, generally to prevent the failure of the entire system.

Local Loop Unbundling: Regulatory process through which multiple Internet Service Providers (ISPs) are allowed to install their software at the telephone exchange and provide a broadband service over existing network cables and other infrastructure.

m³: Cubic meters.

Mbps: Megabits per second.

Right of way: An easement granted by the property owner that gives the rights to cross the land and the provision by the property owner of reasonable use of the property to others, as long as it is not inconsistent with the use and enjoyment of the land by the owner.

The System Average Interruption Duration Index (SAIDI): A commonly used reliability index by electric power utilities. SAIDI estimates measure planned and unplanned outages, including load shedding.

The System Average Interruption Frequency Index (SAIFI): Another commonly used reliability index by electric power utilities. SAIFI estimates measure planned and unplanned outages, including load shedding.

Smart grid: The electricity supply network that uses digital communications technology to detect and react to local changes in usage.

Smart meter: The electronic device that records information such as consumption of electric energy, voltage levels, current, and power factor.

Social Benefits Point (SBP): A way to score indicators if its effects go beyond the firm and extend to socially desirable areas, such as environmental protection, consumer protection and informational externalities.

SSL inspection: The process of intercepting and reviewing SSL-encrypted internet communication between the client and the server.

Third-party inspection: The water or electricity inspections of final electrical wiring or plumbing works, respectively, conducted by licensed and authorized professionals or agencies other than the one that did installation.

Time to obtain electricity connection: The period in days from the moment the application is submitted till the moment electricity supply starts.

Time to obtain fixed broadband connection: The period in days between the completed and submitted application and the connection provision. This period includes the time to install the cable, fiber, or DSL when necessary.

Time to obtain water connection: The period in days from the moment the application is submitted till the moment water supply starts.

TTIK: The total time of interruption for installed KVA.

Volume-differentiated tariff: Tariff, where the entire consumption is charged on the rate of the block where the customer's total consumption lies. For example, if the user's consumption lies in block 3, the customer will be charged the amount of (block 1+block 2+block 3/2) consumption * tariff of block 3.

Water insufficiency/interruption/outage: An incident of insufficient water pressure or water supply from the water grid, whenever there is equipment failure or cessation of production operations due to the lack or reduction of water supply.

ELECTRICITY QUESTIONNAIRE

The tables that follow present all indicators (including their components, if applicable) under each pillar, with a reference to the corresponding question number in parenthesis. The questions are listed before each table for ease of reference.

For Y/N questions, the Y response accounts for the score and is considered as the good practice, unless otherwise indicated with the sign “Y/N; N – good practice”.

In the tables that follow, “AND” means all referenced questions must have a good practice response to obtain a score on the indicator.

In the tables that follow, “OR” means one or more referenced questions must have a good practice response to obtain a score on the indicator.

Certain questions are marked as “not scored,” which indicates that they do not impact the score in any way. The purpose of these questions is to further inform and refine the questions design for subsequent years of the rollout, as needed, as well as to substantiate and provide further information for the scored questions.

PILLAR I–QUALITY OF REGULATIONS ON UTILITY SERVICES (ELECTRICITY)	
Parameters	
Business Location	The largest (most populous) city in the economy. The parameter is used in cases where regulations may not be applicable at a national level and vary across states or regions. Geographical location determines the availability of electricity connections, as well as the type of connections and construction required. For Pillar I, if regulations differ across states within an economy, the experts will be asked to provide information regarding regulations of the largest city.

1.1 REGULATORY MONITORING OF TARIFFS AND SERVICE QUALITY

1.1.1 Monitoring of Tariffs

1. Is there a regulatory agency overlooking the electricity sector? (Y/N)

Y → proceed to the remaining questions.

N → 0 points on questions 2 and 3.

2. Per the regulatory framework, what role does the electricity regulator play in approving tariffs? Please select one.

2a. The regulator has final decision-making role in approving electricity tariff

2b. The regulator shares decision-making role in approving electricity tariffs with other government agency or ministry

2c. The regulator plays consultative role in electricity tariff setting or approval

2d. The regulator is not involved in electricity tariff setting or approval

1.1.2 Monitoring of Service Quality

3. Per the regulatory framework, what role does the electricity regulator play in monitoring the quality and reliability of electricity services? Please select all that apply:

- 3a. The regulator sets performance standards to ensure service quality and the reliability of electricity services
- 3b. The regulator monitors adherence to performance standards to ensure service quality and the reliability of electricity services

4. **Per the regulatory framework, does the regulator control the approved budget and is responsible for decision making in regard to expenditure? (Y/N) (not scored)**

1.1 REGULATORY MONITORING OF TARIFFS AND SERVICE QUALITY			
Indicators	FFP	SBP	Total Points
Monitoring of Tariffs (2a)	1	1	2
Monitoring of Service Quality	1	1	2
- Set performance standards (3a)	0.5	0.5	1
- Monitor adherence to performance standards (3b)	0.5	0.5	1
Total Points	2	2	4

1.2 UTILITY INFRASTRUCTURE SHARING AND QUALITY ASSURANCE MECHANISMS

1.2.1 Joint Planning and Construction

5. Are there provisions in the regulation requiring joint planning and construction (such as electrical poles, overhead or underground cables, water pipes, telephone wires), including provisions on common excavation permits, joint excavation, “dig once” policies? (Y/N)
6. Are there provisions in the regulation which set time limits for agencies involved in electricity connections to take decisions on approvals or issue consents? (Y/N)

1.2.2 Mechanisms on Service Quality Assurance

7. Does the regulatory framework stipulate financial deterrence and incentive mechanisms (such as compensations or penalties paid by utilities or rewards for reliable service supply) aimed at limiting electricity supply interruptions? (Y/N)
8. If yes, please define what types of financial deterrence mechanism and incentives are available. Please select all that apply: (not scored)
- 8a. Penalties paid by the utility
- 8b. Compensations paid to the customer
- 8c. Positive incentive mechanisms (for example, rewards)

1.2 UTILITY INFRASTRUCTURE SHARING AND QUALITY ASSURANCE MECHANISMS			
Indicators	FFP	SBP	Total Points
Joint Planning and Construction	1	1	2
- Common excavation provisions (5)	0.5	0.5	1
- Timelines for approvals (6)	0.5	0.5	1
Mechanisms on Service Quality Assurance (7)	1	1	2
Total Points	2	2	4

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

1.3 SAFETY OF UTILITY CONNECTIONS

1.3.1 Professional Certifications

9. Does the regulation stipulate qualification requirements for the parties carrying out the electrical wiring installation? (Y/N)
Y → proceed to the remaining questions.
N → 0 points on question 10.
10. What qualification requirements for the parties carrying out the electrical wiring installation are in place? Please select all that apply:
- 10a. Minimum number of years of experience
 - 10b. Education qualification (for example, university degree in the relevant field)
 - 10c. Registered member of the national association of electricians or electrical engineers
 - 10d. Pass a qualification exam

1.3.2 Inspection Regimes

11. Does the law mandate that internal electricity installations are carried out by a licensed professional/company? (Y/N)
12. Does the law mandate that the company that carried out internal electricity installations inspect/certify the quality of installation? (Y/N)
13. Does the law mandate that a final inspection is carried out by a third party to ensure the quality of internal electricity installations? (Y/N)
14. Does the law mandate that external electricity installations are carried out by a licensed professional/company? (Y/N)
15. Does the law mandate that the company that carried out external electricity installations inspect/certify the quality of installation? (Y/N)
16. Does the law mandate that a final inspection is carried out by a third party to ensure the quality of external electricity installations? (Y/N)

1.3.3 Liability Regimes

17. In cases of faults discovered when the electricity connection was in use, can any party (besides the investor) involved in providing the electricity connection be held liable by law? (Y/N)
18. Please select all parties involved in providing electricity connections that can be held liable: (*not scored*)
- 18a. The engineer/company that designed the plans for the connection
 - 18b. The professional or agency that conducted technical inspection
 - 18c. The professional or company that performed installation works

1.3 SAFETY OF UTILITY CONNECTIONS			
Indicators	FFP	SBP	Total Points
Professional Certifications	1	1	2

<ul style="list-style-type: none"> - Minimum number of years of practical experience (10a) - Education qualification (10b) - Accreditation by/membership with the national order (association) of electricians or electrical engineers (10c) - Pass a qualification exam (10d) <p><i>Note: At least 2 of the requirements above must be met to obtain a point on this indicator</i></p>			
Inspection Regimes <ul style="list-style-type: none"> - Internal installation works (13 OR (11 AND 12)) - External installation works (16 OR (14 AND 15)) <p><i>Note: A score is assigned if 13 is selected OR both 11 and 12 are selected.</i></p> <p><i>Note: A score is assigned if 16 is selected OR both 14 and 15 are selected</i></p>	1 0.5 0.5	1 0.5 0.5	2 1 1
Liability Regimes (17)	1	1	2
Total Points	3	3	6

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

1.4. ENVIRONMENTAL SUSTAINABILITY

1.4.1 Sustainability of Electricity Provision

19. Does the law set environmental standards for Electricity generation? (Y/N)

Note: Examples of environmental standards for electricity generation include energy efficiency requirements for electricity generation plants; Percentage of total electricity generation to be met with renewables; Requirements for reduction on emissions of local air pollutants for fossil fuel plants?

Y → proceed to the remaining questions.

N → 0 points on question 20.

20. Please specify the applicable environmental standards for electricity generation stipulated in the regulatory framework.

20a. Energy efficiency requirements imposed on electricity generation plants

20b. Percentage of total electricity generation to be met with renewables

20c. Requirements for reduction on emissions of local air pollutants (nitrogen oxide, sulphur dioxide, particulate matter) for fossil fuel plants

20d. Other

21. Per the regulatory framework, are there any deterrence or enforcement mechanisms in place to ensure compliance with environmental standards for electricity generation (for example, fines, penalties)? (Y/N)

22. Please specify the enforcement mechanisms for the environmental standards for electricity generation stipulated in the regulatory framework: (not scored)

22a. Penalties or fines

22b. Inspections by the designated authority

22c. Reporting requirements – electricity generation utilities report to the regulator on meeting the energy efficiency and environmental requirements

22d. Public disclosure of violations related to compliance with environmental standards for electricity generation

23. Does the law set any environmental standards for electricity transmission and distribution? (Y/N)

Note: Examples of environmental standards for electricity transmission and distribution include energy efficiency targets for electricity transmission and distribution, requirement by law to roll-out smart meters to commercial customers free of charge; development of “smart grids”?

Y → proceed to the remaining questions.
N → 0 points on question 24.

- 24. Please specify the applicable standards for electricity transmission and distribution stipulated in the regulatory framework. Please select all that apply:**
- 24a. Energy efficiency requirements imposed on electricity transmission and distribution utilities
 - 24b. Requirement by law to roll-out smart meters to commercial customers free of charge
 - 24c. Development of “smart grids”
 - 24d. Other
- 25. Per the regulatory framework, are there any deterrence or enforcement mechanisms in place to ensure compliance with environmental standards for transmission and distribution (for example, fines or penalties)? (Y/N)**
- 26. Please specify the mechanisms for the environmental standards for electricity transmission and distribution stipulated in the regulatory framework. Please select all that apply: (not scored)**
- 26a. Penalties or fines
 - 26b. Inspections by the designated authority
 - 26c. Reporting requirements—utilities report to the regulator on meeting the environmental standards on transmission and distribution
 - 26d. Public disclosure of violations related to compliance with environmental standards for electricity transmission and distribution

1.4.2 Sustainability of Electricity Use

- 27. Does the law set requirements for businesses to switch to energy efficiency practices? (Y/N)**
Note: Examples of requirements include: requirement to use energy-efficient appliances, requirement to adhere to energy-saving targets, requirements on energy-efficiency labelling.
- 28. Please specify the requirements for businesses to switch to energy efficiency practices stipulated in the regulatory framework. (not scored)**
- 28a. Requirement to use energy-efficient appliances
 - 28b. Requirement to adhere to energy-saving targets
 - 28c. Requirement on energy-efficiency labelling
- 29. Per the regulatory framework, are there any deterrence or enforcement mechanisms in place (for example, fines, penalties, volume-differentiated tariffs) to ensure businesses’ compliance with energy-saving standards? (Y/N)**
- 30. Please specify the enforcement mechanisms to ensure businesses’ compliance with energy-saving standards stipulated in the regulatory framework. Please select all that apply: (not scored)**
- 30a. Penalties or fines
 - 30b. Inspections by the designated authority
 - 30c. Reporting requirements, where businesses report to the regulator on meeting the energy-saving standards
 - 30d. Volume-differentiated tariffs to encourage lower energy consumption

1.4.3 Incentives to Adopt Energy-Saving Practices

- 31. Are there any financial incentives for businesses to adopt energy-saving practices stipulated in the regulatory framework? (Y/N)**

Note: Examples of financial incentives include: tax incentives, low-interest rate loans, tariff incentives, discounts on energy efficiency products from accredited providers.

32. Per the regulatory framework, please indicate whether the following types of financial incentives are provided to businesses to adopt energy-saving practices: (not scored)

- 32a. Tax incentives
- 32b. Rebate programs
- 32c. Low-interest rate loans
- 32d. Tariff incentives
- 32e. Discounts on energy efficiency products from accredited providers
- 32f. Other

33. Per the regulatory framework, are there any non-financial incentives for businesses to adopt energy-efficient practices? (Y/N)

Note: Examples of nonfinancial incentives include most-efficient awards, awareness schemes for businesses providing information on energy-saving practices and technological developments.

34. Per the regulatory framework, please indicate whether the following types of non-financial incentives are provided to businesses to adopt energy-saving practices: (not scored)

- 34a. Most-efficient awards
- 34b. Awareness schemes for businesses providing information on energy-saving practices and technological developments
- 34c. Energy audits to help identify ways to reduce energy use.
- 34d. Other

1.4 ENVIRONMENTAL SUSTAINABILITY			
Indicators	FFP	SBP	Total Points
Sustainability of Electricity Provision	n/a	1	1
- Environmental standards for electricity generation (20a AND 20c)	n/a	0.25	0.25
- Enforcement of environmental standards for generation (21)	n/a	0.25	0.25
- Environmental standards for electricity transmission and distribution (24a OR 24b OR 24c)	n/a	0.25	0.25
- Enforcement of standards for transmission and distribution (25)	n/a	0.25	0.25
Sustainability of Electricity Use	n/a	1	1
- Requirements for businesses to adhere to energy-saving practices (27)	n/a	0.5	0.5
- Enforcement mechanisms to foster businesses' compliance with energy-saving standards (29)	n/a	0.5	0.5
Incentives to Adopt Energy-Saving Practices	1	1	2
- Financial and nonfinancial incentives for businesses (31 AND 33) OR	1 OR	1 OR	2 OR
- Financial incentives for businesses (31)	0.5	0.5	1
Total Points	1	3	4

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

PILLAR II–QUALITY OF THE GOVERNANCE AND TRANSPARENCY OF UTILITY SERVICES (ELECTRICITY)	
Parameters	
Business Location	The largest (most populous) city in the economy. The parameter is used in cases where regulations may not be applicable at a national level and vary across states or regions. The utility services of the largest city (most populous) in the economy will be considered for all questions under Pillar II. For all questions in Pillar II, the experts will be asked to provide their

	response accounting for this specific parameter unless specified otherwise in the question per se.
Largest Utility Provider	The largest utility provider in the largest city is considered (in terms of customers served or market share). The utility services of the largest city will be considered for all questions under Pillar II. For all questions in Pillar II, the experts will be asked to provide their response accounting for this specific parameter unless specified otherwise in the question per se.

2.1 DIGITAL SERVICES AND INTEROPERABILITY

2.1.1 Electronic Application

35. Is it possible to apply electronically for new commercial electricity connections? (Y/N)

36. Is it possible to track online the application for electricity connection? (Y/N)

2.1.2 Electronic Payment

37. Is it possible to pay the fee for new electricity connections electronically? (Y/N)

38. Is it possible to pay for the monthly electricity bill electronically? (Y/N)

2.1.3 Information on Existing Infrastructure and Planned Works

39. Are the following national/local infrastructure databases available that allow the identification of existing infrastructure networks (such as underground lines, for example, “dial before you dig”), through GIS or other?

39a. Shared database for the network lines of multiple utilities, including electricity, water, and internet

39b. Database for electricity distribution networks.

40. Is there an online platform or a website with the information about the planned works on utility networks that are carried out in the city? (Y/N)

2.1.4 Coordination Mechanisms for Excavation Permits

41. Are the following in place to facilitate collaboration between agencies for excavation permit applications and approvals?

41a. An online system

41b. An agency in charge of coordination

41c. Other coordination mechanism

2.1 DIGITAL SERVICES AND INTEROPERABILITY			
Indicators	FFP	SBP	Total Points
Electronic Application	1	1	2
- Electronic application for new electricity connection (35)	0.5	0.5	1
- Online tracking application for electricity connection (36)	0.5	0.5	1
Electronic Payment (37 AND 38)	1	1	2
Information on Existing Infrastructure and Planned Works	1	1	2
- National/Local infrastructure database for multiple utilities/ electricity distribution networks (39a OR 39b)	0.5	0.5	1

- Platform with the Information on the Planned Works on Utility Networks (40)	0.5	0.5	1
Coordination Mechanisms for Excavation Permits	1	1	2
- An online system (41a) OR	1 OR	1 OR	2 OR
- A coordinating agency (41b) OR	0.5 OR	0.5 OR	1 OR
- Other coordinating mechanism (41c)	0.5	0.5	1
<i>Note: A score of 1 is assigned if 41a is selected; a score of 0.5 is assigned if 41b OR 41c is selected.</i>			
Total Points	4	4	8

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

2.2 AVAILABILITY OF INFORMATION AND TRANSPARENCY

2.2.1 Connection Requirements

42. Are the connection requirements for new business electricity connections available online? (Y/N)

Y → proceed to the remaining questions.

N → 0 points on question 43.

43. What connection requirements are published online?

43a. Required documents

43b. Required procedures

43c. Connection cost

43d. Stipulated connection time standards

2.2.2 Tariffs and Tariff Setting

44. Are the current electricity tariffs available online (on the website of the utility or the regulator)?

45. Is electricity consumption by commercial entities metered? (Y/N) *(not scored)*

46. What type of tariff is being applied to commercial entities? Please select one: *(not scored)*

46a. A linear tariff that is proportional to consumption

46b. An increasing block tariff (IBT) that increases with higher consumption

46c. A decreasing block tariff (DBT) that decreases with higher consumption

46d. Time of use

46e. Volume-differentiated tariff

46f. Fixed price monthly tariff

47. How many units of consumption (in kWh) are within the first block of commercial tariff? *(not scored)*

48. What is the commercial tariff in local currency units (LCU) for the first block for 1 kWh? *(not scored)*

49. How many units of consumption (in kWh) are within the second block of commercial tariff? *(not scored)*

50. What is the commercial tariff in local currency units (LCU) for the second block for 1 kWh? *(not scored)*

51. How many units of consumption (in kWh) are within the third block of commercial tariff? *(not scored)*
52. What is the commercial tariff in local currency units (LCU) for the third block for 1 kWh? *(not scored)*
53. What is the fixed cost charge per month in local currency units (LCU) for commercial customers? (i.e., the charge that needs to be paid, even if consumption is zero in a certain month). *(not scored)*
54. Is electricity consumption by residential customers metered (kWh)? (Y/N) *(not scored)*
55. What type of tariff is being applied to residential customers? Please select one: *(not scored)*
- 55a. A linear tariff that is proportional to consumption
 - 55b. An increasing block tariff (IBT) that increases with higher consumption
 - 55c. A decreasing block tariff (DBT) that decreases with higher consumption
 - 55d. Time of use
 - 55e. Volume-differentiated tariff
 - 55f. Fixed monthly prices
56. How many units of consumption (in kWh) are within the first block of residential tariff? *(not scored)*
57. What is the residential tariff in local currency units (LCU/kWh) for the first block for 1 kWh? *(not scored)*
58. How many units of consumption (in kWh) are within the second block of residential tariff? *(not scored)*
59. What is the residential tariff in local currency units (LCU) for the second block for 1 kWh? *(not scored)*
60. How many units of consumption (in kWh) are within the third block of residential tariff? *(not scored)*
61. What is the residential tariff in local currency units (LCU) for the third block for 1 kWh? *(not scored)*
62. What is the fixed cost charge per month in local currency units (LCU) for residential customers? (i.e., the charge that needs to be paid, even if consumption is zero in a certain month). *(not scored)*
63. Are changes in electricity tariffs communicated to the public at least one billing cycle in advance? (for example, published in the press, regulations, or website, through letters, bills, emails, SMS). (Y/N)
64. Is a formula prescribing how end-user electricity tariff levels are determined publicly available?
- 64a. Yes, formula is published online only
 - 64b. Yes, formula is published in the customer bill only
 - 64c. Yes, formula is published online and in customer bill
 - 64d. No, not available

2.2.3 Planned Outages

65. Are planned power outages made publicly available/communicated to the customers? (Y/N)

65a. Made publicly available

65b. Communicated to the customer

2.2.4 Complaint Mechanisms

66. What type of information is available online to guide customers to file a complaint about electricity service supply?

66a. Information on the entity in charge of managing the complaints

66b. Documents necessary to make a complaint

66c. Criteria/scope of complaint mechanism (i.e., what issues can be reported)

66d. Steps necessary to make a complaint

2.2.5 Service Quality Indicators

67. Are the indicators on duration and frequency of electricity outages made available online for the public? (Y/N)

2.2.6 Sustainability Indicators

68. Are there KPIs to monitor the environmental sustainability of electricity supply available online? (Y/N)

2.2 TRANSPARENCY OF ELECTRICITY SERVICES			
Indicators	FFP	SBP	Total Points
Connection Requirements	1	1	2
- Required documents (43a)	0.25	0.25	0.5
- Required procedures (43b)	0.25	0.25	0.5
- Connection cost (43c)	0.25	0.25	0.5
- Stipulated connection time standards (43d)	0.25	0.25	0.5
Tariffs and Tariff Setting	1	1	2
- Tariffs are published online (44) AND			
- Customers are notified in advance of tariff changes (63) AND			
- Tariff setting formula is publicly available (64a OR 64b OR 64c)			
Planned Outages (65a OR 65b)	1	1	2
Complaint Mechanisms	1	1	2
- Information on the entity in charge of complaints (66a)	0.25	0.25	0.5
- Documents necessary to make a complaint (66b)	0.25	0.25	0.5
- Criteria/scope of complaint mechanism (66c)	0.25	0.25	0.5
- Steps necessary to make a complaint (66d)	0.25	0.25	0.5
Service Quality Indicators (67)	1	1	2
Sustainability Indicators (68)	n/a	1	1
Total Points	5	6	11

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

2.3 MONITORING OF SERVICE SUPPLY (INCLUDES GENDER AND ENVIRONMENT)

2.3.1 Reliability and Quality of Electricity Supply

69. Are electricity outages (duration and frequency) monitored? (Y/N)

70. Please provide details on which Key Performance Indicators (KPIs) are used to monitor the reliability of electricity supply: (not scored)

70a. System Average Interruption Duration Index (SAIDI) and System Average Interruption Frequency Index (SAIFI)

70b. Total time of interruption for installed KVA (TTIK) and medium frequency of interruptions for installed KVA (FMIK)

71. Please provide the SAIDI and SAIFI (including load shedding) for the city in the last calendar year (January 1 to December 31, 2022). (not scored)

2.3.2 Sustainability of Electricity Supply

72. Are there Key Performance Indicators to monitor the environmental sustainability of electricity supply (for example, % energy used from renewable sources)? (Y/N)

2.3.3 Access to Electricity for Women Entrepreneurs

73. Does the electricity utility in [largest city] carry out sex-disaggregated customer surveys in order to measure the quality of services provided by the utility from the perspective of women-owned businesses? (Y/N)

Examples of sex-disaggregated customer surveys include asking the gender of the person in consumer satisfaction survey or in complaint form.

74. What customer-surveys data is sex-disaggregated? Please select all that apply. (not scored)

74a. Sex of a person answering consumer satisfaction survey

74b. Sex of a person lodging a complaint related to quality, reliability, and utility's supply services

74c. Other data that is sex-disaggregated

75. Are these survey data available for the most recent calendar year (2022)? (not scored)

76. Are these survey data anonymized? (not scored)

77. Are these survey data made publicly available online? (not scored)

2.3 MONITORING OF SERVICE SUPPLY (INCLUDES GENDER AND ENVIRONMENT)			
Indicators	FFP	SBP	Total Points
Reliability and Quality of Electricity Supply (69)	1	1	2
Sustainability of Electricity Supply (72)	n/a	1	1
Access to Electricity for Women Entrepreneurs (73)	1	1	2
Total Points	2	3	5

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

2.4 ENFORCEMENT OF SAFETY REGULATIONS AND CONSUMER PROTECTION MECHANISMS

2.4.1 Implementation of Inspections for Electricity Connections

- 78. Are internal electricity installation works typically carried out by a licensed professional/company in practice? (Y/N)**
- 79. Please specify the party that typically conducts internal electricity installation works in practice, please select one. (*not scored*)**
 79a. Utility
 79b. Licensed private contractor
 79c. Any available private contractor (not necessarily licensed)
- 80. Does the contractor/company that performed internal installations conduct inspection/ issue certificate of compliance/check quality of installation works? (Y/N)**
- 81. Is the quality check or final inspection by a third party (other than the one that did installation) conducted in practice to ensure the quality and safety of internal electricity installations? (Y/N)**
- 82. If yes, please specify the third party that carries out inspection to ensure quality of internal electricity installations. Please select all that apply: (*not scored*)**
 82a. Utility
 82b. Licensed private company (other than the one that did installation)
 82c. Regulatory agency
 82d. Other government agency
 82e. Other private or public entity (please specify)
- 83. Are external electricity installation works typically carried out by a licensed professional/company in practice?**
- 84. Please specify, the party that typically conducts external electricity installation works in practice. (*not scored*)**
 84a. Utility
 84b. Licensed private contractor
 84c. Any available private contractor (not necessarily licensed)
- 85. Does the contractor/company that performed external installations conduct inspection/issue certificate of compliance/ check quality of external installation works? (Y/N)**
- 86. Is the quality check or final inspection by a third party conducted in practice to ensure the quality and safety of external electricity installations? (Y/N)**
- 87. Please specify the third party that carries out inspection to ensure quality of external electricity installations: Please select all that apply: (*not scored*)**
 87a. Utility
 87b. Licensed private company (other than the one that did installation)
 87c. Regulatory agency
 87d. Other government agency
 87e. Other private or public entity (please specify)

2.4.2 Independent Complaint Mechanism

- 88. Is there a complaint mechanism to report issues in provision of electricity services (such as incorrect billing or inadequate electricity supply)? (Y/N)**
 Y → proceed to the remaining question.

N → 0 points on question 89.

89. Is there a complaint mechanism independent from the electricity utility to escalate the complaints? (Y/N)

2.4 ENFORCEMENT OF SAFETY REGULATIONS AND CONSUMER PROTECTION MECHANISMS			
Indicators	FFP	SBP	Total Points
Implementation of Inspections for Electricity Connections	1	1	2
- Internal installation works ([78 AND 80] OR 81)	0.5	0.5	1
- External installation works ([83 AND 85] OR 86)	0.5	0.5	1
<i>A score is assigned if 81 is selected OR both 78 and 80 are selected.</i>			
<i>A score is assigned if 86 is selected OR both 83 and 85 are selected</i>			
Independent Complaint Mechanism (89)	1	1	2
Total Points	2	2	4

PILLAR III—OPERATIONAL EFFICIENCY OF UTILITY SERVICE PROVISION (ELECTRICITY)

The scores for Pillar III indicators are calculated using the Normal Cumulative Density Function (CDF) transformation method on a scale of 0 to 100, where 0 and 100 represent the lowest and highest possible scores, respectively. The best and worst performers are identified based on the 5th and 95th percentiles of the collected data.

The data for Pillar III on the Operational Efficiency of Utility Service Provision is collected through firm-level surveys, using the following questions:

90. Time to obtain a connection: How many days did it take to obtain electrical connection from the day of the application to the day the service was received?

91. Reliability of supply:

91a. Outages:

91a1. Number of outages: In a typical month, how many power outages did this establishment experience?

91a2. Duration of outages: How long did these power outages last on average?

91b. Losses due to outages: Please estimate the losses that resulted from power outages either as a percentage of total annual sales or as total annual losses.

91c. Coping strategies. Over the course of fiscal year [Insert last complete fiscal year], did this establishment own or share a generator?

PILLAR III—OPERATIONAL EFFICIENCY OF UTILITY SERVICE PROVISION (ELECTRICITY)			
Indicators	FFP	SBP	Total Points
Time to Obtain a Connection (90)	100 (50%)	n/a	100 (50%)
Reliability of Supply	100 (50%)	n/a	100 (50%)
Outages (rescaled 0–100)	50 (25%)	n/a	50 (25%)
- Average frequency of power outages (91a1)	25 (12.5%)	n/a	25 (12.5%)
- Average duration of power outages (91a2)	25 (12.5%)	n/a	25 (12.5%)
Losses Due to Outages (rescaled 0–100)	25 (12.5%)	n/a	25 (12.5%)
- Losses due to outages as a percentage of annual sales (91b)	25 (12.5%)	n/a	25 (12.5%)
Coping Strategies (rescaled 0–100)	25 (12.5%)	n/a	25 (12.5%)

- Percentage of firms owning or sharing a generator (91c)	25 (12.5%)	n/a	25 (12.5%)
Total Points	100	n/a	100

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent).
FFP = Firm Flexibility Point; SBP = Social Benefits Point.

WATER QUESTIONNAIRE

The tables that follow present all indicators (including their components, if applicable) under each pillar, with a reference to the corresponding question number in parenthesis. The questions are listed before each table for ease of reference.

For Y/N questions, the Y response accounts for the score and is considered as the good practice, unless otherwise indicated with the sign “Y/N; N – good practice”.

In the tables that follow, “AND” means all referenced questions must have a good practice response to obtain a score on the indicator.

In the tables that follow, “OR” means one or more referenced questions must have a good practice response to obtain a score on the indicator.

Certain questions are marked as “not scored,” which indicates that they do not impact the score in any way. The purpose of these questions is to further inform and refine the questions design for subsequent years of the rollout, as needed, as well as to substantiate and provide further information for the scored questions.

PILLAR I–QUALITY OF REGULATIONS ON UTILITY SERVICES (WATER)	
Parameters	
Business Location	The largest (most populous) city in the economy. The parameter is used in cases where regulations may not be applicable at a national level and vary across states or regions. Geographical location determines availability of water connections, as well as the type of connections and construction required. For Pillar I, if regulations differ across states within an economy, the experts will be asked to provide information regarding the regulations of the largest city.

1.1 REGULATORY MONITORING OF TARIFFS AND SERVICE QUALITY

1.1.1 Monitoring of Tariffs

1. Is there a regulatory agency overlooking the water sector? (Y/N)

Y → proceed to the remaining questions.

N → 0 points on questions 2 and 3.

2. Per the regulatory framework, what role does the water regulator play in approving tariffs? Please select one:

2a. The regulator has final decision-making role to approve water tariffs

2b. The regulator shares decision-making role to approve water tariffs with other government agency or ministry

2c. The regulator plays consultative role in water tariff setting or approval

2d. The regulator is not involved in water tariff setting or approval

1.1.2 Monitoring of Service Quality

3. Per the regulatory framework, what role does the water regulator play in monitoring the quality and reliability of water services? Please select all that apply:

- 3a. The regulator sets performance standards to ensure service quality and the reliability of water services
- 3b. The regulator monitors adherence to performance standards to ensure service quality and the reliability of water services

4. **Per the regulatory framework, does the regulator control the approved budget and is responsible for decision making in regard to expenditure? (Y/N) (not scored)**

1.1 REGULATORY MONITORING OF TARIFFS AND SERVICE QUALITY			
Indicators	FFP	SBP	Total Points
Monitoring of Tariffs (2a)	1	1	2
Monitoring of Service Quality	1	1	2
- Set performance standards (3a)	0.5	0.5	1
- Monitor adherence to performance standards (3b)	0.5	0.5	1
Total Points	2	2	4

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

1.2 UTILITY INFRASTRUCTURE SHARING AND QUALITY ASSURANCE MECHANISMS

1.2.1 Joint Planning and Construction

5. **Are there provisions in the regulation requiring joint planning and construction (for example, for the deployment of electrical poles, overhead or underground cables, water pipes, telephone wires), including provisions on common excavation permits, joint excavation, or “dig once” policies? (Y/N)**
6. **Are there provisions in the regulatory framework which set time limits for agencies involved in water connections to take a decision on approvals or issue consents? (Y/N)**

1.2.2 Mechanisms on Service Quality Assurance

7. **Does the regulatory framework stipulate financial deterrence or incentives mechanisms (such as compensations or penalties paid by utilities or rewards for reliable service supply) aimed at limiting water supply interruptions? (Y/N)**
8. **If yes, please define what types of financial deterrence and incentives mechanisms are available: (not scored)**
- 8a. Penalties paid by the utility.
- 8b. Compensations paid to the customer.
- 8c. Positive incentive mechanisms (for example, rewards).

1.2 UTILITY INFRASTRUCTURE SHARING AND QUALITY ASSURANCE MECHANISMS			
1.2.1 Joint Planning and Construction			
Indicators	FFP	SBP	Total Points
Joint Planning and Construction	1	1	2
- Common excavation provisions (5)	0.5	0.5	1
- Timelines for approvals (6)	0.5	0.5	1
Mechanisms on Service Quality Assurance (7)	1	1	2

Total Points	2	2	4
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Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

1.3 SAFETY OF UTILITY CONNECTIONS

1.3.1 Professional Certifications

- 9. Does the regulatory framework specify the qualification requirements for the party carrying-out the water installation works? (Y/N)**

Y → proceed to the remaining questions.

N → 0 points on question 10.

- 10. If yes, please select all the qualification requirements that apply:**

10a. Minimum number of years of experience

10b. Education qualification (for example, university degree in the relevant field)

10c. Registered member of the national association of engineers

10d. Pass a qualification exam

1.3.2 Inspection Regimes

- 11. Does the law mandate that internal water installations are carried out by a licensed professional/company? (Y/N)**

- 12. Does the law mandate that the company that carried out internal water installations inspect/certify the quality of installation? (Y/N)**

- 13. Does the law mandate that a final inspection is carried out by a third party to ensure the quality of internal water installations? (Y/N)**

- 14. Does the law mandate that external water installations are carried out by a licensed professional/company? (Y/N)**

- 15. Does the law mandate that the company that carried out external water installations inspect/certify the quality of installation? (Y/N)**

- 16. Does the law mandate that a final inspection is carried out by a third party to ensure the quality of external water installations? (Y/N)**

1.3.3 Liability Regimes

- 17. Can any party (besides the project owner or investor) be held liable by law in case faults are discovered after water installation? (Y/N)**

- 18. If yes, please select all parties involved in providing water connections that can be held liable: (not scored)**

18a. The engineer/company that designed the plans for the connection.

18b. The professional or agency that conducted technical inspections.

18c. The professional or company that performed installation works.

1.3 SAFETY OF UTILITY CONNECTIONS			
Indicators	FFP	SBP	Total Points
Professional Certifications - Minimum number of years of practical experience (10a) - Education qualification (10b) - Registered member of the national association of engineers (10c) - Pass a qualification exam (10d) <i>Note: At least 2 of the requirements above must be met to obtain a point on this indicator</i>	1	1	2
Inspection Regimes for Water Installations - Internal installation works (13 OR (11 AND 12)) - External installation works (16 OR (14 AND 15)) <i>A score is assigned if 13 is selected OR both 11 and 12 are selected.</i> <i>A score is assigned if 16 is selected OR both 14 and 15 are selected</i>	1 0.5 0.5	1 0.5 0.5	2 1 1
Professional Liability for Water Connections (17)	1	1	2
Total Points	3	3	6

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

1.4 ENVIRONMENTAL SUSTAINABILITY

1.4.1 Sustainability of Water Provision

19. Does the law set requirements and standards for water quality to ensure that utilities supply clean water? Examples of standards for water quality include requirements to carry out aesthetic, microbiological parameters, physical-chemical, and radiological tests of treated water. (Y/N)

Y → proceed to the remaining questions.

N → 0 points on question 20.

20. If yes, please specify the applicable tests to ascertain water quality standards are met for end user consumption (i.e., tests that are conducted at consumer tap):

20a. Requirement to carry out aesthetic tests (for example, taste, odor, appearance)

20b. Requirement to carry out microbiological parameters' tests

20c. Requirement to carry out physical-chemical tests

20d. Requirement to carry out radiological tests

21. Are there deterrence or enforcement mechanisms imposed on utilities (for example, fines or penalties) to promote compliance with the water quality standards? (Y/N)

22. If yes, please specify the enforcement mechanisms for the water quality standards: (not scored)

22a. Penalties or fines

22b. Random tests of end user water quality standard by designated authority

22c. Reporting requirements—utilities report to the regulator on meeting the water quality standards

22d. Public disclosure of violations related to compliance with water quality standards

23. Does the law set environmental standards and requirements for utilities for efficient water supply to promote Water-saving? (Y/N)

Note: Examples of environmental standards for efficient water supply include water-saving targets, targets on the number of installed smart meters on business customers' premises, roll-out of smart meters to business customers free of charge.

24. If yes, please specify the standards for efficient water supply: (not scored)

24a. Water-saving targets imposed on utilities

- 24b. Targets on the number of installed smart meters on business customers' premises
- 24c. Roll-out of smart meters to business customers free of charge
- 24d. Coordination of water use with others in the river basin

25. Are there any deterrence or enforcement mechanisms imposed on utilities (for example, fines, penalties) to promote compliance with the water supply efficiency standards? (Y/N)

26. If yes, please specify the enforcement mechanisms to promote compliance with the water supply efficiency standards: (not scored)

- 26a. Penalties or fines
- 26b. Inspections by the designated authority
- 26c. Reporting requirements—utilities report to the regulator on meeting the water- supply efficiency standards
- 26d. Public disclosure of violations related to compliance with water- supply efficiency standards

1.4.2 Sustainability of Water Use

27. Are there any requirements and programs promoting adherence to demand-side water management practices? (Y/N)

Note: Examples of standards for demand management practices include requirements for businesses to install water-efficient appliances, requirement to adhere to water-saving targets, requirements on efficient water consumption labelling.

28. If yes, please specify the applicable demand side water management practices promoting water-saving. Please select all that apply: (not scored)

- 28a. Requirement for businesses to install water-efficient appliances
- 28b. Requirement for businesses to adhere to water-saving targets
- 28c. Requirements for businesses on efficient water consumption labelling

29. Are there any deterrence or enforcement mechanisms, (for example, fines, penalties, volume-differentiated water tariffs) aimed at ensuring businesses compliance with demand side water management practices? (Y/N)

30. If yes, please provide details on the enforcement mechanisms to promote compliance with demand side water management practices. Please select all that apply: (not scored)

- 30a. Penalties or fines
- 30b. Inspections by the designated authority
- 30c. Reporting requirements – businesses report to the regulator on adherence to water-saving practices
- 30d. Volume-differentiated tariffs to discourage water overconsumption

1.4.3 Incentives to Adopt Water-Saving Practices

31. Are there any financial incentives to businesses to adopt water-saving practices? (Y/N)

Note: Examples of financial incentives to businesses to adopt water demand management practices include tax incentives, rebate programs, tariff incentives, low-interest rate loans, discounts on water-efficient appliances.

32. Please indicate whether the following types of financial incentives are provided to businesses to adopt demand side water management practices. (not scored)

- 32a. Tax incentives
- 32b. Rebate programs

- 32c. Tariff incentives
- 32d. Low-interest rate loans
- 32e. Discounts on water-efficient appliances
- 32f. Other

33. Are there any nonfinancial incentives for businesses to adopt demand side water management practices? (Y/N)

Note: Examples of non-financial incentives include: most-efficient awards, awareness schemes for businesses providing information on water demand management practices and technological development, water audits to help businesses identify ways to reduce water use.

34. Please indicate whether the following types of nonfinancial incentives are provided to businesses to adopt demand side water management practices. (not scored)

- 34a. Most-efficient awards
- 34b. Awareness schemes for businesses providing information on water-saving practices and technological development
- 34c. Water audits to help identify ways to reduce water use
- 34d. Other

1.4.4 Sustainability of Wastewater Treatment

35. Is there a designated entity responsible for regulating wastewater discharge to the local sewerage system? (Y/N)

36. Are there wastewater treatment requirements that require wastewater to be treated before it is discharged to water bodies or land (for example, discharge limits, conditions for discharges)? (Y/N)

37. Please specify the wastewater treatment requirements that are in place: (not scored)

- 37a. Discharge limits (effluent limitation)
- 37b. Pretreatment conditions for discharges
- 37c. Other

1.4.5 Wastewater Reuse

38. Does the regulatory framework establish rules on wastewater reuse (for example, guidelines for the use of reclaimed water, effluent quality limits and treatment process/type)? (Y/N)

1.4 ENVIRONMENTAL SUSTAINABILITY			
Indicators	FFP	SBP	Total Points
Sustainability of Water Provision	n/a	1	1
- Environmental standards for water quality (20a AND 20b AND 20c AND 20d)	n/a	0.25	0.25
- Enforcement of environmental standards for water quality (21)	n/a	0.25	0.25
- Environmental standards for efficient water supply for Water-saving (23)	n/a	0.25	0.25
- Enforcement of standards for water supply efficiency (25)	n/a	0.25	0.25
Sustainability of Water Use	n/a	1	1
- Requirements for businesses to adhere water-saving practices (27)	n/a	0.5	0.5
- Enforcement mechanism to foster businesses' compliance with Water-saving standards (29)	n/a	0.5	0.5

Incentives to Adopt Water-Saving Practices - Financial and non-financial incentives for businesses (31 AND 33) OR - Financial incentives for businesses (31)	1 1 OR 0.5	1 1 OR 0.5	2 2 OR 1
Sustainability of Wastewater Treatment - Existence of entity regulating water waste discharge (35) - Wastewater treatment requirements (36)	n/a n/a n/a	1 0.5 0.5	1 0.5 0.5
Wastewater Reuse (38)	n/a	1	1
Total Points	1	5	6

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

PILLAR II–QUALITY OF THE GOVERNANCE AND TRANSPARENCY OF UTILITY SERVICES (WATER)	
Parameters	
Business Location	The largest (most populous) city in the economy. The parameter is used in cases where regulations may not be applicable at a national level and vary across states or regions. Geographical location determines availability of water connections, as well as the type of connections and construction required. The regulations of the largest city will apply to all questions under Pillar II. For all questions under Pillar II, the experts will be asked to provide their response accounting for this specific parameter unless specified otherwise in the question per se.
Largest Utility Provider	The largest utility provider in the largest city is considered (in terms of customers served or market share). The parameter will apply to all questions under Pillar II. For all questions under Pillar II, the experts will be asked to provide their response accounting for this specific parameter unless specified otherwise in the question per se..

2.1 DIGITAL SERVICES AND INTEROPERABILITY

2.1.1 Electronic Application

39. Is it possible to apply electronically for new commercial water connections? (Y/N)

40. Is it possible to track online the application for water connection? (Y/N)

2.1.2 Electronic Payment

41. Is it possible to pay electronically the fee for new water connections? (Y/N)

42. Is it possible to pay electronically for the water monthly tariffs? (Y/N)

2.1.3 Information on Existing Infrastructure and Planned Works

43. Is there a national/local infrastructure database that would allow the identification of existing infrastructure networks such as underground lines (for example, “dial before you dig” or GIS)?

43a. Shared database for the network lines of multiple utilities, including electricity, water, and internet

43b. Database for water networks

44. Is there an online platform or a website with information about the planned works on utility networks that are carried out in the city? (Y/N)

2.1.4 Coordination Mechanisms for Excavation Permits

45. Are the following in place to facilitate collaboration between agencies for excavation permit applications and approvals?

- 45a. An online system
- 45b. An agency in charge of coordination
- 45c. Other coordination mechanism

2.1 DIGITAL SERVICES AND INTEROPERABILITY			
Indicators	FFP	SBP	Total Points
Electronic Application	1	1	2
- Electronic application for new water connection (39)	0.5	0.5	1
- Online tracking application for water connection (40)	0.5	0.5	1
Electronic Payment (41 AND 42)	1	1	2
Information on Existing Infrastructure and Planned Works	1	1	2
- National/Local infrastructure database for multiple utilities/ water distribution networks (43a OR 43b)	0.5	0.5	1
- Platform with the information on the planned works on utility networks (44)	0.5	0.5	1
Coordination Mechanisms for Excavation Permits	1	1	2
- Online system (45a) OR	1 OR	1 OR	2 OR
- A coordinating agency (45b) OR	0.5 OR	0.5 OR	1 OR
- Other coordinating mechanism (45c)	0.5	0.5	1
<i>Note: A score of 1 is assigned if 45a is selected; a score of 0.5 is assigned if 45b or 45c is selected.</i>			
Total Points	4	4	8

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

2.2 AVAILABILITY OF INFORMATION AND TRANSPARENCY

2.2.1 Connection Requirements

46. Are the connection requirements for new business water connections available online?

- Y → proceed to the remaining questions.
- N → 0 points on question 47.

47. What connection requirements are published online?

- 47a. Required documents
- 47b. Required procedures
- 47c. Connection cost
- 47d. Stipulated connection time standards

2.2.2 Tariffs and Tariff Settings

48. Are the current water tariffs available online? (Y/N)

49. Is water consumption by industrial and commercial entities metered? (Y/N) (not scored)

50. What type of tariff is being applied to industrial and commercial entities? (not scored)

- 50a. A linear tariff that is proportional to consumption
- 50b. An increasing block tariff (IBT) that increases with higher consumption
- 50c. A decreasing block tariff (DBT) that decreases with higher consumption

50d. Volume-differentiated tariff
50e. Fixed monthly prices

51. How many units of consumption (in cubic meters, m³) are within the first block of commercial tariff? *(not scored)*
52. What is the commercial tariff in local currency units (LCU/m³) for the first block for 1 m³? *(not scored)*
53. How many units of consumption (in m³) are within the second block of commercial tariff? *(not scored)*
54. What is the commercial tariff in local currency units (LCU/m³) for the second block for 1 m³? *(not scored)*
55. How many units of consumption (in m³) are within the third block of commercial tariff? *(not scored)*
56. What is the commercial tariff in local currency units (LCU/m³) for the third block for 1 m³? *(not scored)*
57. What is the fixed cost charge per month in local currency units (LCU) for commercial customers? (i.e., the charge that needs to be paid, even if consumption is zero in a certain month) *(not scored)*
58. Is water consumption by residential customers metered (m³)? *(not scored)*
59. What type of tariff is being applied to residential customers? Please select one. *(not scored)*
- 59a. A linear tariff that is proportional to consumption
 - 59b. An increasing block tariff (IBT) that increases with higher consumption
 - 59c. A decreasing block tariff (DBT) that decreases with higher consumption
 - 59d. A Volume-differentiated tariff
 - 59e. Fixed monthly prices
60. How many units of consumption (in m³) are within the first block of residential tariff? *(not scored)*
61. What is the residential tariff in local currency units (LCU/m³) for the first block for 1 m³? *(not scored)*
62. How many units of consumption (in m³) are within the second block of residential tariff? *(not scored)*
63. What is the residential tariff in local currency units (LCU/m³) for the second block for 1 m³? *(not scored)*
64. How many units of consumption (in m³) are within the third block of residential tariff? *(not scored)*
65. What is the residential tariff in local currency unit (LCU/m³) for the third block for 1 m³? *(not scored)*

66. What is the fixed cost charge per month in local currency units (LCU) for residential customers? (i.e., the charge that needs to be paid, even if consumption is zero in a certain month) *(not scored)*
67. Are changes in water tariffs communicated to the public at least one billing cycle in advance? (for example, as published in the press, regulations, or website, through letters, bills, emails, SMS). (Y/N)
68. Is a formula prescribing how end-user water tariff levels are determined publicly available?
- 68a. Yes, formula is published online only
 - 68b. Yes, formula is published in the customer bill only
 - 68c. Yes, formula is published online and in the customer bill
 - 68d. No, not available
69. Are current wastewater tariffs for industrial and commercial customers available online? (Y/N) *(not scored)*
70. How are wastewater tariffs set? Please select one: *(not scored)*
- 70a. As a proportion of the total Water bill
 - 70b. As a fixed fee (independent of Water consumption)
71. Are wastewater tariffs varying by pollution load (i.e., dependent on the wastewater characteristics emitted by a firm)? (Y/N) *(not scored)*

2.2.3 Planned Outages

72. Are planned water outages made publicly available/communicated to the customers?
- 72a. Made publicly available
 - 72b. Communicated to the customer

2.2.4 Complaint Mechanisms

73. What type of information is available online to guide customers to file a complaint about water service supply?
- 73a. Information on the entity in charge of managing the complaints
 - 73b. Documents and steps necessary to make a complaint
 - 73c. Criteria / scope of complaint mechanism (i.e., what issues can be reported)
 - 73d. Steps necessary to make a complaint

2.2.5 Service Quality Indicators

74. Are the indicators on reliability of water supply made available online for the public? (Y/N)
75. Are the indicators on quality of supplied water made available online for the public? (Y/N)

2.2.6 Sustainability Indicators

76. Are the KPIs to monitor the environmental sustainability of water supply available online? (Y/N)

2.2 AVAILABILITY OF INFORMATION AND TRANSPARENCY			
Indicators	FFP	SBP	Total Points
Connection Requirements	1	1	2
- Required documents (47a)	0.25	0.25	0.5
- Required procedures (47b)	0.25	0.25	0.5
- Connection cost (47c)	0.25	0.25	0.5
- Stipulated connection time standards (47d)	0.25	0.25	0.5
Tariffs and Tariff Setting	1	1	2
- Tariffs are published online (48) AND			
- Customers are notified in advance of tariff changes (67) AND			
- Tariff setting formula is publicly available (68a OR 68b OR 68c)			
Planned Outages (72a OR 72b)	1	1	2
Complaint Mechanisms	1	1	2
- Information on the entity in charge of complaints (73a)	0.25	0.25	0.5
- Documents necessary to make a complaint (73b)	0.25	0.25	0.5
- Criteria/scope of complaint mechanism (73c)	0.25	0.25	0.5
- Steps necessary to make a complaint (73d)	0.25	0.25	0.5
Service Quality Indicators	1	1	2
- KPIs on reliability of water supply (74)	0.5	0.5	1
- KPIs on water quality (75)	0.5	0.5	1
Sustainability Indicators (76)	n/a	1	1
Total Points	5	6	11

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

2.3 MONITORING OF SERVICE SUPPLY (INCLUDES GENDER AND ENVIRONMENT)

2.3.1 Reliability and Quality of Water Supply

77. Is the reliability of water supply monitored (for example, continuity and frequency of water service)? (Y/N)

78. Is quality of water monitored (for example, percentage of water receiving chemical treatment, percentage of water unfitted for use)? (Y/N)

79. Please provide details on which parameters are used to monitor water quality: *(not scored)*

79a. pH

79b. Biochemical Oxygen Demand

79c. Chemical Oxygen Demand

79d. Lead

79e. Other

2.3.2 Sustainability of Water Supply

80. Are there Key Performance Indicators to monitor the environmental sustainability of water supply (for example, of disposal of sludge from the water treatment, percentage of wastewater that has been reused)? (Y/N)

2.3.3 Access to Water for Women Entrepreneurs

81. Does the water utility in [largest city] carry out sex-disaggregated customer surveys in order to measure the quality of services provided by the utility from the perspective of women owned businesses? (Y/N)

Examples of sex-disaggregated customer surveys include asking the gender of the person in consumer satisfaction survey or in complaint form.

82. What customer-surveys data is sex-disaggregated? Please select all that apply. (not scored)

- 82a. Gender profile of a person answering consumer satisfaction survey
- 82b. Gender profile of a person lodging a complaint related to quality, reliability, and utility's supply services
- 82c. Other data that is sex-disaggregated

83. Are these survey data available for the most recent calendar year (2022)? (not scored)

84. Are these survey data anonymized? (not scored)

85. Are these survey data made publicly available online? (not scored)

2.3 MONITORING OF SERVICE SUPPLY (INCLUDES GENDER AND ENVIRONMENT)			
Indicators	FFP	SBP	Total Points
Reliability and Quality of Water Supply (77 AND 78)	1	1	2
Sustainability of Water Supply (80)	n/a	1	1
Access to Water for Women Entrepreneurs (81)	1	1	2
Total Points	2	3	5

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

2.4 ENFORCEMENT OF SAFETY REGULATIONS AND CONSUMER PROTECTION MECHANISMS

2.4.1 Implementation of Inspections for Water Connections

86. Are internal water installation works typically carried out by a licensed professional/company in practice? (Y/N)

87. Please specify, the party that typically conducts internal water installation works in practice. Please select one: (not scored)

- 87a. Utility/ municipality
- 87b. Licensed private contractor
- 87c. Any available private contractor (not necessarily licensed)

88. Does the contractor/company that performed internal water installations works conduct inspection/ issue certificate of compliance/ check quality of internal installation works? (Y/N)

89. Is the quality check or final inspection by a third-party (other than the one that did installation) conducted in practice to ensure the quality and safety of internal water installation works? (Y/N)

90. Please specify, the third party that carries out inspection to ensure quality of internal water installation works: (not scored)

- 90a. Utility/municipality
- 90b. Licensed private company (other than the one that did installation)
- 90c. Regulatory agency
- 90d. Other governmental agency

90e. Other, please specify

91. Are external water installation works typically carried out by a licensed professional/company in practice? (Y/N).

92. Please specify the party that typically conducts external water installation works in practice. Please select one: (not scored)

92a. Utility

92b. Licensed private contractor

92c. Any available private contractor (not necessarily licensed)

93. Does the licensed contractor/company that performed external installations conduct inspection/ issue certificate of compliance/ check quality of external water installation works? (Y/N)

94. Is the quality check or final inspection by a third party (other than the one that did installation) conducted in practice to ensure the quality and safety of external water installations? (Y/N)

95. Please specify the third party that carries out inspection to ensure quality of external water installations. Please select all that apply: (not scored)

95a. Utility/municipality

95b. Licensed private company (other than the one that did installation)

95c. Regulatory agency

95d. Other government agency

95e. Other, please specify

2.4.2 Independent Complaint Mechanism

96. Is there a complaint mechanism available to report issues faced by customers in provision of water (such as incorrect billing or inadequate water supply)? (Y/N)

Y → proceed to the remaining question.

N → 0 points on question 97

97. Is there a complaint mechanism independent from the water utility to escalate the complaints? (Y/N)

2.4 ENFORCEMENT OF SAFETY REGULATIONS AND CONSUMER PROTECTION MECHANISMS			
Indicators	FFP	SBP	Total Points
Implementation of Inspections for Water Connections	1	1	2
- Internal installation works ((86 AND 88) OR 89)	0.5	0.5	1
- External installation works ((91 AND 93) OR 94)	0.5	0.5	1
<i>A score is assigned if 89 is selected OR both 86 and 88 are selected.</i>			
<i>A score is assigned if 94 is selected OR both 91 and 93 are selected</i>			
Independent Complaint Mechanism (97)	1	1	2
Total Points	2	2	4

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

PILLAR III—OPERATIONAL EFFICIENCY OF UTILITY SERVICE PROVISION (WATER)

The scores for Pillar III indicators are calculated using the Normal Cumulative Density Function (CDF) transformation method on a scale of 0 to 100, where 0 and 100 represent the lowest and highest possible scores, respectively. The best and worst performers are identified based on the 5th and 95th percentiles of the collected data.

The data for Pillar III on the Operational Efficiency of Utility Service Provision is collected through firm-level surveys, using the following questions:

98. Time to obtain water connection: How many days did it take to obtain water connection from the day of the application to the day the service was received?

99. Reliability of water supply: Over fiscal year [Insert last complete fiscal year], did this establishment experience insufficient water supply?

PILLAR III—OPERATIONAL EFFICIENCY OF UTILITY SERVICE PROVISION (WATER)			
Indicators	FFP	SBP	Total Points
Time to Obtain a Connection (98)	100 (50%)	n/a	100 (50%)
Reliability of Supply	100 (50%)	n/a	100 (50 %)
Percentage of firms that experience water insufficiencies (99) (rescaled 0 – 100)	100 (50%)	n/a	100 (50%)
Total Points	100 (100%)	n/a	100 (100%)

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent). FFP = Firm Flexibility Point; SBP = Social Benefits Point. GNI = Gross National Income.

INTERNET

The tables that follow present all indicators (including their components, if applicable) under each pillar, with a reference to the corresponding question number in parenthesis. The questions are listed before each table for ease of reference.

For Y/N questions, the Y response accounts for the score and is considered as the good practice, unless otherwise indicated with the sign “Y/N; N – good practice”.

In the tables that follow, “AND” means all referenced questions must have a good practice response to obtain a score on the indicator.

In the tables that follow, “OR” means one or more referenced questions must have a good practice response to obtain a score on the indicator.

Certain questions are marked as ‘not scored’ which indicates that they do not impact the score in any way. The purpose of these questions is to further inform and refine the questions design for subsequent years of the rollout, as needed, as well as to substantiate and provide further information for the scored questions.

PILLAR I–QUALITY OF REGULATIONS ON UTILITY SERVICES (INTERNET)	
Parameters	
Business Location	The largest (most populous) city in the economy. The parameter is used in cases where regulations may not be applicable at a national level and vary across states or regions. Geographical location determines availability of internet connections, as well as the type of connections and construction required. For Pillar I, if regulations differ across states within an economy, the experts will be asked to provide information regarding the regulations of the largest city.

1.1 REGULATORY MONITORING OF TARIFFS AND SERVICE QUALITY

1.1.1 Monitoring of Tariffs

- 1. Is there a regulatory agency overlooking digital connectivity operators (first, middle, and last mile) and internet service providers? (Y/N)**

Y → proceed to the remaining questions.

N → 0 points on questions 2 and 3.

- 2. Per the regulatory framework which of the following functions on tariff setting and anticompetitive practices in the digital infrastructure service sector does the regulator perform?**

2a. Overseeing wholesale connectivity tariffs (interconnection agreements)

2b. Initiating investigations for anticompetitive practices and setting fines for anticompetitive practices

2c. Establishing price caps on retail prices for end users

1.1.2 Monitoring of Service Quality

- 3. Per the regulatory framework, what role does the internet regulator play in monitoring the quality and reliability of internet services? Please select all that apply:**

- 3a. The regulator sets performance standards to ensure service quality and the reliability of internet services
- 3b. The regulator monitors adherence to performance standards to ensure service quality and the reliability of internet services

4. **Per the regulatory framework, does the regulator control the approved budget and is responsible for decision making in regard to expenditure? (Y/N) (not scored)**

1.1 REGULATORY MONITORING OF TARIFFS AND SERVICE QUALITY			
Indicators	FFP	SBP	Total Points
Monitoring of Tariffs (2a AND 2b)	1	1	2
Monitoring of Service Quality	1	1	2
- Setting performance standards (3a)	0.5	0.5	1
- Monitoring of performance standards (3b)	0.5	0.5	1
Total Points	2	2	4

1.2 UTILITY INFRASTRUCTURE SHARING AND QUALITY ASSURANCE MECHANISMS

1.2.1 Joint Planning and Construction

5. **Are there provisions in the regulation requiring joint planning and construction (for example, for the deployment of electrical poles, overhead or underground cables, water pipes, telephone wires), including common excavation permits, joint excavation, or other “dig once” policies? (Y/N)**
6. **Are there provisions in the regulation which set time limits for agencies involved in new digital infrastructure for new internet connections to take a decision on approvals or issue consents (for example, for construction licenses or internet service provision licenses)? (Y/N)**

1.2.2 Rights of Way

7. **Are there provisions in the regulation guaranteeing equal access to government-owned infrastructure (such as roads, railways, towers and water and power lines) available to internet service providers for backbone/backhaul infrastructure as well as last mile infrastructure? (Y/N)**
8. **Are there provisions in the regulation establishing rights of way for digital infrastructure service providers? (Y/N)**
9. **Are there provisions stipulating obligations for operators owning passive infrastructure (for example, wired, or wireless, including ducts and towers) to share access for the last mile? (Y/N)**
10. **Are there provisions stipulating obligations for operators owning active infrastructure (for example, RAN Access, lit fiber, access node switches and broadband remote access servers) to share access for the last mile? (Y/N)**

1.2.3 Open Infrastructure

11. **Are there provisions in the regulation guaranteeing local loop unbundling and line access? (Y/N)**

12. Are utility partnerships for infrastructure sharing (such as leasing excess capacity of fiber optic infrastructure, spectrum leasing/sharing, interconnection agreements, co-investment in networks expansion or other voluntary market arrangements) allowed in the current telecommunication regulations?

12a. Yes, the law allows partnerships for infrastructure sharing

12b. No, the law forbids partnerships for infrastructure sharing

12c. The law is silent on partnerships for infrastructure sharing

13. Are there asymmetric regulations for dominant carriers or carriers with significant market power? (Y/N)

14. What are the regulations applied to reduce dominance? Please select all that apply: (not scored)

14a. Price-caps

14b. Rate-of-return regulations

14c. Provisions that establish remedial action if a negotiated solution between incumbents and new entrants is not reached

1.2.4 Mechanisms on Service Quality Assurance

15. Does the regulatory framework stipulate financial deterrence or incentives mechanisms (such as compensations or penalties paid by internet service providers or rewards for reliable service supply) aimed at limiting internet service outages or slowdowns? (Y/N)

16. If yes, are the following types of financial deterrence mechanisms and incentives available: (not scored)

16a. Penalties paid by the utility

16b. Compensations paid to the customer

16c. Positive incentive mechanisms (for example, rewards)

16d. Other

1.2 UTILITY INFRASTRUCTURE SHARING AND QUALITY ASSURANCE MECHANISMS			
Indicators	FFP	SBP	Total Points
Joint Planning and Construction	1	1	2
- Common excavation provisions (5)	0.5	0.5	1
- Timelines for approvals (6)	0.5	0.5	1
Rights of Way	1	1	2
- Regulation on equal access to government-owned infrastructure (7)	0.5	0.5	1
- Regulation on rights of way for digital infrastructure service providers (8)	0.5	0.5	1
Open Infrastructure	1	1	2
- Passive or active infrastructure sharing (9 or 10)	0.25	0.25	0.5
- Local loop unbundling and line access (11)	0.25	0.25	0.5
- Utility partnerships for infrastructure sharing (12a)	0.25	0.25	0.5
- Asymmetric regulations for dominant carriers (13)	0.25	0.25	0.5
Mechanisms on Service Quality Assurance (15)	1	1	2
Total Points	4	4	8

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point. ISP = Internet Service Provider.

1.3 SAFETY OF UTILITY CONNECTIONS

1.3.1 Liability Regimes

17. Does the regulatory framework establish liability and a legal right to pursue compensation for personal data protection breaches? (Y/N)

18. If yes, what parties are held liable: *(not scored)*

- 18a. Data Controllers
- 18b. Data Processors
- 18c. Data Sub-Processors

19. Are there clear provisions in the law establishing data breach incident reporting? (Y/N)

1.3.2 Cybersecurity Coordination

20. Is there an agency responsible for cybersecurity coordination at a national level? (Y/N)

Y → proceed to the remaining questions.

N → 0 points on questions 21 to 23.

21. If yes, please specify the functions of the agency:

- 21a. Carrying out risk-assessment strategies
- 21b. Carrying out cybersecurity audits, drills, exercises, or trainings
- 21c. Leading collective efforts against cyber threats
- 21d. Enforcing cybersecurity laws and regulations

1.3.3 Cybersecurity Safeguards

22. Does the regulatory framework establish minimum cybersecurity protections or mandate minimum cybersecurity standards and cybersecurity safeguards? (Y/N)

23. Does the regulatory framework define a *modus operandi* for incident response in a case of a major cyberattack or a compromise of service availability (including the government authorities' level of engagement)? (Y/N)

24. If yes, what are the applicable cybersecurity safeguards for which the regulatory framework mandates measures and controllers: *(not scored)*

- 24a. Prevention and protection controllers
- 24b. Systems monitoring and detection
- 24c. Data collection
- 24d. Vulnerabilities scanning
- 24e. Proactive prevention measures
- 24f. Incident handling and incident response
- 24g. System recovery
- 24h. Network forensic capabilities
- 24i. Training and awareness raising activities
- 24j. Firewalls
- 24k. SSL inspection
- 24l. Cloud-based DDoS protection
- 24m. Intrusion prevention
- 24n. Malware protection

1.3 SAFETY OF UTILITY CONNECTIONS			
Indicators	FFP	SBP	Total Points
Liability Regimes	1	1	2
- Liability for personal data protection breaches (17)	0.5	0.5	1
- Data breach incident reporting (19)	0.5	0.5	1
Cybersecurity Coordination	1	1	2
- Carrying out risk-assessment strategies (21a)	0.25	0.25	0.5
- Carrying out cybersecurity audits, drills, exercises (21b)	0.25	0.25	0.5
- Leading collective efforts against cyber threats (21c)	0.25	0.25	0.5
- Enforcing cybersecurity laws and regulations (21d)	0.25	0.25	0.5
Cybersecurity Safeguards	1	1	2
- Cybersecurity protection or minimum standards (22)	0.5	0.5	1
- Modus operandi for incidents response (23)	0.5	0.5	1
Total Points	3	3	6

1.4 ENVIRONMENTAL SUSTAINABILITY

1.4.1 Environmental Reporting or Disclosure Standards for Digital Connectivity Infrastructure

25. Are there environmental reporting or disclosure standards, mandatory or voluntary, for digital connectivity infrastructure and data infrastructure that together add up to digital infrastructure? (for example, energy consumption, CO₂ equivalents, use of renewable energy, energy intensity, e-waste metrics, or water consumption). (Y/N)

25a. Yes, mandatory standards

25b. Yes, voluntary standards

25c. No reporting or disclosure standards exist

26. If yes, please specify the environmental standards for digital connectivity infrastructure and data infrastructure: (not scored)

26a. Greenhouse Gas Emissions

26b. Global Reporting Initiative Standards

26c. ISO 50001

26d. ISO 14064

26e. ISO 14001

26f. ITU-TL133

26g. ETSI ES 203

26h. Other

1.4.2 Emissions and Energy Efficiency of Infrastructure

27. Are there any national targets for emissions or energy efficiency of electronic communication networks and data infrastructure, including data centers, such as power usage effectiveness, renewable energy use, or coefficient of performance (COP)? (Y/N)

1.4 ENVIRONMENTAL SUSTAINABILITY			
Indicators	FFP	SBP	Total Points
Environmental Reporting or Disclosure Standards for Digital Connectivity Infrastructure (25a OR 25b)	n/a	1	1
Emissions and Energy Efficiency of Infrastructure (27)	n/a	1	1
Total Points	n/a	2	2

PILLAR II–QUALITY OF THE GOVERNANCE AND TRANSPARENCY OF UTILITY SERVICES (INTERNET)	
Parameters	
Business Location	The largest (most populous) city in the economy. The parameter is used in cases where regulations may not be applicable at a national level and vary across states or regions. Geographical location determines availability of internet services, as well as the type of connections and construction required. The parameter will apply to all questions under Pillar II. For all questions under Pillar II, the experts will be asked to provide their response accounting for this specific parameter unless specified otherwise in the question per se.
Largest Utility Provider	The largest ISP (in terms of market share in the largest city) that offers high speed fixed broadband packages (minimum of 25 Mbps). The parameter will apply to all questions under Pillar II. For all questions under Pillar II, the experts will be asked to provide their response accounting for this specific parameter unless specified otherwise in the question per se.
Speed (measured in bandwidth)	25 Mbps of download speed and 3 Mbps of upload speed. Application of the parameter will be specified in the respective questions.

2.1 DIGITAL SERVICES AND INTEROPERABILITY

2.1.1 Electronic Application

28. Is it possible to apply electronically for new commercial internet connections? (Y/N)

29. Is it possible to track online the application for new commercial internet connection? (Y/N)

2.1.2 Electronic Payment

30. Is it possible to pay the fee for the new fixed broadband connection electronically? (Y/N)

31. Is it possible to pay electronically for the internet monthly tariffs? (Y/N)

2.1.3 Information on Existing Infrastructure and Planned Works

32. Is there a national/local infrastructure database that would allow the identification of existing infrastructure networks such as underground lines (for example, “dial before you dig,” GIS)?

32a. Shared database for the network lines of multiple utilities, including electricity, water, and internet

32b. Database for internet service providers networks

33. Is there an online platform or a website with the information about the planned works on utility networks that are carried out in the city? (Y/N)

2.1.4 Coordination Mechanisms for Excavation Permits

34. Are the following in place to facilitate collaboration between agencies for excavation permit applications and approvals?

34a. An online system

34b. An agency in charge of coordination

34c. Other coordination mechanism

2.1 DIGITAL SERVICES AND INTEROPERABILITY			
Indicators	FFP	SBP	Total Points
Electronic Application	1	1	2
- Electronic application for new internet connection (28)	0.5	0.5	1
- Online tracking application for internet connection (29)	0.5	0.5	1
Electronic Payment (30 AND 31)	1	1	2
Information on Existing Infrastructure and Planned Works	1	1	2
- National/Local infrastructure database for multiple utilities/ internet service provider networks (32a OR 32b)	0.5	0.5	1
- Platform with the information on the planned works on utility networks (33)	0.5	0.5	1
Coordination Mechanisms for Excavation Permits	1	1	2
- Online system (34a) OR	1 OR	1 OR	2 OR
- A coordinating agency (34b) OR	0.5 OR	0.5 OR	1 OR
- Other coordinating mechanism (34c)	0.5	0.5	1
<i>Note: A score of 1 is assigned if 34a is selected; a score of 0.5 is assigned if 34b or 34c is selected.</i>			
Total Points	4	4	8

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

2.2 AVAILABILITY OF INFORMATION AND TRANSPARENCY

2.2.1 Connection Requirements

35. Are the connection requirements for high-speed broadband internet connection available online? (Y/N)

Y → proceed to the remaining questions.

N → 0 points on question 36.

36. What connection requirements are published online?

36a. Required documents

36b. Required procedures

36c. Connection cost

36d. Stipulated connection time standards

2.2.2 Tariffs and Tariff Setting

37. Are the current internet monthly fees available online? (Y/N)

38. For businesses to use high-speed internet with at least 25 Mbps download speed in your city, what is the most common package (in terms of download speed) (Mbps)? (not scored)

39. What is the current average monthly fee (on a contract) for a commercial internet service (with at least 25 Mbps of download speed and 3 Mbps of upload speed) for the most common package in local currency units (LCU)? (not scored)

40. What is the current average monthly fee (on a month-to-month basis) for a commercial internet service (with at least 25 Mbps of download speed and 3 Mbps of upload speed) for the most common package in local currency units (LCU)? (not scored)

41. What is the current average monthly tax rate for commercial internet service (with at least 25 Mbps of download speed and 3 Mbps of upload speed) for the most common package in local currency units (LCU)? *(not scored)*
42. Is the most common package for high-speed internet connection of at least 25 Mbps download speed subject to fixed or variable prices? Please select one: *(not scored)*
 - 42a. Fixed monthly price
 - 42b. Variable monthly price (depending on data usage)
43. If the monthly price depends on data usage, what is the tariff per 1 GB of data (LCU)? *(not scored)*
44. What is the typical billing period for a high-speed internet connection of at least 25 Mbps download speed? *(not scored)*
 - 44a. Monthly
 - 44b. Bimonthly
 - 44c. Trimester
45. Are changes in high-speed broadband connection tariffs communicated to the public at least one billing cycle in advance? (for example, as published in the press, regulations, or website, through letters, bills, emails). (Y/N)
46. Is formula prescribing how end-user fixed broadband tariffs are determined publicly available?
 - 46a. Yes, formula is published online only
 - 46b. Yes, formula is published in the customer bill only
 - 46c. Yes, formula is published online and in the customer bill
 - 46d. No

2.2.3 Planned Outages

47. Are planned internet outages (including government-led outages) made publicly available/communicated to the customers?
 - 47a. Yes, made publicly available
 - 47b. Yes, communicated to the customers
 - 47c. No

2.2.4 Complaint Mechanisms

48. What type of information is available online to guide customers to file a complaint about digital connectivity?
 - 48a. Information on the entity in charge of managing the complaints
 - 48b. Documents necessary to make a complaint
 - 48c. Criteria and scope of complaint mechanism (i.e., what issues can be reported)
 - 48d. Steps necessary to make a complaint

2.2.5 Service Quality Indicators

49. Are the KPIs to monitor reliability and quality of internet supply available online? (Y/N)

2.2 AVAILABILITY OF INFORMATION AND TRANSPARENCY			
Indicators	FFP	SBP	Total Points
Connection Requirements	1	1	2
- Required documents (36a)	0.25	0.25	0.5
- Required procedures (36b)	0.25	0.25	0.5
- Connection cost (36c)	0.25	0.25	0.5
- Stipulated connection time standards (36d)	0.25	0.25	0.5
Tariffs and Tariff Setting	1	1	2
- Tariffs are published online (37) AND			
- Customers are notified in advance of tariff changes (45) AND			
- Tariff setting formula is publicly available (46a OR 46b OR 46c)			
Planned Outages (47a OR 47b)	1	1	2
Complaint Mechanisms	1	1	2
- Information on the entity in charge of complaints (48a)	0.25	0.25	0.5
- Documents necessary to make a complaint (48b)	0.25	0.25	0.5
- Criteria/scope of complaint mechanism (48c)	0.25	0.25	0.5
- Steps necessary to make a complaint (48d)	0.25	0.25	0.5
Service Quality Indicators (49)	1	1	2
Total Points	5	5	10

2.3 MONITORING OF SERVICE SUPPLY (INCLUDES GENDER AND ENVIRONMENT)

2.3.1 Reliability and Quality of Internet Supply

50. Are there Key Performance Indicators to monitor reliability and quality of internet supply? (download/upload speed, latency, minimum uptimes, throughput, jitter, recovery time etc.) (Y/N)

51. Please provide details which KPIs are used. Select all that apply: (not scored)

- 51a. Download/upload speed
- 51b. Latency
- 51c. Minimum uptimes
- 51d. Throughput
- 51e. Jitter
- 51f. Recovery time
- 51g. Other

2.3.2 Access to Internet for Women Entrepreneurs

52. Does the internet service provider in [largest city] carry out sex-disaggregated customer surveys in order to measure quality of services provided by the utility from the perspective of women-owned businesses? (Y/N)

Examples of sex-disaggregated customer surveys include asking the gender of the person in consumer satisfaction survey or in complaint form.

53. What customer-surveys data is sex-disaggregated? (not scored)

- 53a. Gender profile of a person answering consumer satisfaction survey
- 53b. Gender profile of a person lodging a complaint related to quality, reliability, and utility's supply services
- 53c. Other data that is sex-disaggregated

54. Are these survey data available for the most recent calendar year (2022)? (Y/N) (not scored)

55. Are these survey data anonymized? (Y/N) *(not scored)*

56. Are these survey data made publicly available online? (Y/N) *(not scored)*

2.3 MONITORING OF SERVICE SUPPLY (INCLUDES GENDER AND ENVIRONMENT)			
Indicators	FFP	SBP	Total Points
Reliability and Quality of Internet Supply (50)	1	1	2
Access to Internet for Women Entrepreneurs (52)	1	1	2
Total Points	2	2	4

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

2.4 ENFORCEMENT OF SAFETY REGULATIONS AND CONSUMER PROTECTION MECHANISMS

2.4.1 Cybersecurity Protocols

57. Which cybersecurity protocols stipulated in the legal and regulatory framework implemented in practice?

57a. Cybersecurity breaches are reported by the relevant cybersecurity agency to the private sector in practice

57b. Computer Incident Response Teams or Computer Emergency Readiness Team respond to reported cyberattacks or cybersecurity breaches in practice

57c. Cyber security incident response drills, trainings or exercises are carried out in practice to test capabilities to prevent, detect, respond and/or recover from cyberattacks or cybersecurity breaches

57d. Cyber security audits are carried out in practice for critical infrastructure operators to detect vulnerabilities and recommend or enforce remedial actions to prevent cyberattacks or cybersecurity breaches

2.4.2 Independent Complaint Mechanism

58. Is there a complaint mechanism available to report issues faced by customers in provision of internet services (such as breach of service level agreement performance standards, billing issues, issues with equipment, etc.)? (Y/N)

Y → proceed to the remaining question.

N → 0 points on question 59.

59. Is there a complaint mechanism independent from the internet provider to escalate complaints? (Y/N)

2.4 ENFORCEMENT OF SAFETY REGULATIONS AND CONSUMER PROTECTION MECHANISMS			
Indicators	FFP	SBP	Total Points
Cybersecurity Protocols	1	1	2
- Breaches are reported (57a)	0.25	0.25	0.5
- Respond to reported cyberattacks (57b)	0.25	0.25	0.5
- Cyber security incident response (57c)	0.25	0.25	0.5
- Cyber security audits are carried out in practice (57d)	0.25	0.25	0.5
Independent Complaint Mechanism (59)	1	1	2
Total Points	2	2	4

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

PILLAR III—OPERATIONAL EFFICIENCY OF UTILITY SERVICE PROVISION (INTERNET)

The scores for Pillar III indicators are calculated using the Normal Cumulative Density Function (CDF) transformation method on a scale of 0 to 100, where 0 and 100 represent the lowest and highest possible scores, respectively. The best and worst performers are identified based on the 5th and 95th percentiles of the collected data.

The data for Pillar III on the Operational Efficiency of Utility Service Provision is collected through firm-level surveys, using the following questions:

60. Time to obtain a connection: How many days did it take to obtain the fixed broadband connection from the day of the application to the day the service was received?

61. Reliability of supply: Over fiscal year [Insert last complete fiscal year], did this establishment experience any disruptions to its internet connection, including complete downtime and connection slowdowns? Please exclude disruptions that are directly due to power outages.

PILLAR III—OPERATIONAL EFFICIENCY OF UTILITY SERVICE PROVISION (INTERNET)			
Indicators	FFP	SBP	Total Points
Time to Obtain a Connection (60)	100 (50%)	n/a	100 (50%)
Reliability of Supply	100 (50%)	n/a	100 (50%)
Percentage of firms not experiencing disruptions (61) (rescaled 0 – 100)	100 (50%)	n/a	100 (50%)
Total Points	100 (100%)	n/a	100 (100%)

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent). FFP = Firm Flexibility Point; SBP = Social Benefits Point.

CHAPTER 5. LABOR–METHODOLOGY NOTE

I. MOTIVATION

Labor is arguably the most important factor of production in most businesses. It is also the most important source of income for most people.¹ Regulations and public services related to labor are fundamental drivers of private sector development from the perspective of both enterprises and workers. These regulations and public services affect firms' decisions whether to expand by hiring labor, and whether to do so formally or informally.² In addition, these regulations and public services affect the well-being of potential workers by providing them with good jobs and opportunities for growth.

For formally employed workers, labor regulations matter—they protect their rights, reduce the risk of job loss, and support equity and welfare. For workers employed in the informal sector, labor regulations can affect their ability to enter the formal workforce.³ If labor regulations make hiring costs too high and rules too cumbersome, firms may choose to use more capital than labor or to hire informally. Some workers lose when firms make such choices. Sound and balanced labor regulations are needed for firms and workers to benefit from a dynamic and innovative labor market that does not come at the expense of income security or basic workers' rights.⁴

Public services can help enforce and facilitate quality labor regulations.⁵ They can provide the institutional infrastructure for labor inspections and audits to incentivize compliance. Institutions can also render services that make labor more expensive if firms are required to pay for them. For example, public services can provide health, pension, and other forms of social insurance. They address market imperfections and have important implications for the functioning of the labor market and firm choices. A lack of social security coverage for workers reduces opportunities for firms, especially small and medium enterprises (SMEs), to transition to higher productivity and profitability.⁶ Informal workers not only lack health and social protection benefits; they are also less likely to move out of poverty.⁷ For example, if an economy offers universal (or close to universal) basic health care, it can have a direct positive impact on job quality and wages by allowing firms to redirect resources into business development and employee wages. Employment services, including job search assistance, and training programs serve as a bridge between the needs of firms and the skills of workers.

II. INDICATORS

The Labor topic measures good practices in employment regulations and public services from the perspective of both enterprises and employees across three different dimensions, here referred to as pillars. The first pillar assesses the quality of labor regulations pertaining to workers' conditions and employment restrictions and costs, covering de jure features of the regulatory framework that are necessary for the functioning of the labor market and to provide employers and employees with their obligations and relevant safeguards. The second pillar measures the adequacy of public services for labor, assessing the de facto provision of social protection and the employment services on which the labor market and the enforcement of labor regulations depend. The third pillar measures the operational efficiency of labor regulations and public services in practice, assessing employment restrictions and cost, as well as public services. Each pillar is divided into categories—defined by common features that inform the grouping into a particular category—and each category is further divided into subcategories. Each subcategory has several indicators, each of which may, in turn, have several components. Relevant points are assigned to each indicator and subsequently aggregated to obtain the number of points for each subcategory, category, and pillar. Table 1 summarizes all three pillars and their respective categories.

Table 1. Summary Table of all Three Pillars for the Labor Topic

Pillar I–Quality of Labor Regulations (33 indicators)	
1.1	Workers’ Conditions (20 indicators)
1.1.1	Labor Rights (13 indicators)
1.1.2	Minimum Wage Attributes (4 indicators)
1.1.3	Termination of Employment (3 indicators)
1.2	Employment Restrictions and Costs (13 indicators)
1.2.1	Terms of Employment (8 indicators)
1.2.2	Minimum Wage Rate (1 indicator)
1.2.3	Termination of Employment (4 indicators)
Pillar II–Adequacy of Public Services for Labor (15 indicators)	
2.1	Social Protection (6 indicators)
2.1.1	Unemployment Insurance (2 indicators)
2.1.2	Health Care Coverage (2 indicators)
2.1.3	Retirement Pension (2 indicators)
2.2	Employment Services (9 indicators)
2.2.1	Employment Centers and Training (4 indicators)
2.2.2	Labor Dispute Resolution Mechanisms (2 indicators)
2.2.3	Labor Inspectorates (3 indicators)
Pillar III–Operational Efficiency of Labor Regulations and Public Services in Practice (9 indicators)	
3.1	Employment Restrictions and Costs (4 indicators)
3.1.1	Social Contribution (1 indicator)
3.1.2	Obstacles to Hiring (1 indicator)
3.1.3	Dismissal Time and Cost (2 indicators)
3.2	Employment Services (5 indicators)
3.2.1	On-the-Job Training (1 indicator)
3.2.2	Prevalence and Operational Efficiency of Labor Disputes (2 indicators)
3.2.3	Health and Safety Inspection (2 indicators)

1. PILLAR I. QUALITY OF LABOR REGULATIONS

Table 2 shows the structure for Pillar I, Quality of Labor Regulations. Each of this pillar’s categories and subcategories will be discussed in more detail in the order shown in the table.

Table 2. Pillar I–Quality of Labor Regulations

1.1	Workers’ Conditions
1.1.1	Labor Rights
1.1.2	Minimum Wage Attributes
1.1.3	Termination of Employment
1.2	Employment Restrictions and Costs
1.2.1	Terms of Employment
1.2.2	Minimum Wage Rate
1.2.3	Termination of Employment

1.1 Workers’ Conditions

Category 1.1 is divided into three subcategories consisting of several indicators, some of which may, in turn, have several components.

1.1.1 Labor Rights

Labor rights encompass the basic rights and protections that workers should be granted in the workplace. These rights are aimed at ensuring fair and safe working conditions, promoting equality and non-discrimination, and safeguarding the dignity and well-being of workers. They are rooted in the core labor standards embedded in the Fundamental Principles and Rights at Work and include freedom of association, the right to collective

bargaining, the abolition of forced labor, the elimination of child labor, the elimination of discrimination in respect of employment and occupation and the right to a safe and healthy working environment.⁸

Policies and programs that address discrimination, bias, and inequality at work can lead to positive outcomes for individuals, organizations, and society as a whole.⁹ Furthermore, the regulatory framework plays a role in public health and safety by protecting children from hazardous work more likely to harm their health, safety, or morals.¹⁰ They can also safeguard against forced labor. According to 2021 Global Estimates, 17.3 million people are in forced labor exploitation on any given day, of which children make up 1.3 million. Among adults, those trapped in this category of forced labor remained there for an extended period of time—up to 5.4 months, on average.¹¹

Health and safety regulations are an important component to ensuring the well-being and protection of workers.¹² When enforced and implemented, they help prevent accidents and injuries, promote worker health, and reduce worker absenteeism and turnover.¹³ Similarly, violence and harassment in the workplace is a widespread phenomenon that needs increased attention. Reports have found that more than one in five persons in employment has experienced at least one form of violence and harassment at work during their working life.¹⁴ Therefore, Subcategory 1.1.1–Labor Rights has thirteen indicators (table 3).

Table 3. Subcategory 1.1.1–Labor Rights

	Indicators	Components
1	Equal Remuneration for Work of Equal Value	Legal requirement to ensure fairness and non-discrimination in remuneration practices by providing equal compensation for work of equal value
2	Prohibition of Discrimination	Law expressly prohibits discrimination in hiring, employment and dismissal in regard to: <ul style="list-style-type: none"> i) Race and ethnicity ii) Gender iii) Religion or belief iv) Political opinion v) Sexual orientation vi) Disability vii) National extraction (place of birth, ancestry, or foreign origin) or social origin viii) Trade-union membership
3	Freedom of Association and Assembly	Law mandates freedom of association and assembly
4	Right to Collective Bargaining	Law mandates the right to collective bargaining
5	Prohibition of Forced Labor	<ul style="list-style-type: none"> i) Legal regulations that explicitly forbid the practice of forcing people to work against their will ii) Requirement for labor inspectorate to enforce forced labor legislation
6	Minimum Legal Age for Employment	The minimum age for admission to employment is equal or higher to the ILO provisions on minimum age of 15 years old—or exceptionally, 14 years old
7	Prohibition of Child Labor	<ul style="list-style-type: none"> i) Prohibition for children to perform work likely to harm health, safety, or morals. ii) Requirement for labor inspectorates to enforce national legislation on child labor
8	Existence of Health and Safety Legislation	Health and safety legislation that covers all workers including but not limited to part-time, self-employed, temporary-agency and others)
9	Periodic Review of Health and Safety Legislation	Law that establishes the periodic revision and update of health and safety legislation
10	Law on Workplace Violence, Discrimination, Harassment, Bullying	Laws that mandate legal protection of employees against workplace violence, discrimination, harassment, and bullying in order to promote equality, prevent conflicts, and foster a culture of respect and dignity in the workplace
11	Protection Against Workplace Violence, Discrimination, Harassment, Bullying through Grievance Mechanisms, Information, and Training	<ul style="list-style-type: none"> i) Law that requires companies to establish internal complaints or grievance mechanisms for reporting violence, discrimination, harassment, and/or bullying at the workplace. ii) Law that requires firms to provide workplace information on how to identify hazards and risks of violence, discrimination, harassment, and/or bullying as well as workers' respective rights and responsibilities, including prevention and protection. iii) Law that requires firms to provide training on how to identify hazards and risks of violence, discrimination, harassment, and/or bullying

12	Legally Mandated Paid Annual Leave	Legally mandated paid annual leave for at least three working weeks after one year of service for workers in the private sector
13	Legally Mandated Paid Sick Leave	Legally mandated paid sick leave by law for workers in the private sector

1.1.2 Minimum Wage Attributes

A minimum wage is a legally mandated floor for wages that employers must pay to their employees. The purpose of a minimum wage is to ensure that workers receive a fair and decent wage that can cover their basic needs and contribute to their well-being.¹⁵ Key elements of a minimum wage system include scope of coverage, setting and adjustment of the minimum wage, criteria to determine the minimum wage, enforcement and compliance and monitoring and evaluation.¹⁶ Therefore, Subcategory 1.1.2–Minimum Wage Attributes has four indicators (table 4).

Table 4. Subcategory 1.1.2–Minimum Wage Attributes

	Indicators	Components
1	Existence of Minimum Wage in the Private Sector	Availability of minimum wage in the private sector set by the law or collective bargaining agreement
2	Criteria for Determining Minimum Wage Level	Formally established and legally binding criteria within the relevant legislation that are used for setting the minimum wage
3	Minimum Wage Update Process	Mandatory mechanism for periodically evaluating and potentially adjusting the minimum wage to ensure/maintain fairness and equity over time
4	Social Consultation	Legally mandated social consultation during the process of setting and updating the minimum wage

1.1.3 Termination of Employment

To mitigate detrimental consequences of immediate termination of employment, it is recommended that workers receive a reasonable period of notice.¹⁷ The purpose of such notice is to prepare the worker for unemployment, giving them the necessary time to adapt and/or seek alternative employment. Concurrently, the provision of severance pay helps to cushion the financial impact experienced by workers in the event of job loss due to redundancy. While various jurisdictions may have regulations aimed at safeguarding the rights of employees during collective redundancies, these regulations often necessitate the participation of labor representatives and/or authoritative bodies to guarantee that the process is fair, transparent, and in accordance with applicable legal standards. Therefore, Subcategory 1.1.3–Termination of Employment has three indicators (table 5).

Table 5. Subcategory 1.1.3–Termination of Employment

	Indicators	Components
1	Legally Mandated Notice Period	Availability of notice period by law or collective bargaining agreement (CBA)
2	Legally Mandated Severance Pay	Severance pay by law or collective bargaining agreement (CBA)
3	Notification Requirement for Collective Dismissal	Requirement for third-party notification (workers' representatives and/or competent authorities) in the case of a collective dismissal mandated by law or collective bargaining agreement (CBA)

Note: CBA = Collective Bargaining Agreement.

1.2 Employment Restrictions and Costs

Category 1.2 is divided into three subcategories consisting of several indicators, some of which may, in turn, have several components.

1.2.1 Terms of Employment

Flexible work hours and contracts enable firms to adapt to market demand and can help workers balance their work with personal obligations. More specifically, the use of fixed-term contracts gives firms the flexibility to

bring in workers for a specific project or period without committing to long-term employment.¹⁸ They can also help the core workforce be less exposed to employment adjustment.¹⁹ Firms should be able to choose among the types of contracts to meet their specific production demands and to control staffing costs.²⁰

Furthermore, when the law allows for flexible work hours, such as the possibility of overtime work, night work, and to work on any given day of the week, firms are more able to adapt to production needs. Workers can also benefit by having more freedom to choose when they want to work as long as the law also safeguards their well-being and productivity by setting maximum thresholds of working hours²¹ and ensuring a 24-hour weekly rest period.²²

Unemployment protection, health care, and retirement pensions are important forms of social insurance. They address market imperfections and have important implications for the functioning of the labor market. When the firms are directly mandated to cover these expenses, it can burden them. In some cases, firms must make extra payments for workers' social security, in addition to mandatory general taxes. A lack of government-provided social security coverage for workers reduces opportunities for firms, especially SMEs, to transition to higher productivity and profitability. Informal workers not only lack health and social protection benefits; they are also less likely to move out of poverty. Therefore, Subcategory 1.2.1–Terms of Employment has eight indicators (table 6).

Table 6. Subcategory 1.2.1–Terms of Employment

	Indicators	Components
1	No Restrictions on the Use of Fixed-Term Contracts for Any Task	No limitations on the types of tasks for which employers can use fixed-term contracts
2	No Restrictions on the Use of Fixed-Term Contracts for Permanent Tasks	No limitations on using fixed-term contracts for tasks that are considered permanent/ongoing within the organization
3	No Legal Mandate for Firms to Pay Wage Premium for Night Work	No legal requirement for companies to provide a wage premium for employees working night shifts
4	No Restrictions on Overtime Work within a Limit of 56 Hours Weekly Maximum	No legal prohibition on overtime mandated by law within a limit of maximum 56 total working hours per week
5	No Legal Mandate for Firms to Pay for Unemployment Protection Directly	No legal requirement for firms to directly pay/fund unemployment protection schemes through mandatory taxes (including mandatory labor taxes or social security contributions)
6	No Legal Mandate for Firms to Pay for Health Care Directly	No legal requirement for firms to directly pay/fund workers' health care through mandatory taxes (including mandatory labor taxes or social security contributions)
7	No Legal Mandate for Firms to Pay for Pensions Directly	No legal requirement for firms to directly pay/fund workers' retirement pension through mandatory taxes (including mandatory labor taxes or social security contributions)
8	Lawful Grounds, Including Business Needs, for Individual Dismissal	Dismissal based on business needs or redundancy is allowed by law or collective bargaining agreement (CBA)

1.2.2 Minimum Wage Rate

The minimum wage is a form of protection meant to ensure a minimum living wage for all employed. Well-designed and effective minimum wages can contribute to reduced inequality within and among economies.²³ Conversely, when the minimum wage is set too high it can have the opposite effect, encourage informality, and put workers' well-being at risk. Minimum wages play a role in promoting full and productive employment and decent work for all. Therefore, Subcategory 1.2.2–Minimum Wage Rate has one indicator related to the minimum wage rate (table 7).

Table 7. Subcategory 1.2.2-Minimum Wage Rate

	Indicators	Components
1	Minimum Wage Rate*	The amount of minimum wage as set by law or collective bargaining agreement in manufacturing and services sectors

*The scores for minimum wage rate indicator are calculated using the Normal Cumulative Density Function (CDF) transformation method on a scale of 0 to 100, where 0 and 100 represent the lowest and highest possible scores, respectively. The best and worst performers are identified based on the 5th and 95th percentiles of the collected data.

1.2.3 Termination of Employment

To lessen the adverse effects of sudden job termination, it is advisable for workers to be given a reasonable notice period.²⁴ The aim of providing such notice is to prepare the worker for unemployment, affording them the necessary time to adjust and seek alternative employment. Likewise, the presence of severance payment helps mitigate the income loss experienced by workers in cases of redundancy. When the duration of the notice period is too long and the amount of severance mandate by law is excessive, they no longer serve the purpose they were intended for—to protect regular workers—and instead protect a selected few. Large dismissal costs appear to be a contributing factor to the development of dual labor markets, reduce employment among youths and prime-age women and may have adverse effects on the poor in developing countries.²⁵ Faced with costly dismissal procedures, firms may choose not to make new hiring decisions, which may, in turn, affect their productivity and growth, but also youth employment and the economy's human capital.

Firms need flexibility to manage their workforce and respond to changes in the business environment. An economy that requires clear and valid grounds for individual dismissal, including business needs, provides companies with the ability to quickly adjust workforce in response to changes in demand, market conditions, or other factors.²⁶ Therefore, Subcategory 1.2.3–Termination of Employment has four indicators (table 8).

Table 8. Subcategory 1.2.3–Termination of Employment

	Indicators	Components
1	Length of Notice Period*	Length of notice period mandated by law for a worker with more than 1 year of employment but less than 5 years (in number of weeks)
2	Amount of Severance Pay*	Amount of severance pay mandated by law for a worker with more than 1 year of employment but less than 5 years (in number of weeks)
3	No Third-Party Approval Requirement for Individual Dismissal	No legal requirement for third party approval in the case of individual dismissal by law or collective bargaining agreement (CBA)
4	No Third-Party Approval Requirement for Collective Dismissal	No legal requirement for third party approval in the case of collective dismissal by law or collective bargaining agreement (CBA)

*The scores for length of notice period and amount of severance pay indicators are calculated using the Normal Cumulative Density Function (CDF) transformation method on a scale of 0 to 100, where 0 and 100 represent the lowest and highest possible scores, respectively. The best and worst performers are identified based on the 5th and 95th percentiles of the collected data.

2. PILLAR II. ADEQUACY OF PUBLIC SERVICES FOR LABOR

Table 9 shows the structure for Pillar II, Adequacy of Public Services for Labor. Each of this pillar's categories and subcategories will be discussed in more detail in the order shown in the table (table 9).

Table 9. Pillar II–Adequacy of Public Services for Labor

2.1	Social Protection
2.1.1	Unemployment Insurance
2.1.2	Health Care Coverage
2.1.3	Retirement Pension
2.2	Employment Services
2.2.1	Employment Centers and Training
2.2.2	Labor Dispute Resolution Mechanisms

2.2.3	Labor Inspectorates
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2.1 Social Protection

Category 2.1 is divided into three subcategories consisting of several indicators, each of which may, in turn, have several components.

2.1.1 Unemployment Insurance

Government-funded unemployment insurance can positively affect society as a whole because it can enhance human capital and productivity, as well as reduce inequalities.²⁷ If funded by some contribution from general revenues, rather than solely labor taxes, unemployment protection makes labor less costly, more flexible, and more attractive to firms. Therefore, Subcategory 2.1.1–Unemployment Insurance has two indicators (table 10).

Table 10. Subcategory 2.1.1–Unemployment Insurance

	Indicators	Components
1	Availability of Government-Provided Unemployment Insurance	Existence of unemployment insurance provided by the government for workers in the private sector
2	Funding for Unemployment Insurance from General Tax Revenues	Unemployment insurance funded through some contribution from general tax revenue

2.1.2 Health Care Coverage

If an economy offers universal basic health care, funded by some contribution from general revenues, it can have a direct positive impact on productivity, job quality, and wages by allowing firms to redirect resources into business development and employee wages.²⁸ Therefore, Subcategory 2.1.2–Health Care Coverage has two indicators (table 11).

Table 11. Subcategory 2.1.2–Health Care Coverage

	Indicators	Components
1	Availability of Universal Health Care	Existence of universal health care provided by the government for all workers, regardless of their employment contract, if any, including the poorest, i.e., those that cannot afford it on their own
2	Funding for Health Care from General Tax Revenues	Universal health care funded through some contribution from general tax revenue

2.1.3 Retirement Pension

Public pension systems are a foundation on which income security for older persons is built.²⁹ Income security in old age contributes significantly to reducing inequality within and among economies and supports gender equality.³⁰ If funded by some contribution from general revenue, non-contributory retirement pension can also alleviate some of the cost burden on firms, allowing them to use this capital for employee wages and the growth of the company.³¹ Therefore, Subcategory 2.1.3–Retirement Pension has two indicators (table 12).

Table 12. Subcategory 2.1.3–Retirement Pension

	Indicators	Components
1	Availability of Government Provided Retirement Pension Scheme	Existence of retirement pension scheme provided by the government
2	Funding for Non-Contributory Retirement Pension from General Tax Revenues	Non-contributory retirement pension funded through some contribution from general tax revenue

2.2 Employment Services

Category 2.2 is divided into three subcategories consisting of several indicators, each of which may, in turn have several components.

2.2.1 Employment Centers and Training

Employment centers and training provide resources and assistance that help job seekers overcome barriers and find employment by connecting them with employers and providing career guidance and training. Labor market training is one of the main policies to reduce unemployment (especially among low-skilled populations), which is ultimately a driver of formalization.³² Public employment services contribute to these programs as a part of the active labor market policies (ALMP) that can be implemented by governments. Therefore, Subcategory 2.2.1–Centers and Training has four indicators (table 13).

Table 13. Subcategory 2.2.1–Employment Centers and Training

	Indicators	Components
1	Existence of a National Employment Service Center	Existence of national employment service center in the largest B-READY city
2	No Legal Mandate for Firms to Pay for Employment Service Center Services	No legal requirement for firms to pay for the services provided by an employment service center (e.g., job placement assistance, career counseling, or training programs)
3	Legal Mandate for Vocational Guidance and Training for Unemployed and Job Seekers	Existence of a law or regulation establishing vocational guidance and training for the unemployed and job seekers
4	Existence of Public Training Programs for Unemployed and Job Seekers	Availability of the government/publicly funded training programs (including, but not limited to skills development, vocational training, or educational opportunities aimed to enhance the employability) to people who are unemployed and/or actively seeking employment

2.2.2 Labor Dispute Resolution Mechanisms

Inadequate mechanisms for resolving labor disputes can create significant uncertainty for both employers and employees, and economic insecurity for households. Prolonged litigation impedes job reallocation dynamics and productivity. Conversely, a specialized mechanism to resolve a labor dispute, as well as conciliation and mediation offer a more efficient, cost-effective, and collaborative approach to dispute resolution that can help preserve business continuity and promote better labor relations, by addressing conflict in the early stages.³³ Therefore, Subcategory 2.2.2–Labor Dispute Resolution Mechanisms has two indicators (table 14).

Table 14. Subcategory 2.2.2–Labor Dispute Resolution Mechanisms

	Indicators	Components
1	Existence of a Functioning, Specialized and Independent Mechanism for Resolution of a Labor Dispute	Availability of a functioning, specialized, and independent mechanism for resolution of a labor dispute
2	Existence of Alternative Dispute Resolution Process for a Labor Dispute	Availability of a conciliation/mediation or arbitration process to resolve a labor dispute for both workers and firms in a judicial or non-judicial setting

2.2.3 Labor Inspectorates

The primary mission of labor inspectorates is to ensure the application of national labor laws in the workplace, by convincing the social partners of the need to respect the law in the workplace and their mutual interest in this regard, through preventive, educational, and, when necessary, enforcement measures. Labor inspection is the most important instrument of state presence and intervention to design, stimulate, and contribute to the

development of a culture of prevention covering all aspects potentially under its purview: industrial relations, wages, general conditions of work, occupational safety and health, and issues related to employment and social security.³⁴ Therefore, Subcategory 2.2.3–Labor Inspectorates has three indicators (table 15).

Table 15. Subcategory 2.2.3–Labor Inspectorates

	Indicators	Components
1	Existence of a Central Labor Inspectorate	Availability of a designated governmental authority or agency responsible for overseeing and enforcing labor laws and regulations
2	Best Practice Initiation of Labor Inspections	Labor inspectors may enter workplaces freely and without prior notice (unannounced) to the employer to ensure compliance with labor laws and regulations
3	Existence of Data on Reported Number of Cases/Complaints for Labor Violations	Existence of data on reported number of cases/complaints for different types of violations

3. PILLAR III. OPERATIONAL EFFICIENCY OF LABOR REGULATIONS AND PUBLIC SERVICES IN PRACTICE

Table 16 shows the structure for Pillar III, Operational Efficiency of Labor Regulations and Public Services in Practice. Each of this pillar's categories and subcategories will be discussed in more detail in the order shown in the table 16.

Table 16. Pillar III–Operational Efficiency of Labor Regulations and Public Services in Practice

3.1	Employment Restrictions and Costs
3.1.1	Social Contribution
3.1.2	Obstacles to Hiring
3.1.3	Dismissal Time and Cost
3.2	Employment Services
3.2.1	On-the-Job Training
3.2.2	Prevalence and Operational Efficiency of Labor Disputes
3.2.3	Health and Safety Inspection

3.1 Employment Restrictions and Costs

Category 3.1 is divided into three subcategories constituting of several indicators, each of which may, in turn, have several components.

3.1.1 Social Contribution

Social contribution payments should not pose an excessive financial burden for firms. High social contribution costs could deter firms from hiring formally or "force" them to seek informal labor.³⁵ Therefore, Subcategory 3.1.1–Social Contribution has one indicator (table 17).

Table 17. Subcategory 3.1.1–Social Contribution

	Indicators	Components
1	Ratio of Social Contribution	Total annual costs of social security payments and employment-based taxes (excluding employee taxes that were withheld), divided by the total annual cost of labor including wages, salaries, bonuses, social security payments, during the last fiscal year

3.1.2 Obstacles to Hiring

Regulations on hiring can have a considerable effect on firms and their employees, as well as on workers in the informal sector or those currently unemployed. If labor regulations make the cost of hiring too high and rules are too cumbersome, firms may choose to use more capital than labor or to hire informally.³⁶ Therefore, Subcategory 3.1.2–Obstacles to Hiring has one indicator (table 18).

Table 18. Subcategory 3.1.2–Obstacles to Hiring

	Indicators	Components
1	Percent of Firms Identifying Labor Regulations as a Constraint	Share of firms that perceive existing labor regulations as a major or very severe constraint to the current operations of the establishment

3.1.3 Dismissal Time and Cost

Firms tend to be less efficient, productive, and innovative if they must comply with cumbersome dismissal procedures. Moreover, complex dismissal processes might skew the firm's labor composition toward older and less productive workers. Research shows that in economies with highly bureaucratic dismissal procedures, firms hire fewer young workers, thus constraining youth employment.³⁷ In addition, costly dismissal procedures pose challenges to firms. Namely, rigid, and costly regulations can lead to misallocation of company resources, providing older workers with job stability while leaving younger, less experienced workers vulnerable.³⁸ Therefore, Subcategory 3.1.3–Dismissal Time and Cost has two indicators (table 19).

Table 19. Subcategory 3.1.3–Dismissal Time and Cost

	Indicators	Components
1	Weeks to Dismiss Full-Time Permanent Worker	Number of weeks that took in practice to dismiss an employee—from the time the notice of dismissal was provided to the worker until the worker was removed from the establishment's payroll in the past three years
2	Weeks Paid in Severance	Amount paid for severance, in weeks of paid salary, to dismiss permanent, full-time worker in practice in the past three years

3.2 Employment Services

Category 3.2 is divided into three subcategories consisting of several indicators, each of which may, in turn have several components.

3.2.1 On-the-Job Training

On-the-job training can contribute to both organizational success and employee professional development. It can help employees improve their knowledge, skills, behaviors, and ultimately performance.³⁹ Studies showed that training may empower workers and have a positive impact on job satisfaction.⁴⁰ On-the-job training tailored to suit the conditions of developing countries presents a cost-effective approach to substantially enhance workers' performance. This low-cost, high-yield strategy provides developing nations with an effective tool to compete in the global marketplace.⁴¹

Workers who have better skills foster more innovation, reduce risks and errors, and ultimately drive firm growth and competitiveness. Expansion of firms, the adoption of new technologies and adequate employee training can be an effective strategy to increase formality among firms.⁴² Therefore, Subcategory 3.2.1–On-the-Job Training has one indicator (table 20).

Table 20. Subcategory 3.2.1–On-the-Job Training

	Indicators	Components
1	Percent of Firms with Formal Training Programs for its Permanent, Full-Time Workers	Share of firms offering formal training programs to their permanent, full-time employees

3.2.2 Prevalence and Operational Efficiency of Labor Disputes

Cumbersome processes to resolve labor disputes deter firms from focusing on more productive activities. More and more economies have implemented specialized courts or agencies to address labor disputes, as well as alternative dispute resolution mechanisms, which can contribute to more timely resolution and lower costs.⁴³

Therefore, Subcategory 3.2.2–Prevalence and Operational Efficiency of Labor Disputes has two indicators (table 21).

Table 21. Subcategory 3.2.2–Prevalence and Operational Efficiency of Labor Disputes

	Indicators	Components
1	Percent of Firms Involved in Labor Dispute Over Last 3 Years	Share of firms engaged in labor disputes over the past three years
2	Months to Resolve Labor Dispute	Time it took for a dispute to be resolved from the moment it was filed until it was resolved, over the past three years

3.2.3 Health and Safety Inspection

When inspections are too frequent and/or are used as a rent-seeking mechanism, this reduces firm productivity, creating a faulty business climate.⁴⁴ The sharing of reports with employers after an inspection helps increase transparency and accountability by providing documentation of factual information.⁴⁵ Therefore, Subcategory 3.2.3–Health and Safety Inspection has two indicators (table 22).

Table 22. Subcategory 3.2.3–Health and Safety Inspection

	Indicators	Components
1	Percent of Firms Visited or Inspected for Workplace Health and Safety	Percentage of companies that have been visited or inspected for workplace health and safety
2	Percent of Firms with a Report Issued by Inspectorate for Workplace Health and Safety	Percentage of companies with a workplace health and safety report issued by the inspectorate after a visit

III. DATA SOURCES

4.1 Data Collection Sources

The data for Pillar I and Pillar II are collected through consultations with private sector experts. Private sector experts are lawyers with expertise in labor law and social security law practice and litigation. These experts have deep knowledge of the laws and regulations on labor-related issues as well as the different regulatory processes that firms need to follow as they hire, employ, or dismiss workers.

The data for Pillar III are collected through Enterprise Surveys. These surveys provide representative data on non-wage labor costs, employment restrictions and costs, and operational efficiency of public services as experienced by businesses in practice. A representative sample of companies captures the variation of experience within each economy. Businesses with different characteristics, such as size, region, and sector, participate in the surveys. For more details on the collection of data by the Enterprise Surveys, please refer to the Overview chapter of this Methodology Handbook.

4.2 Screening and Selection of Experts

In order to select potential experts to participate in the questionnaires, screener questionnaires have been developed (table 23).

Table 23. Screener Questionnaire and Respondent Criteria

Relevant Experts' Professions
Lawyers
Relevant Areas of Specialization

Labor law: dismissal procedures, discrimination in the workplace, labor dispute resolution (litigation/conciliation/mediation/arbitration and enforcement) labor inspections
Social security law: Specific areas (among others): health insurance and health care coverage, pensions
Assessment of the Experts' Knowledge and Experience Related to Labor and Social Security Law and Practice
Labor law. Specific areas (among others); dismissal procedures, discrimination in the workplace, labor dispute resolution (litigation/conciliation/mediation/arbitration and enforcement) labor inspections
Social security law. Specific areas (among others): health insurance and health care coverage, pensions

Thus, the information provided in the screener questionnaire allows the team to better understand the experts' professions, areas of specialization and experts' knowledge or experience related to labor regulations and public services for labor. Ultimately, this will allow the team to select the experts to respond to the questionnaire.

IV. PARAMETERS

To ensure comparability of the data from expert consultations across economies, the Labor topic uses general parameters. A parameter refers to an assumption that is made about the business location, type of worker, and firm characteristics. Questionnaire respondents are presented with these parameters and assumptions and asked to evaluate a standardized scenario that permits comparability across jurisdictions, and economies.

5.1 General Parameters

Many economies have subnational jurisdictions, which require a specific business location to be specified in order for experts to identify the relevant regulatory framework to be assessed. Similarly, defining the type of worker and the firm's characteristics allows respondents to determine which labor law is applicable for a certain contractual agreement or business sector respectively.

5.1.1 Business Location

Justification:

The business location determines the applicable law pertaining to firms and workers, in addition to the availability and effectiveness of public services. For instance, labor laws sometimes differ within an economy or a region and are not necessarily integrated into a single national law. Similarly, public services may vary depending on the location, and accessibility can be subject to geographical elements. These factors may affect the way in which businesses and workers interact. Thus, business location is an essential parameter for measuring the adequacy of labor law. The largest city is chosen based on the population size, as detailed in the Overview chapter of this Methodology Handbook.

Application:

For Pillar I, the parameter is used in cases where regulations are not applicable at a national level, varying across states or regions. For the economies where regulations differ across states, regulations for the largest city are measured. For Pillar II, the parameter is used to determine the regulation that applies to these services and is important for identifying a geographical area for the provision of public services. For Pillar III, the parameter is relevant for measures on time and cost as they can vary significantly across cities.

5.1.2 Type of Worker

Justification:

Given the large variety of possible contractual arrangements between firms and workers, and the different sectors to which local labor law is applicable, the type of worker is defined as a permanent employee of working age (over 25 years old), engaged in a formal employment relationship in a private sector firm. The worker is a national of the economy and works in the services sector, unless otherwise indicated in the questionnaire for certain specific indicators, such as minimum wage. The worker may be male, female, or non-binary and is hence, referred to by the pronouns he/she/they. This worker is chosen based on the standard application of the labor code.

Application:

The type of worker is relevant to all measures of Pillar I and II because the quality of labor regulations and the provision of public services varies depending on the type of worker. The parameter does not apply to the subcategory of Minimum Working Age, where law provisions targeting child labor are measured.

5.1.3 Firm Characteristics

Justification:

Firms can be classified by size or sector in which they operate. The classification of a firm determines its interaction with applicable laws, as many economies have different regulations depending on the firm's characteristics. The incumbent firm is defined as a registered private sector firm with fewer than 250 employees in the services industry, unless otherwise indicated in the questionnaire for certain specific indicators, such as the minimum wage. This size is chosen because small and medium enterprises (SMEs) account for a great portion of businesses worldwide, as well as a significant portion of employment and GDP in emerging economies.

Application:

The parameter of firm characteristics is relevant to all measures of Pillar I and II, because the quality of labor regulations and the provision of public services varies depending on the size and sector of the firm.

V. TOPIC SCORING

The Labor topic has three pillars: Pillar I–Quality of Labor Regulations; Pillar II–Adequacy of Public Services for Labor; and Pillar III–Operational Efficiency of Labor Regulations and Public Services in Practice. The total points for each Pillar are further rescaled to values from 0 to 100, and subsequently aggregated into the total topic score. Each pillar contributes one-third to the total topic score. Table 24 shows the scoring for the Labor topic. The scores distinguish between benefits to the firm (captured as Firm Flexibility Points) and benefits to society's broader interests (captured as Social Benefits Points). For further scoring details please see Annex A, which complements this section.

Table 24. Aggregate Scoring Overview

Pillar	Title	Number of Indicators	Score			Rescaled Points (0–100)	Weight
			Firm Flexibility Points	Social Benefits Points	Total Points		
I	Quality of Labor Regulations	33	13	22	35	100	0.33
II	Adequacy of Public Services for Labor	15	10	11	21	100	0.33
III	Operational Efficiency of Labor Regulations and Public Services in Practice	9	100	n/a	100	100	0.33

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent).

6.1 Pillar I–Quality of Labor Regulations

Pillar I covers 33 indicators with a total score of 35 points (13 points on firm flexibility and 22 points on social benefits). The scores are equally assigned to both categories *Workers' Conditions* and *Employment Restrictions and Costs* (table 25). The scoring for each category under this pillar is as follows:

6.1.1 *Workers' Conditions* has 20 indicators with a total maximum score of 20 points (0 points on firm flexibility and 20 on social benefits). Specifically, the *Labor Rights* Subcategory has 13 indicators; the *Minimum Wage Attributes* Subcategory has 4 indicators; and the *Termination of Employment* Subcategory has another 3 indicators. A regulatory framework that follows good practices around

workers' conditions benefits workers and society (social benefits). Firm flexibility points are not applicable in this category.

- 6.1.2** *Employment Restrictions and Costs* has 13 indicators with a total maximum score of 15 points (13 points on firm flexibility and 2 on social benefits). Specifically, the *Terms of Employment* Subcategory has 8 indicators; the *Minimum Wage Rate* Subcategory has 1 indicator; and the *Termination of Employment* Subcategory has 4 indicators. A regulatory framework that follows good practices for employment restrictions and costs benefits firms (firm flexibility) and marginally society (social benefits). Hence, points are not equally assigned to both categories.

Table 25. Scoring Overview of Pillar I

Pillar I—Quality of Labor Regulations		No. of Indicators	FFP	SBP	Total Points	Rescaled Points
1.1	Workers' Conditions	20	n/a	20	20	50.00
1.1.1	Labor Rights	13	n/a	13	13	16.67
1.1.2	Minimum Wage Attributes	4	n/a	4	4	16.67
1.1.3	Termination of Employment	3	n/a	3	3	16.67
1.2	Employment Restrictions and Costs	13	13	2	15	50.00
1.2.1	Terms of Employment	8	8	2	10	16.67
1.2.2	Minimum Wage Rate	1	1	n/a	1	16.67
1.2.3	Termination of Employment	4	4	n/a	4	16.67
Total		33	13	22	35	100.00

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent). FFP = Firm Flexibility Point; SBP = Social Benefits Point.

6.2 Pillar II—Adequacy of Public Services for Labor

Pillar II includes 15 indicators with a total score of 21 points (10 points on Firm Flexibility and 11 points on Social Benefits) (table 26). The scoring for each category under the pillar is as follows:

- 6.1.1** *Social Protection* has 6 indicators with a total maximum score of 6 points (3 points for Firm Flexibility and 3 points on Social Benefits). Specifically, the *Unemployment Insurance* Subcategory has 2 indicators, the *Health Care Coverage* Subcategory has 2 indicators, and the *Retirement Pension* Subcategory has 2 indicators. Because these measures directly affect firms and society, points are equally assigned for firm flexibility and social benefits.
- 6.1.2** *Employment Services* has 9 indicators with a total maximum score of 15 points (7 points on firm flexibility and 8 points on social benefits). Specifically, the *Employment Centers and Training* Subcategory has 4 indicators; the *Labor Dispute Resolution Mechanisms* Subcategory has 2 indicators; and the *Labor Inspectorate* Subcategory has 3 indicators. Under this category, only *Labor Dispute Resolution Mechanisms* indicators have points equally assigned for firm flexibility and social benefits. This is because effective labor dispute resolution benefits both workers and firms. Employment centers and training programs benefit firms and society almost equally, so the scores are assigned accordingly. Labor inspectorates, however, benefit workers more significantly, so under this subcategory, more points are assigned to social benefits.

Table 26. Scoring Overview of Pillar II

Pillar II—Adequacy of Public Services for Labor		No. of Indicators	FFP	SBP	Total Points	Rescaled Points
2.1	Social Protection	6	3	3	6	50.00

2.1.1	Unemployment Insurance	2	1	1	2	16.67
2.1.2	Health Care Coverage	2	1	1	2	16.67
2.1.3	Retirement Pension	2	1	1	2	16.67
2.2	Employment Services	9	7	8	15	50.00
2.2.1	Employment Centers and Training	4	4	3	7	16.67
2.2.2	Labor Dispute Resolution Mechanisms	2	2	2	4	16.67
2.2.3	Labor Inspectorates	3	1	3	4	16.67
	Total	15	10	11	21	100.00

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

6.3 Pillar III—Operational Efficiency of Labor Regulations and Public Services in Practice

Pillar III covers 9 indicators with scores ranging from 0 to 100 (table 27). The scores on indicators under this pillar are assigned on firm flexibility only, as the indicators measure the time and cost for firms to comply with labor regulations, elements of social security and outcomes of the employment services provided to firms. For example, burdensome social security costs, lengthy and costly processes to dismiss employees and to resolve labor disputes have adverse impacts on firms, thus hampering firm flexibility. The scoring for each category under this pillar is as follows:

6.3.1 *Employment Restrictions and Costs* has 4 indicators with a total maximum score of 50 points. Specifically, the *Social Contributions* subcategory has 1 indicator, the *Obstacles to Hiring* subcategory has 1 indicator, and the *Dismissal Time and Cost* subcategory has 2 indicators.

6.3.2 *Employment Services* has 5 indicators with a total maximum score of 50 points. Specifically, the *On-the-job Training* subcategory has 1 indicator, the *Prevalence and Operational Efficiency of Labor Dispute* subcategory has 2 indicators, and the *Health and Safety Inspection* subcategory has 2 indicators.

Table 27. Scoring Overview of Pillar III

Pillar III—Operational Efficiency of Labor Regulations and Public Services in Practice		No. of indicators	Rescaled Points
3.1	Employment Restrictions and Costs	4	50.00
3.1.1	Social Contribution	1	16.67
3.1.2	Obstacles to Hiring	1	16.67
3.1.3	Dismissal Time and Cost	2	16.67
3.2	Employment Services	5	50.00
3.2.1	On-the-job Training	1	16.67
3.2.2	Prevalence and Operational Efficiency of Labor Disputes	2	16.67
3.2.3	Health and Safety Inspection	2	16.67
	Total	9	100.00

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ANNEX A. LABOR–SCORING SHEET

This document outlines the scoring approach for the Labor topic. For every indicator, a Firm Flexibility Point (FFP) and/or a Social Benefits Point (SBP) are assigned, along with a clarification on the detailed scoring for each such indicator and a note on the relevant background literature.

PILLAR I–QUALITY OF LABOR REGULATIONS					
1.1 WORKERS’ CONDITIONS					
1.1.1 Labor Rights					
Indicators	FFP	SBP	Total Points	Rescaled Points	Background Literature
Equal Remuneration for Work of Equal Value	n/a	1	1	1.28	Buckman et al. (2021); ILO C100; Klasen and Lamanna (2009); UN (1965, 1969, 1979)
Prohibition of Discrimination	n/a	1	1	1.28	Asali and Gurashvili (2019); ILO C111; ILO C122; ILO C158; Klasen and Lamanna (2009); UN (1963, 1966, 1979)
Freedom of Association and Assembly	n/a	1	1	1.28	ILO C87
Right to Collective Bargaining	n/a	1	1	1.28	ILO C98
Prohibition of Forced Labor	n/a	1	1	1.28	ILO C29; ILO C125; ILO R35
Minimum Legal Age for Employment	n/a	1	1	1.28	Beegle, Dehejia, and Gatti (2009); Ibrahim et al. (2019); ILO C138; ILO R146; ILO C182; ILO R190; ILO, ICLS 2008; ILO/IPEC-SIMPOCS, 2007; UN (1989)
Prohibition of Child Labor	n/a	1	1	1.28	ILO C182; ILO R190; ILO C138; UN 1989
Existence of Health and Safety Legislation	n/a	1	1	1.28	ILO C155; ILO C161; ILO C187
Periodic Review of Health and Safety Legislation	n/a	1	1	1.28	ILO C155; ILO C161; ILO C187
Law on Workplace Violence, Discrimination, Harassment, Bullying	n/a	1	1	1.28	Amin and Islam (2015); ILO C190; ILO R206; McLaughlin, Uggen, and Blamackstone (2017); UN (1948, 1965, 1966); World Bank (2019)
Protection Against Workplace Violence, Discrimination, Harassment, Bullying Through Grievance Mechanisms, Information, and Training	n/a	1	1	1.28	Amin and Islam (2015); ILO C190; ILO R206; McLaughlin, Uggen, and Blamackstone (2017); UN (1948, 1965, 1966); World Bank (2019)
Legally Mandated Paid Annual Leave	n/a	1	1	1.28	ILO C132; ILO C102; ILO R202; ILO R204; Panasci (2019); Wooden and Warren (2008)
Legally Mandated Paid Sick Leave	n/a	1	1	1.28	ILO C130; Scheil-Adlung and Sandner (2010)
Total Points for Subcategory 1.1.1	n/a	13	13	16.67	
1.1.2 Minimum Wage Attributes					

Existence of Minimum Wage in the Private Sector	n/a	1	1	4.17	Ahlfeldt, Roth, and Seidel (2022); Clemens (2021); Dustman et al. (2021); ILO C131; ILO R135; Manning, 2021; Neumark (2017); Neumark and Shirley (2021); Riley and Rosazza Bondibene (2017)
Criteria for Determining Minimum Wage Level	n/a	1	1	4.17	Ahlfeldt, Roth and Seidel (2022); Ku (2022); Neumark and Shirley (2021)
Minimum Wage Update Process	n/a	1	1	4.17	ILO C131; ILO R135
Social Consultation	n/a	1	1	4.17	ILO C131; ILO R135
Total Points for Subcategory 1.1.2	n/a	4	4	16.67	
1.1.3 Termination of Employment					
Legally Mandated Notice Period	n/a	1	1	5.56	Collins (1992); ILO C158; ILO R166; ILO C98; ILO C111; Stern (2012)
Legally Mandated Severance Pay	n/a	1	1	5.56	Collins (1992); ILO C158; ILO R166; ILO C98; ILO C111; Stern (2012)
Notification Requirement for Collective Dismissal	n/a	1	1	5.56	Collins (1992); ILO C158; ILO R166; ILO C98; ILO C111; Stern, (2012)
Total Points for Subcategory 1.1.3	n/a	3	3	16.67	
Total Points for Category 1.1	n/a	20	20	50.00	
1.2 EMPLOYMENT RESTRICTIONS AND COSTS					
1.2.1 Terms of Employment					
No Restrictions on the Use of Fixed-Term Contracts for Any Task	1	n/a	1	1.67	Aimo (2016); ILO C158; ILO R166; Kuddo, Robalino, and Weber (2015); Pfeifer (2009)
No Restrictions on the Use of Fixed-Term Contracts for Permanent Tasks	1	n/a	1	1.67	Aleksynska and Muller (2015); ILO C158; ILO R166; Kuddo, Robalino, and Weber (2015); Pfeifer (2009)
No Legal Mandate for Firms to Pay Wage Premium for Night Work	1	n/a	1	1.67	Blundell, Bozio, and Laroque (2013); Collewet and Sauermann (2017); ILO C1; ILO C30; ILO C171; ILO R178; Messenger (2004); Wagstaff, Lie, and Sigstad (2011); Weeden, Cha and Bucca, (2016); Yi, McCann, and Messenger (2007)
No Restrictions on Overtime Work Within a Limit of 56 Hours Weekly Maximum	1	1	2	3.33	Blundell, Bozio, and Laroque (2013); Collewet and Sauermann (2017); ILO C1; ILO C30; ILO C171; ILO R178; Messenger (2004); Wagstaff, Lie, and Sigstad (2011); Weeden, Cha and Bucca, (2016); Yi, McCann, and Messenger (2007)
No Legal Mandate for Firms to Pay for Unemployment Protection Directly	1	n/a	1	1.67	Bierbaum and Schmitt (2022); Bodor, Robalino, and Rutkowski (2007); Gentilini et al. (2020); ILO C102; Kuddo, Robalino, and Weber (2015); Packard et al. (2019); Ribe, Robalino, and Walker (2010); Ulku and Georgieva (2022)
No Legal Mandate for Firms to Pay for Health Care Directly	1	n/a	1	1.67	Bierbaum and Schmitt (2022); ILO C102; Sommers and Oellerich (2013)
No Legal Mandate for Firms to Pay for Pensions Directly	1	n/a	1	1.67	Bierbaum and Schmitt (2022); ILO C102; ILO C128

Lawful Grounds, Including Business Needs, for Individual Dismissal	1	1	2	3.33	Collins (1992); ILO C158; ILO R166; ILO C98; ILO C111; Stern, (2012)
Total Points for Subcategory 1.2.1	8	2	10	16.67	
1.2.2 Minimum Wage Rate					
Minimum Wage Rate	1	n/a	1	16.67	Ahlfeldt, Roth, and Seidel (2018); Clemens (2021); Dustman et al. (2021); ILO C131; ILO R135; Manning (2021); Neumark (2017); Neumark and Shirley (2021); Riley and Rosazza Bondibene (2017)
Total Points for Subcategory 1.2.2	1	n/a	1	16.67	
1.2.3 Termination of Employment					
Length of Notice Period	1	n/a	1	4.17	ILO C158; ILO R166; Collins (1992); Stern (2012)
Amount of Severance Payment	1	n/a	1	4.17	Collins (1992); ILO C158; ILO R166; ILO C98; ILO C111; Stern (2012)
No Third-Party Approval Requirement for Individual Dismissal	1	n/a	1	4.17	ILO C158; ILO R166; ILO C98
No Third-Party Approval Requirement for Collective Dismissal	1	n/a	1	4.17	ILO C158; ILO R166; ILO C98
Total Points for Subcategory 1.2.3	4	n/a	4	16.67	
Total Points for Category 1.2	13	2	15	50.00	
Total Points for Pillar I	13	22	35	100.00	

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent). FFP = Firm Flexibility Point; SBP = Social Benefits Point.

PILLAR II—ADEQUACY OF PUBLIC SERVICES FOR LABOR					
2.1 SOCIAL PROTECTION					
2.1.1 Unemployment Insurance					
Indicators	FFP	SBP	Total Points	Rescaled Points	Background Literature
Availability of Government-Provided Unemployment Insurance	n/a	1	1	8.33	Bierbaum and Schmitt (2022); Bodor, Robalino, and Rutkowski (2007); Gentilini et al. (2020); ILO C102; Kuddo, Robalino, and Weber (2015); Levy (2008); Packard et al. (2019); Ribe, Robalino, and Walker (2010); Ulku and Georgieva (2022)
Funding for Unemployment Insurance from General Tax Revenues	1	n/a	1	8.33	Bierbaum and Schmitt (2022); Bodor, Robalino, and Rutkowski (2007); Gentilini et al. (2020); ILO C102; Kuddo, Robalino, and Weber (2015); Levy (2008); Packard et al. (2019); Ribe, Robalino, and Walker (2010); Ulku and Georgieva (2022)
Total Points for Subcategory 2.1.1	1	1	2	16.67	
2.1.2 Health Care Coverage					
Availability of Universal Health Care	n/a	1	1	8.33	Bierbaum and Schmitt (2022); Bobba, Flabbi, and Levy (2018); ILO C102; Sommers and Oellerich (2013)
Funding for Health Care from General Tax Revenues	1	n/a	1	8.33	Antón-Sarabia, Hernandez, and Levy (2012); Bierbaum and Schmitt (2022); Bobba, Flabbi, and Levy (2018); ILO C102; Sommers and Oellerich (2013)
Total Points for Subcategory 2.1.2	1	1	2	16.67	
2.1.3 Retirement Pension					
Availability of Government-Provided Retirement Pension Scheme	n/a	1	1	8.33	Bierbaum and Schmitt (2022); ILO C102; ILO C128; ILO (2018)
Funding for Non-Contributory Retirement Pension from General Tax Revenues	1	n/a	1	8.33	Antón-Sarabia, Hernandez, and Levy (2012); Bierbaum and Schmitt (2022); ILO C102; ILO C128
Total Points for Subcategory 2.1.3	1	1	2	16.67	
Total Points for Category 2.1	3	3	6	50.00	
2.2 EMPLOYMENT SERVICES					
2.2.1 Employment Centers and Training					
Existence of a National Employment Service Center	1	1	2	4.76	Avila (2021); Boone and van Ours (2004); ILO C122; ILO, 2021; Kuddo (2012); (2020); Ulku and Georgieva (2022)

No Legal Mandate for Firms to Pay for Employment Service Center Services	1	n/a	1	2.38	Donna C. Koeltz and Carmela I. Torres (2016); IDB, WAPES, OECD (2015)
Legal Mandate for Vocational Guidance and Training for Unemployed and Job Seekers	1	1	2	4.76	Avila (2021); Chiplunkar and Goldberg (2021); ILO C156; ILO R165; ILO R191; World Bank (2019)
Existence of Public Training Programs for Unemployed and Job Seekers	1	1	2	4.76	Osikominu (2021); Spinnewijn, (2013); Card, D., Kluve, J. and Weber, A. (2015)
Total Points for Subcategory 2.2.1	4	3	7	16.67	
2.2.2 Labor Dispute Resolution Mechanisms					
Existence of a Functioning, Specialized, and Independent Mechanism for Resolution of a Labor Dispute	1	1	2	8.33	ILO (2013); Maffie (2019)
Existence of Alternative Dispute Resolution Process for a Labor Dispute	1	1	2	8.33	ILO (2013)
Total Points for Subcategory 2.2.2	2	2	4	16.67	
2.2.3 Labor Inspectorates					
Existence of a Central Labor Inspectorate	n/a	1	1	4.17	Almeida and Ronconi (2016); ILO C81; ILO R20; Viollaz (2018); World Bank (2019)
Best Practice Initiation of Labor Inspections	n/a	1	1	4.17	ILO C81 ILO R20
Existence of Data on Reported Number of Cases/Complaints for Labor Violations	1	1	2	8.33	ILO R20
Total Points for Subcategory 2.2.3	1	3	4	16.67	
Total Points for Category 2.2	7	8	15	50.00	
Total Points for Pillar II	10	11	21	100.00	

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent). FFP = Firm Flexibility Point; SBP = Social Benefits Point.

PILLAR III—OPERATIONAL EFFICIENCY OF LABOR REGULATIONS AND PUBLIC SERVICES IN PRACTICE					
3.1 EMPLOYMENT RESTRICTIONS AND COSTS					
3.1.1 Social Contribution					
Indicators	FFP	SBP	Total Points	Rescaled Points	Background Literature
Ratio of Social Contribution	100	n/a	100	16.67	Bierbaum and Schmitt (2022); Bodor, Robalino, and Rutkowski (2007); Gentilini et al. (2020); Levy (2008) ; Packard et al. (2019); Ribe, Robalino, and Walker (2010); Ulku and Georgieva (2022)
Total Points for Category 3.1.1	100	n/a	100	16.67	
3.1.2 Obstacles to Hiring					
Percent of Firms Identifying Labor Regulations as a Constraint	100	n/a	100	16.67	Ahlfeldt, Roth, and Seidel (2022); Clemens (2021); Dustman et al. (2021); Manning (2021); Neumark (2017); Neumark and Shirley (2021); Riley and Rosazza Bondibene (2017)
Total Points for Category 3.1.2	100	n/a	100	16.67	
3.1.3 Dismissal Time and Cost					
Weeks to Dismiss Full-Time Permanent Worker	50	n/a	50	8.33	Barlow et al. (2019); Hansen (2009); Sudiarawan, Tanaya and Hapsari (2021); Ulku and Georgieva (2022); Van der Wiel (2010)
Weeks Paid in Severance	50	n/a	50	8.33	Barlow et al. (2019); Hansen (2009); Sudiarawan, Tanaya, and Hapsari (2021); Ulku and Georgieva (2022); Van der Wiel (2010)
Total Points for Category 3.1.3	100	n/a	100	16.67	
Total Points for Category 3.1	100	n/a	100	50.00	
3.2 EMPLOYMENT SERVICES					
3.2.1 On-the-Job Training					
Percent of Firms with Formal Training Programs for its Permanent, Full-Time Workers	100	n/a	100	16.67	Sultana A., Irum S., Ahmed K. and Mehmood M. (2012); Stolovitch and Ngoa-Nguele (2001); Raza H., Mahmood J., Owais M. and Raza A. (2015); Hanaysha and Tahir (2016)
Total Points for Category 3.2.1	100	n/a	100	16.67	
3.2.2 Prevalence and Operational Efficiency of Labor Disputes					
Percent of Firms Involved in Labor Dispute over Last 3 Years	50	n/a	50	8.33	Ebisui, Cooney, and Fenwick (2016); ILO (2013); Maffie (2019)
Months to Resolve Labor Dispute	50	n/a	50	8.33	Ebisui, Cooney, and Fenwick (2016); ILO (2013); Maffie (2019)

Total Points for Category 3.2.2	100	n/a	100	16.67	
3.2.3 Health and Safety Inspection					
Percent of Firms Visited or Inspected for Workplace Health and Safety	50	n/a	50	8.33	Almeida and Ronconi (2016); ILO C81; ILO (2022); Viollaz (2018)
Percent of Firms with a Report Issued by Inspectorate for Workplace Health and Safety	50	n/a	50	8.33	Almeida and Ronconi (2016); ILO C81; ILO (2022); Viollaz (2018)
Total Points for Category 3.2.3	100	n/a	100	16.67	
Total Points for Category 3.2	100	n/a	100	50.00	
Total Points for Pillar III	100	n/a	100	100.00	

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent). FFP = Firm Flexibility Point; SBP = Social Benefits Point.

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ANNEX B. LABOR-ANNOTATED QUESTIONNAIRE

Annex B consists of a Glossary and Annotated Questionnaire for Labor. The Annotated Questionnaire provides the mapping between each indicator and the corresponding question(s).

Glossary

Child (or children): A person below the age of 18 years unless under the national law applicable to the child, majority is attained earlier.

Collective bargaining agreement (CBA): Legally binding agreement negotiated between an employer, a group of employers or one or more employers' organizations on the one hand, and one or more workers' organizations that govern terms and conditions of workers' employment.

Consultation (in the context of minimum wage setting): Consultation implies more than merely sharing information but does not imply a joint decision-making process. The objective of the consultation is not to reach an agreement, but it is intended to assist the competent authority in taking a decision.

Discrimination: Discrimination is any distinction, exclusion, or preference made on the basis of race, color, sex, religion, political opinion, national extraction, or social origin that affects equality of opportunity or treatment of workers. Discrimination can occur at each or any stage of the employment process, including hiring, employment, and termination.

Equal remuneration for work of equal value: The principle of equal remuneration for work of equal value is set out in the Preamble of the International Labour Organization (ILO) Constitution. It is not the same as “equal pay for equal work.” “Equal pay for equal work” limits the application of the equal pay principle to work undertaken by two individuals in the same area of activity and in the same enterprise. The concept of “equal remuneration for work of equal value” is broader and encompasses cases where men and women do different work.

Fixed-term contract: An employment contract that has a specified end date.

Forced labor: All work or service that is exacted from any person under the menace of any penalty and for which the person has not offered himself/herself/themselves voluntarily, with the exception of compulsory military service.

Hazardous work: Work that entails an element of dangerous risk to the physical, mental health, or personal safety of an employee.

Health care: The maintaining and restoration of an individual's health by the treatment and prevention of disease especially by trained and licensed professionals.

Labor dispute resolution mechanism: Structured process (for example, judicial or non-judicial) to address and resolve conflict concerning labor matters between different parties, usually an employer and one or more employees.

Labor inspectorate: A public body whose role is to ensure that both employers and employees comply with the rights and obligations imposed by employment and social security regulations (for example, social security, remuneration, health and safety standards, etc.). They have the power to inspect workplaces and often to sanction those who are not in compliance.

Light work: Work that is not likely to be harmful to the health or development of a child and that shall not prejudice their education or ability to benefit from education.

National extraction: An individual's past history or previous circumstances as well as citizenship. National extraction considers both the nation and the nationality from which a person is derived, either by birth or by self and community identification. It is wider than "nationality," which is generally restricted to citizenship of a country.

Night work: Work performed during a period of not less than seven consecutive hours, including the interval from midnight to 5 a.m.

Occupational Health and Safety (OHS): Measures in place relating in full or in part to the protection of employee or worker health and safety.

Overtime work: Overtime work refers to the legal number of additional hours of work that can be performed in addition to the normal weekly working hours.

Permanent contract: An employment contract without a specified end date.

Platform (gig) worker: Individual employed on a temporary basis by a company that uses an online platform, through a mobile device or computer, to allow users to request a gig worker's service. Hence, platform workers work on an on-demand basis and their compensation for the most part depends on the number of clients served.

Redundancy (also expressed as "making an employee redundant"): Dismissal allowed by law that is justified by economic, operational, or structural reasons (not by other causes, such as personal grounds or faulty worker's behavior).

Retirement pension: A monetary benefit given to a person who has retired from regular employment.

Self-employed: An individual whose income is obtained by conducting his/her/their own business activity rather than working for a fixed salary paid by a specific employer.

Sick leave: When an employee takes time off work because of an illness or injury.

Social protection: Set of policies and public actions that mitigate negative social effects caused by unemployment, labor market shocks, and poorly protected labor. Well-designed social protection programs help vulnerable individuals find new or better jobs, boost human capital, and reduce inequality.

Temporary agency worker: An employment contract where a worker is employed by a temporary work agency to deliver services at or for a user company.

Unemployment insurance: A type of insurance that ensures that a benefit is paid to workers who have recently lost their job through no fault of their own. It may be provided publicly or privately.

Wage premium: A form of extra payment for employees who work outside their usual shifts/working hours or under unusual conditions.

LABOR QUESTIONNAIRE

The tables that follow present all indicators (including their components, if applicable) under each pillar, with a reference to the corresponding question number in parenthesis. The questions are listed before each table for ease of reference.

For Y/N questions, the Y response accounts for the score and is considered as the good practice, unless otherwise indicated with the sign “Y/N; N – good practice”.

In the tables that follow, “AND” means all referenced questions must have a good practice response to obtain a score on the indicator.

In the tables the follow, “OR” means one or more referenced questions must have a good practice response to obtain a score on the indicator.

Certain questions are marked as “not scored,” which indicates that they do not affect the score in any way. The purpose of these questions is to further inform and refine the questions design for subsequent years of the rollout, as needed, as well as to substantiate and provide further information for the scored questions.

PILLAR I—QUALITY OF LABOR REGULATIONS	
Parameters	
Business Location	The largest (most populous) city in the economy. The parameter applies to all questions under Pillar I.
Type of Workers	The relevant employee is a working-age (over 25 years old) permanent employee, unless otherwise specified in the questions. The worker is a citizen of the economy and works in the services sector, unless otherwise indicated in the questionnaire for certain specific indicators. The worker may be male, female or identify as non-binary and is hence, referred to by the pronouns he/she/they. This parameter applies to all questions under Pillar I.
Firm Characteristics	The most common type of employer in the private sector working in a firm with less than 250 employees operating in the services industry, unless otherwise indicated in the questionnaire for certain specific indicators. This parameter applies to all questions under Pillar I.

1.1 WORKERS’ CONDITIONS

1.1.1 Labor Rights

- 1. Does the law mandate equal remuneration for work of equal value? (Y/N)**
- 2. Does the law explicitly prohibit discrimination in hiring based on the following criteria? (Y/N)**
 - 2a. Race and ethnicity
 - 2b. Gender
 - 2c. Religion or belief
 - 2d. Political opinion
 - 2e. Sexual orientation
 - 2f. Disability
 - 2g. National extraction (place of birth, ancestry, or foreign origin) or social origin
 - 2h. Trade-union membership

3. **Does the law explicitly prohibit discrimination in employment based on the following criteria? (Y/N)**
 - 3a. Race and ethnicity
 - 3b. Gender
 - 3c. Religion or belief
 - 3d. Political opinion
 - 3e. Sexual orientation
 - 3f. Disability
 - 3g. National extraction (place of birth, ancestry, or foreign origin) or social origin
 - 3h. Trade-union membership
4. **Does the law explicitly prohibit discrimination in dismissal based on the following criteria? (Y/N)**
 - 4a. Race and ethnicity
 - 4b. Gender
 - 4c. Religion or belief
 - 4d. Political opinion
 - 4e. Sexual orientation
 - 4f. Disability
 - 4g. National extraction (place of birth, ancestry, or foreign origin) or social origin
 - 4h. Trade-union membership
5. **Does the law grant all workers the right of freedom of association and assembly? (Y/N)**
6. **Does the law grant all workers the right to collective bargaining? (Y/N)**
7. **Does the law expressly prohibit forced labor? (Y/N)**
8. **Does the law mandate labor inspectorates to enforce national legislation on forced labor (that is, to check for forced or compulsory labor, identify vulnerable employees, inspect for abusive employment relationship, etc.) (Y/N)**
9. **Does the law set a minimum legal age for admission to employment? (Y/N)**
10. **What is the minimum age for employment as specified in the law? (Age)**
11. **Does the law prohibit children from performing work that is likely to harm their health, safety, or morals? (Y/N)**
12. **Does the law require labor inspectorates to enforce national legislation on child labor? (that is, minimum age of workers, types of work young workers are involved in, working hours, not prejudice to their education or ability to benefit from education) (Y/N)**
13. **Is there a national or federal Occupational Health and Safety (OHS) legislation? Y/N**
14. **Does the law mandate a periodic review of OHS regulations? (Y/N)**
15. **What is the frequency (monthly, yearly, other) for updating the OHS regulation? [Legal time frame]**
(not scored)
16. **Is there a law on? (Y/N)**
 - 16a. Workplace violence
 - 16b. Discrimination

- 16c. Harassment
- 16d. Bullying

17. Does the law require employers to establish internal complaints or grievance mechanisms for reporting the following issues at the workplace? (Y/N)

- 17a. Violence
- 17b. Discrimination
- 17c. Harassment
- 17d. Bullying

18. Does the law require employers to provide workers with information on how to identify the following hazards and risks at the workplace? (Y/N)

- 18a. Violence
- 18b. Discrimination
- 18c. Harassment
- 18d. Bullying

19. Does the law require employers to provide workers with training on how to identify hazards and risks at the workplace, including prevention and protection measures for the following issues? (Y/N)

- 19a. Violence
- 19b. Discrimination
- 19c. Harassment
- 19d. Bullying

20. Does the law mandate paid annual leave for workers on a permanent contract? (Y/N)

21. Per calendar year, how many fully paid working days of annual leave a worker on a permanent contract with more than 1 year of employment but less than 5 years is entitled to?

22. Does the law mandate paid sick leave for workers on a permanent contract? (Y/N)

1.1.2 Minimum Wage Attributes

23. Is there a minimum wage in the private sector? (Y/N)

- 23a. There is one single statutory minimum wage set by law, applicable nationwide, across all sectors of activity and to all workers, irrespective of age or occupation
- 23b. There is one single statutory minimum wage and additional sector-specific minimum wage(s) or floor(s) applied in collective bargaining agreement(s) (CBA)
- 23c. There is no one single statutory minimum wage but there are multiple sector-specific minimum wage(s) or floors(s) applied in CBA(s)
- 23d. There is neither a minimum wage set by law nor sector-specific minimum wages(s) or floors(s) applied in CBA(s) in the private sector.
- 23e. There is a statutory minimum wage only in the public sector

24. Please provide the monthly minimum wage or floor in local currency for a worker on a permanent contract, over 25 years of age with lowest complexity of work and corresponding responsibilities, in the largest business city in the economy, for the following two sectors:

- 24a Manufacturing (car parts industry): [numerical value of wage in local currency]
- 24b Services (food retail): [numerical value of wage in local currency]

25. Does the law or applicable CBA(s) mandate criteria for setting the minimum wage (i.e., economic growth, cost of living, etc.)? (Y/N)
26. What criteria, as mandated by law or CBA(s), are considered for setting the minimum wage? (*not scored*) (Y/N)
- 26a Economic growth
 - 26b Cost of living (inflation)
 - 26c Level of wages in the economy
 - 26d Level of productivity
 - 26e Level of employment
 - 26f Level of poverty/minimum consumption
 - 26g Other criteria, please describe:
27. Does the law or applicable CBA(s) mandate a periodic process of minimum wage update? (Y/N)
28. What is the frequency (monthly, yearly, or other) for updating the minimum wage, as mandated by law or CBA(s)? [Legal time frame] (*not scored*)
29. Does the law mandate social consultation before setting the minimum wage for the first time, if not established previously, or for updating the minimum wage, if established already? (Y/N)

1.1.3 Termination of Employment

30. In case of a redundancy dismissal, does the law mandate a notice period that an employer must provide to an employee? (Y/N)
31. In case of a redundancy dismissal, does the law mandate a severance payment that an employer must provide to an employee? (Y/N)
32. Does an employer have to notify a third party before terminating a group of employees' equivalent to a collective redundancy—according to your economy's legislation—in the private sector? (Y/N)
- 32a. Yes, notification should be given to the public administration, i.e., Ministry of Labor
 - 32b. Yes, notification should be given to workers' representatives
 - 32c. No

1.1 WORKERS' CONDITIONS			
1.1.1 Labor Rights			
Indicators	FFP	SBP	Total Points
Equal Remuneration for Work of Equal Value (1)	n/a	1	1

Prohibition of Discrimination (2 AND 3 AND 4) <i>To score a full point on SB, an economy must have law or regulation which explicitly prohibit discrimination in (i) hiring, (ii) employment and (iii) dismissal based on all the criteria:</i> <ul style="list-style-type: none"> - Race and ethnicity (2a AND 3a AND 4a) - Gender (2b AND 3b AND 4b) - Religion or belief (2c AND 3c AND 4c) - Political opinion (2d AND 3d AND 4d) - Sexual orientation (2e AND 3e AND 4e) - Disability (2f AND 3f AND 4f), - National extraction (place of birth, ancestry, or foreign origin) or social origin (2g AND 3g AND 4g) - Trade-union membership (2h AND 3h AND 4h) <i>If it does not cover all 3 aspects, but it covers at least 1, it obtains half: 0.0625 (0.125/2 = 0.0625).</i>	n/a	1	1
Freedom of Association and Assembly (5)	n/a	1	1
Right to Collective Bargaining (6)	n/a	1	1
Prohibition of Forced Labor <ul style="list-style-type: none"> - Law explicitly prohibits forced labor (7) - Law must have a requirement for labor inspectorates to enforce legislation on forced labor (8). 	n/a n/a n/a	1 0.5 0.5	1 0.5 0.5
Minimum Legal Age for Employment (9 AND 10) <i>To score a full point on SB, the economy must mandate a minimum age for admission to employment, and this minimum age should be equal or higher to 15. If the minimum age is equal to 14, the economy obtains 0.5 points on SB.</i>	n/a	1	1
Prohibition of Child Labor <ul style="list-style-type: none"> - Law prohibits children to perform work likely to harm health, safety, or morals (11) - Law requires labor inspectorates to enforce national legislation on child labor (12) 	n/a n/a n/a	1 0.5 0.5	1 0.5 0.5
Existence of Health and Safety Legislation (13)	n/a	1	1
Periodic Review of Health and Safety Legislation (14)	n/a	1	1
Law on Workplace Violence, Discrimination, Harassment, Bullying (16) <ul style="list-style-type: none"> - Workplace violence - Discrimination - Harassment - Bullying 	n/a n/a n/a n/a	1 0.25 0.25 0.25 0.25	1 0.25 0.25 0.25 0.25
Protection Against Workplace Violence, Discrimination, Harassment, Bullying through Grievance Mechanisms, Information, and Training (17 AND 18 AND 19) <i>To score a full point on SB, an economy must have a law or regulation that requires companies to establish internal complaints or grievance mechanisms AND to provide workplace information on how to identify hazards and risks AND provide training on:</i> <ul style="list-style-type: none"> - Workplace violence - Discrimination - Harassment - Bullying <i>If an economy does not cover all 3 criteria, but it covers at least 1 it will obtain half a score of the respective category: 0.125 (0.25/2 = 0.125).</i>	n/a n/a n/a n/a	1 0.25 0.25 0.25 0.25	1 0.25 0.25 0.25 0.25
Legally Mandated Paid Annual Leave (20 AND 21) <i>To score a full point on SB, an economy must legally mandate paid annual leave (20) AND the duration must be of 15 or more working days (21).</i>	n/a	1	1
Legally Mandated Paid Sick Leave (22)	n/a	1	1
Total Points	n/a	13	13

1.1.2 Minimum Wage Attributes			
Indicators	FFP	SBP	Total Points
Existence of Minimum Wage in the Private Sector (23a OR 23b OR 23c AND 24a AND/OR 24b) <i>To score a full point on SB, an economy must have minimum wage for the private sector (set by law or collective bargaining agreement(s)) in the manufacturing AND/OR service sectors.</i>	n/a	1	1
Criteria for Determining Minimum Wage Level (25)	n/a	1	1
Minimum Wage Update Process (27)	n/a	1	1
Social Consultation (29)	n/a	1	1
Total Points	n/a	4	4
1.1.3 Termination of Employment			
Indicators	FFP	SBP	Total Points
Legally Mandated Notice Period (30)	n/a	1	1
Legally Mandated Severance Pay (31)	n/a	1	1
Notification Requirement for Collective Dismissal (32) <i>To score a full point on SB, an economy must have a legally mandated requirement to notify a third-party public administration (32a) AND/OR workers' representatives (32b) in case of a collective dismissal.</i>	n/a	1	1
Total Points	n/a	3	3

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent).
FFP = Firm Flexibility Point; SBP = Social Benefits Point.

1.2 Employment Restrictions and Costs

1.2.1 Terms of Employment

33. Does the law allow the use of fixed-term contracts for any type of task/job? (Y/N)
34. Does the law allow the use of fixed-term contracts for permanent tasks specifically, i.e., tasks or jobs of permanent nature to the firm, not dissolved once the task is accomplished? (Y/N)
35. Does the law allow night work? (Y/N) (*not scored*)
36. Please specify the hours that constitute night work, by law: (*not scored*)
37. Does the law mandate a wage premium for night work? (Y/N)
38. What is the maximum number of working days per week? [number]
39. What is the standard number of working hours mandated by law (not including overtime)? [number]
40. Does the law allow overtime work? (Y/N) (*not scored*)
41. What is the maximum number of overtime working hours per week mandated by law? [number]
42. Does the law mandate a wage premium for overtime work? (Y/N)

43. What is the wage premium for overtime work mandated by law (in local currency or as a percentage of worker's salary)? [numerical value] (*not scored*)
44. Does the law require firms to pay for unemployment protection for a permanent (open-ended) full-time worker on firm's payroll? (*i.e.*, the payment requirement could be part of labor taxes, social security contribution, or separate non-tax-related payment incurred by the firm if a worker is terminated earlier on a basis of redundancy) (Y/N, N – good practice)
45. Does the law require firms to pay for health care for a permanent (open-ended) full-time worker on firm's payroll? (*i.e.*, the payment requirement could be part of labor taxes, social security contribution, or separate non-tax-related mandatory payment incurred by the firm) (Y/N, N – good practice)
46. Does the law require firms to pay retirement pension for a permanent (open-ended) full-time worker on firm's payroll? (*i.e.*, the payment requirement could be part of labor taxes, social security contribution, or separate non-tax-related mandatory payment incurred by the firm) (Y/N, N – good practice)
47. Does the law allow individual dismissal based on business needs or due to redundancy reasons? (Y/N)

1.2.2 Minimum Wage Rate

Please, see relevant question 24a and 24b.

1.2.3 Termination of Employment

48. What is the legally mandated notice period for a worker on a permanent contract with one year but less than 5 years of employment? [number of weeks]
49. What is the legally mandated severance payment for a worker on a permanent contract with one year but less than 5 years of employment? [number of weeks]
50. Does an employer need to obtain approval from a third party before terminating one employee in the private sector? (Y/N)
 50a. Yes, approval should be obtained from the public administration, *i.e.*, Ministry of Labor
 50b. Yes, approval should be obtained from workers' representatives
 50c. No
51. Does an employer need to obtain approval from a third party before terminating a group of employees' equivalent to a collective redundancy—according to your economy's legislation—in the private sector? (Y/N)
 51a. Yes, approval should be obtained from the public administration, *i.e.*, Ministry of Labor
 51b. Yes, approval should be obtained from workers' representatives
 51c. No

1.2 EMPLOYMENT RESTRICTIONS AND COSTS			
1.2.1 Terms of Employment			
Indicators	FFP	SBP	Total Points
No Restrictions on the Use of Fixed-Term Contracts for Any Task (33)	1	n/a	1
No Restrictions on the Use of Fixed-Term Contracts for Permanent Tasks (34)	1	n/a	1
No Legal Mandate for Firms to Pay Wage Premium for Night Work (37)	1	n/a	1
No Restrictions on Overtime Work Within a Limit of 56 Hours Weekly Maximum (39 and 41) <i>To score full points on FF and SB, the maximum working hours (the sum of standard working hours (39) and overtime hours (41)) for an economy must be greater than 48 hours/week (the maximum standard working hours) but less than 56 hours/ week (ILO limit).</i>	1	1	2
No Legal Mandate for Firms to Pay for Unemployment Protection Directly (44)	1	n/a	1
No Legal Mandate for Firms to Pay for Health Care Directly (45)	1	n/a	1
No Legal Mandate for Firms to Pay for Pensions Directly (46)	1	n/a	1
Lawful Grounds, Including Business Needs, for Individual Dismissal (47)	1	1	2
Total Points	8	2	10
1.2.2 Minimum Wage Rate			
Indicators	FFP	SBP	Total Points
Minimum Wage Rate (24a and 24b)*	1	n/a	1
Total Points	1	n/a	1
1.2.3 Termination of Employment			
Indicators	FFP	SBP	Total Points
Length of Notice Period (48)*	1	n/a	1
Amount of Severance Pay (49)*	1	n/a	1
No Third-Party Approval Requirement for Individual Dismissal (50a AND/OR 50b)	1	n/a	1
No Third-Party Approval Requirement for Collective Dismissal (51a AND/OR 51b)	1	n/a	1
Total Points	4	n/a	4

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent). FFP = Firm Flexibility Point; SBP = Social Benefits Point.

* The score is calculated using the Normal Cumulative Density Function (CDF) transformation method on a scale of 0 to 100, where 0 and 100 represent the lowest and highest possible scores, respectively. The best and worst performers are identified based on the 5th and 95th percentiles of the collected data.

PILLAR II—ADEQUACY OF PUBLIC SERVICES FOR LABOR	
Parameters	
Business Location	The largest (most populous) city in the economy. The parameter applies to all questions under Pillar II.
Type of Worker	The relevant employee is a working-age (over 25 years old) permanent employee, unless otherwise specified in the questions. The worker is a citizen of the economy and works in the services sector, unless otherwise indicated

	in the questionnaire for certain specific indicators. This parameter applies to all questions under Pillar II.
Firm Characteristics	The most common type of employer in the private sector in a firm with less than 250 employees operating in the services industry, unless otherwise indicated in the questionnaire for certain specific indicators. This parameter applies to all questions under Pillar II.

2.1 SOCIAL PROTECTION

2.1.1 Unemployment Insurance

52. In the economy, is there government-provided unemployment protection scheme for workers in the private sector in the economy? (Y/N)

- 52a. Yes, there is a government-provided unemployment insurance provided to all categories of workers (including nontraditional ones such as domestic, temporary agency, or platform workers) who meet the eligibility requirements
- 52b. Yes, there is a government-provided unemployment insurance but some categories of workers such as temporary agency workers, platform workers or others are excluded (they do not meet the eligibility requirements, there is no legal provision, or other)
- 52c. There is not any government-provided unemployment insurance for workers in the private sector

53. If there is a government-provided unemployment protection scheme in the economy, please explain the eligibility requirements? (*not scored*)

54. If there is a government-provided unemployment protection scheme in the economy but some categories of workers are excluded, please explain which ones. (*not scored*)

55. If there is a government-provided unemployment protection scheme, how is it funded? (Y/N)

- 55a. Through general tax revenue
- 55b. Through taxes on employers, including mandatory labor taxes or social security contributions
- 55c. Through both general tax revenue and taxes on employers, including mandatory labor taxes or social contributions

2.1.2 Health Care Coverage

56. Which of the following types of health care coverage are available to workers in the private sector in the economy? (*select all that apply*) (Y/N)

- 56a. Non-contributory government-funded essential health care coverage available universally (i.e., to all citizens whether or not employed)
- 56b. Contributory health care coverage available through employment only (i.e., the worker's health care benefits are lost as he/she/they leaves one employer and are resuscitated as he/she/they starts a new employment relationship)
- 56c. Contributory health care coverage available through employment or self on a voluntary basis (i.e., a worker, including self-employed workers, can voluntarily contribute to mandatory health care scheme)

57. How is the health care system, if provided by the government in the economy, funded? (Y/N)

- 57a. Through general tax revenue
- 57b. Through taxes on employers, including mandatory labor taxes or social security contributions
- 57c. Through both general tax revenue and taxes on employers, including mandatory labor taxes or social contributions

2.1.3 Retirement Pension

58. Which of the following types of retirement pension schemes are available to workers in the private sector in the economy? (Y/N)

- 58a. Non-contributory government-funded retirement pension benefit available universally (i.e., to all citizens whether or not employed, means-tested or pension-tested)
- 58b. Contributory retirement pension benefit available through employment only
- 58c. Contributory retirement pension benefit available through employment or self-employment on a voluntary basis
- 58d. Last-resort retirement assistance or an alternative non-contributory retirement pension benefit
- 58e. There is not any retirement pension for workers in the private sector (neither government-provided nor through separate scheme funded by employer/employee contributions).

59. How is the pension system if provided by the government in the economy funded? (Y/N)

- 59a. Through general tax revenue
- 59b. Through taxes on employers, including mandatory labor taxes or social security contributions
- 59c. Through both general tax revenue and taxes on employers, including mandatory labor taxes or social contributions

2.1 SOCIAL PROTECTION			
2.1.1 Unemployment Insurance			
Indicators	FFP	SBP	Total Points
Availability of Government-Provided Unemployment Insurance (52)	n/a	1	1
- For all workers in the private sector (52a) OR	n/a	1 OR	1 OR
- For some categories of workers in the private sector (only 52b)	n/a	0.5	0.5
Funding for Unemployment Insurance from General Tax Revenues (55a OR 55c)	1	n/a	1
Total Points	1	1	2
2.1.2 Health Care Coverage			
Indicators	FFP	SBP	Total Points
Availability of Universal Health Care (56)	n/a	1	1
- Non-contributory government-funded essential health care for all workers in the private sector (i.e., to all citizens whether or not employed) (56a) OR	n/a	1 OR	1 OR
- Contributory health care coverage available through employment only (56b)	n/a	0.5	0.5
AND/OR		AND/OR	AND/OR
- Contributory health care coverage available through employment or self on voluntary basis (56c)	n/a	0.5	0.5
Funding for Health Care from General Tax Revenues (57a OR 57c)	1	n/a	1
Total Points	1	1	2
2.1.3 Retirement Pension			
Indicators	FFP	SBP	Total Points
Availability of Government-Provided Retirement Pension Schemes (58)	n/a	1	1
- Non-contributory government-funded retirement pension benefit available universally (58a), AND	n/a	1 OR	1 OR
- Contributory retirement pension benefit available through employment only (58b) OR self on a voluntary basis (58c)			
- Non-contributory government-funded retirement pension benefit available universally (58a), OR	n/a	0.5	0.5

- Contributory retirement pension benefit available through employment only (58b) AND/OR self on a voluntary basis (58c)			
Funding for Non-Contributory Retirement Pension from General Tax Revenues (59a OR 59c)	1	n/a	1
Total Points	1	1	2

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent).
FFP = Firm Flexibility Point; SBP = Social Benefits Point.

2.2 EMPLOYMENT SERVICES

2.2.1 Employment Centers and Training

60. Is there a national employment service center in the largest city in this economy? (Y/N)
61. Please provide link to the website of the employment service center if available online: *(not scored)*
62. Does the law require firms to pay for employment service center services (i.e., the payment requirement could be part of labor taxes, social security contribution, or separate non-tax-related mandatory payment incurred by the firm)? (Y/N, N – good practice)
63. Does your economy have a law or regulation that establishes vocational guidance and training for the unemployed and job seekers? (Y/N)
64. Are public training programs for the unemployed and job seekers available? (Y/N)

2.2.2 Labor Dispute Resolution Mechanisms

65. Does your economy have a functioning, specialized, and independent mechanism for resolution of a labor dispute (of any kind)? (Y/N)
66. Which of the following types of alternative dispute resolution mechanisms are available to resolve a labor dispute? (Y/N)
- 66a. Judicial conciliation/mediation (court-annexed)
 - 66b. Non-judicial conciliation/mediation (private person to mediate)
 - 66c. Arbitration

2.2.3 Labor Inspectorates

67. Is there a central labor inspectorate in this economy? (Y/N)
68. Can labor inspectors enter a workplace freely and without notice? (Y/N)
69. Are there data on reported number of cases/complaints available for labor violations? (Y/N)

2.2 EMPLOYMENT SERVICES			
2.2.1 Employment Centers and Training			
Indicators	FFP	SBP	Total Points
Existence of a National Employment Service Center (60)	1	1	2
No Legal Mandate for Firms to Pay for Employment Service Center services (62)	1	n/a	1

Legal Mandate for Vocational Guidance and Training for Unemployed and Job Seekers (63)	1	1	2
Existence of Public Training Programs for Unemployed and Job Seekers (64)	1	1	2
Total Points	4	3	7
2.2.2 Labor Dispute Resolution Mechanisms			
Indicators	FFP	SBP	Total Points
Existence of a Functioning, Specialized, and Independent Mechanism for Resolution of a Labor Dispute (65)	1	1	2
Existence of Alternative Dispute Resolution Process for a Labor Dispute (66)	1	1	2
Total Points	2	2	4
2.2.3 Labor Inspectorates			
Indicators	FFP	SBP	Total Points
Existence of a Central Labor Inspectorate (67)	n/a	1	1
Best Practice Initiation of Labor Inspections (68)	n/a	1	1
Existence of Data on Reported Number of Cases/Complaints for Labor Violations (69)	1	1	2
Total Points	1	3	4

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent).
FFP = Firm Flexibility Point; SBP = Social Benefits Point.

PILLAR III—OPERATIONAL EFFICIENCY OF LABOR REGULATIONS AND PUBLIC SERVICES IN PRACTICE

The data for Pillar III are collected through Enterprise Surveys. The scores for Pillar III indicators are calculated using the Normal Cumulative Density Function (CDF) transformation method on a scale of 0 to 100, where 0 and 100 represent the lowest and highest possible scores, respectively. The best and worst performers are identified based on the 5th and 95th percentiles of the collected data.

3.1 EMPLOYMENT RESTRICTIONS AND COSTS

3.1.1 Social Contribution

- 70. Please provide the total annual costs of social security payments and employment-based taxes, excluding employee taxes that were withheld for the last fiscal year in local currency units.** [numerical value]
- 71. Please provide the total annual cost of labor including wages, salaries, bonuses, social security payments.** [numerical value]

3.1.2 Obstacles to Hiring

- 72. To what degree are labor regulations an obstacle to the current operations of this establishment?**
- 72a. No obstacle
 - 72b. Minor obstacle
 - 72c. Moderate obstacle
 - 72d. Major obstacle
 - 72e. Very severe obstacle

3.1.3 Dismissal Time and Cost

73. In the last three years, has this establishment dismissed any permanent, full-time worker? (Y/N) *(not scored)*
74. How many weeks did it typically take—from the time the notice of dismissal was provided to the worker until the worker was removed from the establishment's payroll? (Please include all pre-notice requirements, notifications, and wait times.) [numerical value in weeks]
75. How much was a typical severance payment, in weeks of paid salary, for a dismissed permanent, full-time worker? (Please include pay and benefits but exclude unpaid salaries.) [numerical value]

3.1 EMPLOYMENT RESTRICTIONS AND COSTS			
3.1.1 Social Contribution			
Indicators	FFP	SBP	Total Points
Ratio of Social Contributions (70 and 71) <i>The ratio of social contributions is equal to the total annual costs of social security payments and employment-based taxes divided by the total annual cost of labor including wages, salaries, bonuses, social security payments)</i>	100 (100%)	n/a	100 (100%)
3.1.2 Obstacles to Hiring			
Indicators	FFP	SBP	Total Points
Percent of Firms Identifying Labor Regulations as a Constraint (72) <i>The percentage of firms identifying labor regulations as a constraint is equal to the number of firms that selected "major obstacle" or "very severe obstacle", divided by the total number of firms.</i>	100 (100%)	n/a	100 (100%)
3.1.3 Dismissal Time and Cost			
Indicators	FFP	SBP	Total Points
Weeks to Dismiss Full-Time Permanent Worker (74) <i>The time in weeks typically required to dismiss a permanent, full-time worker, from the moment the notice of dismissal is given until the worker is removed from the payroll.</i>	100 (50%)	n/a	100 (50%)
Weeks Paid in Severance (75) <i>The amount of a typical severance payment, expressed as weeks of paid salary, for a dismissed permanent, full-time worker.</i>	100 (50%)	n/a	100 (50%)
Total Points	100	n/a	100

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent). FFP = Firm Flexibility Point; SBP = Social Benefits Point.

3.2 EMPLOYMENT SERVICES

3.2.1 On-the-Job Training

76. Over the last fiscal year, did this establishment have formal training programs for its permanent, full-time workers? (Y/N)

3.2.2 Prevalence and Operational Efficiency of Labor Disputes

77. Over the last three years, has this establishment been involved in any labor disputes? (Y/N) (*not scored*)
78. How many months did it typically take from the moment the dispute arose until it got resolved, whether through an agreement, court decision, or other means? [numerical value]

3.2.3 Health and Safety Inspection

79. Over the fiscal year in reference to workplace health and safety, was this establishment visited or inspected by a government labor inspector or has it been required to meet with one? (Y/N) (*not scored*)
80. As a result of these inspections, was a report issued to the establishment by the inspectorate? If there has been more than one inspection, please consider the latest completed inspection. (Y/N)

3.2 EMPLOYMENT SERVICES			
3.2.1 On-the-job Training			
Indicators	FFP	SBP	Total Points
Percent of Firms with Formal Training Programs for its Permanent, Full-Time Workers (76) <i>The percentage of firms with formal training programs for its permanent full-time workers is equal to the number of firms that answered “yes”, divided by the total number of firms.</i>	100 (100%)	n/a	100 (100%)
3.2.2 Prevalence and Operational Efficiency of Labor Disputes			
Indicators	FFP	SBP	Total Points
Percent of Firms Involved in Labor Dispute Over Last 3 Years (77) <i>The percentage of firms involved in a labor dispute over the last 3 years is equal to the number of firms that answered “yes”, divided by the total number of firms</i>	100 (50%)	n/a	100 (50%)
Months to Resolve Labor Dispute (78)	100 (50%)	n/a	100 (50%)
3.2.3 Health and Safety Inspection			
Indicators	FFP	SBP	Total Points
Percent of Firms Visited or Inspected for Workplace Health and Safety (79) <i>The percentage of firms visited or inspected for workplace health and safety is equal to the number of firms who answered “yes”, divided by the total number of firms</i>	100 (50%)	n/a	100 (50%)
Percent of Firms with a Report Issued by Inspectorate for Workplace Health and Safety (80) <i>The percentage of firms with a report issued by inspectorate from workplace health and safety is equal to the number of firms that answered “yes”, divided by the total number of firms.</i>	100 (50%)	n/a	100 (50%)
Total Points	100	n/a	100

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent).
FFP = Firm Flexibility Point; SBP = Social Benefits Point.

CHAPTER 6. FINANCIAL SERVICES—METHODOLOGY NOTE

I. MOTIVATION

Access to finance remains a major constraint for firms worldwide, despite being essential for their operations and expansion and positively associated with firm innovation.¹ Access to finance affects firms' ability to manage volatile cash flow and directly contributes to a firm's resilience, which was underscored during the global pandemic.² Research has also shown that private sector financing in developing economies has positive macroeconomic effects as firm-level employment often benefits from improved access to finance.³

Having a sound and robust regulatory framework that can support financial service providers and enhance information sharing can increase the likelihood of firms obtaining financing. Sound due diligence regulations spanning aspects of anti-money laundering/combating the financing of terrorism (AML/CFT) and grounded in risk-based evaluations are important for macroeconomic financial stability.⁴ Furthermore, a modern secured transactions system, where movable assets are commonly used as collateral, offers borrowers access to credit at affordable rates.⁵ To enable financing, lenders require adequate access to borrowers' credit information to overcome information asymmetries. Sharing such information in the form of credit reporting reduces lenders' uncertainty about borrowers' total debt exposure, increases the availability of credit, and lowers interest rates.⁶

Accessible financing also plays an important role in maintaining a company's financial stability. Removing bottlenecks associated with making and receiving payments further strengthens firms' financial security. In recent years, cashless transactions (including e-payments) have continued growing.⁷ However, economies' ever-increasing digitalization requires the regulation of electronic solutions to reap the benefits of technological progress. This would enable the extensive use of electronic payments (e-payments), which is associated with reduced tax evasion and lower informality in the private sector.⁸

In this context, the Financial Services topic measures the quality and effectiveness of regulatory frameworks for commercial lending, secured transactions, and e-payments. It also measures the operational efficiency of accessibility of information in credit infrastructure. Lastly, the topic will also look at the operational efficiency of receiving financial services from a firm's perspective.

II. INDICATORS

The Financial Services topic measures four areas—Commercial Lending; Secured Transactions; e-Payments; and Credit Infrastructure—across the three different dimensions, here referred to as pillars. The first pillar assesses the effectiveness of regulation pertaining to commercial lending, secured transactions, and e-payments, covering de jure features of a regulatory framework. The second pillar measures the accessibility of information in credit infrastructure by evaluating the operation of credit bureaus and registries and the operation of collateral registries. Thus, the second pillar assesses the de facto and some de jure provision of financial services. The third pillar measures the operational efficiency of obtaining a loan, registering a security interest as well as the timeliness of credit information sharing, and operational efficiency of e-payments along with their usage. Each pillar is divided into categories—defined by common features that inform the grouping into a particular category—and each category is further divided into subcategories. Each subcategory has several indicators, each of which may, in turn, have several components. Relevant points are assigned to each indicator and subsequently aggregated to obtain the number of points for each subcategory, category, and pillar. Table 1 summarizes all three pillars and their respective categories for the four areas measured: Commercial Lending, Secured Transactions, e-Payments, and Credit Infrastructure.

Table 1. Summary Table of all Three Pillars for the Financial Services Topic

Pillar I—Quality of Regulations for Financial Services (23 indicators)	
1.1	Commercial Lending (4 indicators)
1.1.1	Customer Due Diligence (CDD) and Risk Factors (1 indicator)
1.1.2	Record Keeping of Customer Information (1 indicator)
1.1.3	Availability of Enhanced and Simplified CDD Measures (2 indicators)
1.2	Secured Transactions (7 indicators)
1.2.1	Integrated Legal Framework for Secured Transactions (1 indicator)
1.2.2	Types of Movable Assets, Debts, and Obligations that Can Be Secured (4 indicators)
1.2.3	Priority/Enforcement of Security Interests (2 indicators)
1.3	e-Payments (12 indicators)
1.3.1	Risk Management (3 indicators)
1.3.2	Consumer Protection (6 indicators)
1.3.3	Interoperability of Payment Systems and Promotion of Competition (3 indicators)
Pillar II—Accessibility of Information in Credit Infrastructure (6 indicators)	
2.1	Operation of Credit Bureaus and Registries (3 indicators)
2.1.1	Data Coverage (1 indicator)
2.1.2	Types of Data Collected and Shared (1 indicator)
2.1.3	Additional Services and Borrower's Access to Information (1 indicator)
2.2	Operation of Collateral Registries (3 indicators)
2.2.1	Existence of a Centralized and Publicly Available Registry (1 indicator)
2.2.2	Notice-Based Registry Updates (1 indicator)
2.2.3	Autonomy of Secured Creditors to Access and Update the Registry (1 indicator)
Pillar III—Operational Efficiency of Receiving Financial Services (8 indicators)	
3.1	Loans (3 indicators)
3.1.1	Obtaining a Loan (2 indicators)
3.1.2	Operational Efficiency of Security Interest and Credit Data Update (1 indicator)
3.2	e-Payments (5 indicators)
3.2.1	Cost of e-Payments (2 indicators)
3.2.2	Time to Receive e-Payments (1 indicator)
3.2.3	Usage Level of e-Payments (2 indicators)

1. PILLAR I. QUALITY OF REGULATIONS FOR FINANCIAL SERVICES

Table 2 shows the structure for Pillar I, Quality of Regulations for Financial Services. Each of this pillar's categories and subcategories will be discussed in more detail in the order shown in the table.

Table 2. Pillar I—Quality of Regulations for Financial Services

1.1	Commercial Lending
1.1.1	Customer Due Diligence (CDD) and Risk Factors
1.1.2	Record Keeping of Customer Information
1.1.3	Availability of Enhanced and Simplified CDD Measures
1.2	Secured Transactions
1.2.1	Integrated Legal Framework for Secured Transactions
1.2.2	Types of Movable Assets, Debts and Obligations that Can Be Secured
1.2.3	Priority/Enforcement of Security Interests
1.3	e-Payments
1.3.1	Risk Management
1.3.2	Consumer Protection
1.3.3	Interoperability of Payment Systems and Promotion of Competition

1.1 Commercial Lending

Category 1.1 is divided into three subcategories consisting of several indicators, each of which may, in turn, have several components.

1.1.1 Customer Due Diligence (CDD) and Risk Factors

Modern financial legal frameworks require lenders such as banks and other financial institutions to perform a certain level of due diligence before enrolling new customers and before granting any financing to such customers or to their businesses.⁹ To strengthen global safeguards and further protect the integrity of the financial systems, FATF emphasizes a risk-based approach to AML/CFT.¹⁰ According to this approach, economies, relevant authorities, and financial institutions should identify and assess the risks they are exposed to and take appropriate measures to mitigate them effectively.¹¹ Therefore, Subcategory 1.1.1–Customer Due Diligence (CDD) and Risk Factors comprises one indicator (table 3).¹²

Table 3. Subcategory 1.1.1–Customer Due Diligence (CDD) and Risk Factors

	Indicators	Components
1	Requirement to Conduct CDD and Risk Factors	i) Legal requirement to conduct CDD ii) Availability of risk-based approach iii) Risk factors (customer identity) iv) Customer risk factors (beneficial owner) v) Customer risk factors (ownership structure) vi) Customer risk factors (involvement in international structure) vii) Customer risk factors (personal asset-holding vehicles) viii) Customer risk factors (nominee shareholders or shares in bearer forms) ix) Customer risk factors (business relationship conducted in unusual circumstances) x) Customer risk factors (cash-intensive) xi) Customer risk factors (located in high-risk geographical location) xii) Risk factors (product, service, geography, delivery channel) xiii) Product risk factors (private banking) xiv) Product risk factors (anonymous transactions) xv) Product risk factors (payments received from unknown sources) xvi) Product risk factors (non-face-to-face relation and transactions) xvii) Product risk factors (operations in high-risk geographical location)

Note: CDD = Customer Due Diligence.

1.1.2 Record Keeping of Customer Information

The evolution of AML/CFT measures and those related to the compliance/Know Your Customer (KYC) regulations highlights reliance on several measures.¹³ These include customer due diligence (CDD) for existing customers and steps undertaken by other relevant institutions, maintaining the information collected about customers and their businesses for a certain period, and updating such information regularly, especially when the customer is considered high risk.¹⁴ Therefore, Subcategory 1.1.2–Record Keeping of Customer Information comprises one indicator (table 4).

Table 4. Subcategory 1.1.2–Record Keeping of Customer Information

	Indicators	Components
1	CDD for Existing Customers and Record Keeping	i) Reliance on CDD for existing customers ii) Reliance on CDD undertaken by other institutions (eKYC) iii) Maintain CDD information for a period of 5 years iv) Ongoing CDD for high-risk clients

1.1.3 Availability of Enhanced and Simplified CDD Measures

Not all customers are subject to the same risks and therefore the economies' regulations would require different processes when it comes to performing CDD measures, depending on the customer's level of risk.¹⁵ Thus, following a risk assessment of the client, the availability of simplified and enhanced CDD measures in an economy would simplify the process for firms with lower risks, while adopting a more

robust and in-depth review process for those with higher risk.¹⁶ Therefore, Subcategory 1.1.3–Availability of Enhanced and Simplified CDD Measures comprises two indicators (table 5).

Table 5. Subcategory 1.1.3–Availability of Enhanced and Simplified CDD Measures

	Indicators	Components
1	Simplified CDD	i) Simplified AML/CFT CDD review for low-risk clients ii) Regulatory guidance to determine low-risk clients
2	Enhanced CDD	i) Enhanced AML/CFT CDD review for high-risk clients ii) Regulatory guidance to determine high-risk clients

Note: AML/CFT = Anti-Money Laundering/Combating the Financing of Terrorism; CDD = Customer Due Diligence.

1.2 Secured Transactions

Category 1.2 is divided into three subcategories consisting of several indicators, each of which may, in turn, have several components.

1.2.1 Integrated Legal Framework for Secured Transactions

Under this approach, all secured transactions, no matter how denominated, are classified as security rights and are subjected to an identical legal framework. Having an integrated and functional approach to secured transactions provides flexible contractual arrangements for security purposes that allows borrowers to use as much of their movable assets as collateral to get credit.¹⁷ It also allows both incorporated and non-incorporated entities to create or acquire collateral in movable assets without conferring special advantages or rights to any class of debtor or creditor.¹⁸ This approach helps avoid multiplicity of legal frameworks that can create gaps and inconsistencies. Also, an integrated legal framework could be easier to implement because it would not require adjustments or references to other laws. Furthermore, it can lower the risk of lending and contribute to a more stable financial environment. Therefore, Subcategory 1.2.1–Integrated Legal Framework for Secured Transactions comprises only one indicator (table 6).

Table 6. Subcategory 1.2.1–Integrated Legal Framework for Secured Transactions

	Indicators	Components
1	Integrated Legal Framework for Secured Transactions	i) Integrated legal framework ii) Fiduciary transfer of title iii) Financial lease agreement iv) Assignment of receivables and outright transfer of receivables v) Retention of title sales vi) Incorporated and non-incorporated debtors and creditors

1.2.2 Types of Movable Assets, Debts, and Obligations that Can Be Secured

For promoting access to finance for firms and individuals, it is critical that they can grant a security interest in different types of movable assets, including tangible and intangible, current, or future. Having regulations that enable firms and individuals to use multiple types of movable assets when obtaining loan gives them the ability of translating the full value of those assets into productive use, by potentially increasing the amount of credit available to them and reducing the cost of such credit. Also, including all types of movable assets under the same regime and permitting grantors to describe such assets in generic terms enables parties to avoid expensive investigation at the time a security right is created or costly litigation thereafter about whether any particular type of asset is, or is not, covered by the regime. This contributes not only to firm flexibility but also to the overall benefit of the society by promoting safe and secure lending to the private sector.¹⁹ Therefore Subcategory 1.2.2–Type of Movable Assets, Debts, and Obligations that Can Be Secured comprises four indicators (table 7).

Table 7. Subcategory 1.2.2–Types of Movable Assets, Debts, and Obligations that Can Be Secured

	Indicators	Components
1	Security Interest in One Category of Movable Assets	i) Security interest over accounts receivable ii) Description of the collateral iii) Security interest over inventory iv) Limitations on inventory v) Description of the collateral vi) Security interest over tangible movable property, other than inventory vii) Description of the collateral
2	Security Interest in Combined Category of Movable Assets	i) Security interest in combined category of movable assets ii) Limitations on the assets iii) Description of the collateral
3	Security Interest over Future Assets	i) Security interest over future assets ii) Security interest over after-acquired property iii) Automatic extension of the collateral to products, proceeds, and replacements of the original collateral
4	Debts and Obligations	i) Current and future debts and obligations ii) Fixed debts and obligations iii) Conditional debts and obligations iv) Fluctuating debts and obligations v) Description of debts and obligations

1.2.3 Priority/Enforcement of Security Interests

Securing creditor's rights by having clear and transparent rules that determine the priority system for creditors in case of loan default is crucial to promote access to finance and decrease the cost of lending. This approach promotes the enactment of precise rules to govern every possible type of priority conflict with the rights of a competing claimant and to avoid, as far as possible, creating any later-in-time rights that would outrank existing security rights. Providing the concerned parties with the option to agree to enforce the security interest outside of court through public and/or private auction can relieve some of the pressure on the judiciary branch and decrease the risk of backlog of cases. This can make the enforcement process more efficient and flexible.²⁰ Therefore Subcategory 1.2.3–Priority/Enforcement of Security Interests comprises two indicators (table 8).

Table 8. Subcategory 1.2.3–Priority/Enforcement of Security Interests

	Indicators	Components
1	Priority of Claims Outside of Insolvency or Bankruptcy	Priority of claims outside of insolvency or bankruptcy
2	Enforcement of Security Interests	i) Enforcement of security interests ii) Availability of public auction iii) Availability of private sale iv) Availability of pactum commissorium

1.3 e-Payments

Category 1.3 is divided into three subcategories consisting of several indicators, each of which may, in turn, have several components.

1.3.1 Risk Management

A sound regulatory framework for e-payments is essential to maintain the integrity of the monetary system and safeguard financial stability.²¹ In particular, having adequate risk management practices is important to ensure the security, efficiency, and stability of the electronic transfers.²² Measures that prevent fraud, promote information and cybersecurity, ensure protection, integrity, authenticity, and confidentiality of data and operating processes boost the confidence of users in these services and make the overall e-payment system more secure.²³ Therefore Subcategory 1.3.1–Risk Management comprises three indicators (table 9).

Table 9. Subcategory 1.3.1–Risk Management

	Indicators	Components
1	External Review and Internal Control	i) External review of regulatory compliance of payment service providers (PSP) ii) Implementation of internal controls
2	Cybersecurity and Operational Risk	i) Requirement for cybersecurity ii) Requirement for a contingency plan
3	Liquidity Risk	i) Requirements to ensure customers have access to funds ii) Customer usage limits

1.3.2 Consumer Protection

The consumer protection subcategory covers the protection of funds of customers using e-payments, disclosure by PSPs of complete and accurate information about all fees, terms, and conditions for using e-payments, and availability of recourse and dispute resolution mechanisms. Protection of customer funds is vital to ensure the safety and reliability of payments systems and preserve user's confidence.²⁴ It is a fundamental part of an overall financial consumer protection framework and includes arrangements covering, among others, the obligations of users and payment service providers (PSPs), fraudulent or unauthorized payments, cancellation or modification of transactions, and insurance requirements for protection of funds.²⁵ Disclosure of relevant information by the PSPs is essential for promoting transparency and enabling users to have a clear understanding of the costs associated with these services.²⁶ Timely notifications of any subsequent changes, including in policies and procedures for handling customer complaints and their data, are also important because they often involve handling sensitive personal and financial information.²⁷ These measures are essential for promoting consumers' trust and confidence in using e-payments.²⁸ Availability of recourse and dispute resolution mechanism can provide users of e-payment services with an opportunity to resolve their disputes and complaints in a timely and effective manner.²⁹ These mechanisms play an important role in preventing customer abuse and motivating PSPs to address operational weaknesses that may result in low-quality service.³⁰ They also boost consumer confidence and trust, and enable new and existing customers alike to exercise their rights effectively.³¹ Therefore, Subcategory 1.3.2–Consumer Protection comprises six indicators (table 10).

Table 10. Subcategory 1.3.2–Consumer Protection

	Indicators	Components
1	Obligations of User and Payment Service Provider (PSP)	i) Limits on use of payment instrument and access to payment accounts ii) Obligations of user in relation to payment instrument and security credentials iii) PSP verifies the identity of a payment service user (authentication) prior to the execution of payment transaction
2	Cancellation of Erroneous Transactions, Protection of Funds held by Non-Bank PSPs and Liability of Unauthorized Payments	i) Allow for cancellation or modification of payment transaction by payer unilaterally up to processing time ii) Protection of customer funds held with non-bank PSPs iii) Insurance requirements of customer funds held by non-bank PSPs iv) Requirement for notification about suspicious activity v) Requirement to rectify unauthorized or incorrectly executed transactions vi) General provisions on liability for fraud vii) PSP's liability for unauthorized payments viii) Payer's liability for unauthorized payment
3	Disclosure of Fees and Notification of Fee Changes	i) Disclosure of all fees for use of e-payment ii) Notify user about changes in fees
4	Disclosure of Liability, Use of Data, and Dispute Mechanisms	i) Disclosure of liability ii) Disclosure of use of customer data iii) Written policies for complaints handling procedures iv) General terms of services
5	Disputing a Transaction	i) Time limit in which payment can be disputed ii) PSP to acknowledge receipt of dispute notice

		iii) Recipient continues collecting undisputed charges while a dispute is pending resolution
6	Availability of Dispute Mechanisms	i) PSP to have independent unit in charge of dispute resolution ii) Requirement to make available dispute resolution mechanism iii) Availability of independent governmental authority as a resort for disputes that were not resolved internally

Note: PSP = Payment Service Provider.

1.3.3 Interoperability of Payment Systems and Promotion of Competition

Payment system interoperability allows participants to conduct, clear, and settle payments across systems without participating in multiple systems.³² The interoperability of payment systems can promote competition, reduce costs, enable economies of scale for PSPs, and enhance convenience for users of payment services.³³ Similarly, promoting market competition is vital for facilitating the entrance of new players and innovation of products, enhancing the quality and efficiency of available services, and reducing prices.³⁴ Interoperability and promotion of competition can play a critical role in meeting the needs of unserved and underserved firms/users. Therefore, Subcategory 1.3.3–Interoperability of Payment Systems and Promotion of Competition comprises three indicators (table 11).

Table 11. Subcategory 1.3.3–Interoperability of Payment Systems and Promotion of Competition

	Indicators	Components
1	Interoperability of Payment Systems	i) Level and extent of interoperability characterized in the jurisdiction
2	Fair Competition	i) Fair competition provisions ii) Rules and procedures for registration applied for all new payment service providers
3	Equal Access and Treatment of Different PSPs	i) Providing new PSPs equal access to market as existing participants ii) Functional requirements for PSP

Note: PSPs = Payment Service Providers.

2. PILLAR II. ACCESSIBILITY OF INFORMATION IN CREDIT INFRASTRUCTURE

Table 12 shows the structure for Pillar II, Accessibility of Information in Credit Infrastructure. Each of this pillar's categories and subcategories will be discussed in more detail in the order shown in the table (table 12).

Table 12. Pillar II–Accessibility of Information in Credit Infrastructure

2.1	Operation of Credit Bureaus and Registries
2.1.1	Data Coverage
2.1.2	Types of Data Collected and Shared
2.1.3	Additional Services and Borrower's Access to Information
2.2	Operation of Collateral Registries
2.2.1	Existence of a Centralized and Publicly Available Registry
2.2.2	Notice-Based Registry Updates
2.2.3	Autonomy of Secured Creditors to Access and Update the Registry

2.1 Operation of Credit Bureaus and Registries

Category 2.1 is divided into three subcategories consisting of several indicators, each of which may, in turn, consist of several components.

2.1.1 Data Coverage

In today's interconnected world, access to comprehensive and accurate data is crucial for informed decision-making, risk assessment, and crisis management. Credit Bureaus and Registries report the number of borrowers (individuals and firms) listed in a credit agency's database, with information on their

borrowing history. Accurate, transparent and shared data enables better understanding of consumer behavior and market trends. With the increasing complexity of global financial systems, the need for reliable data sharing and collaboration is more pressing than ever. Therefore, Subcategory 2.1.1–Data Coverage comprises one indicator (table 13).

Table 13. Subcategory 2.1.1–Data Coverage

	Indicators	Components
1	Data Coverage	i) Data on firms and individuals are shared ii) Data from alternative sources are shared in addition to data from financial institutions iii) Cross-border information sharing iv) Crisis reporting

2.1.2 Types of Data Collected and Shared

The scope of data collected and shared is crucial in determining the effectiveness of credit reporting systems to maintain a comprehensive and accurate picture of creditworthiness. Credit Bureaus and Registries collect information on the creditworthiness of borrowers in the financial system and facilitate the exchange of credit information among creditors.³⁵ This improves the efficiency of the lending process by reducing information asymmetries.³⁶ Therefore, Subcategory 2.1.2–Types of Data Collected and Shared comprises one indicator (table 14).

Table 14. Subcategory 2.1.2–Types of Data Collected and Shared

	Indicators	Components
1	Types of Data Collected and Shared	i) Both positive credit information and negative information are shared ii) At least two years of historical data are shared iii) Data on loan amounts below 1% of income per capita are shared

2.1.3 Additional Services and Borrower’s Access to Information

Access to information empowers borrowers to take control of their finance through credit scores and credit reports. It also enables lenders to better understand lending risks associated with each potential borrower.³⁷ This can promote access to finance for borrowers and contribute to the stability of the financial sector. Therefore, Subcategory 2.1.3–Additional Services and Borrower’s Access to Information comprises one indicator (table 15).

Table 15. Subcategory 2.1.3–Additional Services and Borrower’s Access to Information

	Indicators	Components
1	Additional Services and Borrower’s Access to Information	i) By law, borrowers have the right to access online their data in the largest credit bureau or registry in the economy ii) Banks and other financial institutions have online access to credit information iii) Bureau or registry credit scores are offered as a value-added service iv) Borrower’s credit information are verified in practice

2.2 Operation of Collateral Registries

Category 2.2 consists of three subcategories divided in several indicators, each of which may, in turn, consist of several components.

2.2.1 Existence of a Centralized and Publicly Available Registry

Collateral registries are publicly available databases of security interests in movable assets by incorporated and nonincorporated entities. They support the legal framework of security rights in movable assets by facilitating awareness of both their existence and establishing priority based on the time of registration.³⁸ A centralized collateral registry allows for the consolidation of all security interests registrations within the economy in a single location or single database. By centralizing the collateral registry and allowing registry access to the wide public, records become available to all parties, enabling them to determine whether a

security interest already exists over a firm's or individual's movable assets. With this information, anyone can take measures to protect themselves against any potential priority risks that may affect their prospective or existing rights.³⁹ Therefore, Subcategory 2.2.1–Existence of a Centralized and Publicly Available Registry comprises one indicator (table 16).

Table 16. Subcategory 2.2.1–Existence of a Centralized and Publicly Available Registry

	Indicators	Components
1	Existence of a Centralized and Publicly Available Registry	<ul style="list-style-type: none"> i) Registry is operational ii) Registry is centralized or linked among different geographic regions iii) Registration of non-possessory security interest required iv) Registry is open to all types of borrowers or creditors v) If there are different registries per province for different types of debtors, the same rules for the creation of the non-possessory security interest and for third-party effectiveness should apply vi) If there are different registries per province for different types of assets, the same rules for the creation of the non-possessory security interest and for third-party effectiveness should apply vii) Anyone can access the data in the registry without restriction from any geographic location in the economy viii) Registry has an online database searchable by debtor's name or unique identifier ix) Registry can be consulted by a serial number of the collateral

2.2.2 Notice-Based Registry Updates

As opposed to a document-based registry, a notice-based registration system for security interests provides notice that the secured creditor may have a security right in the registered assets. This notice includes only certain information about the security right. Thus, the security agreement creating the security right is not registered and its validity and content are not verified by the system or by a clerk at the registry. A notice-based system significantly reduces the registration burden on secured creditors and provides a highly efficient and cost-effective registration and searching process. It also contributes to keeping low the administrative costs of the registry.⁴⁰ Therefore, Subcategory 2.2.2–Notice-Based Registry Updates comprises one indicator (table 17).

Table 17. Subcategory 2.2.2–Notice-Based Registry Updates

	Indicators	Components
1	Notice-Based Registry Updates	<ul style="list-style-type: none"> i) Registry is notice-based ii) Registry does not verify the legality of the transaction iii) Registry does not verify the correctness of the information iv) Registry covers all types of security interests in movable assets

2.2.3 Autonomy of Secured Creditors to Access and Update the Registry

Allowing all types of secured creditors direct access to the computerized collateral registry system without registry personnel intervention ensures a more efficient, cost-effective, and user-friendly system for all parties involved.⁴¹ To maintain efficiency and reduce costs, scrutiny by registry personnel should not be required for registration or searches. Thus, the registry should be computerized to allow direct electronic access to its users. This direct client access greatly reduces operational and maintenance costs while enhancing the efficiency of the registration process by giving users direct control over the timing of their registrations. Therefore, subcategory 2.2.3–Autonomy of Secured Creditors to Access and Update the Registry comprises one indicator (table 18).

Table 18. Subcategory 2.2.3–Autonomy of Secured Creditors to Access and Update the Registry

	Indicators	Components
1	Autonomy of Secured Creditors to Access and Update the Registry	<ul style="list-style-type: none"> i) All types of secured creditors can perform the registration ii) Secured creditors or their representatives can open an account online without the participation or approval of any third party

		iii) Secured creditors or their representatives can conduct registrations and searches of security interests online, without the interference of the registry iv) The collateral registry has an online system for registrations, amendments, renewals, cancellations, and searches of security interests v) Banks verify collateral registry records
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3. PILLAR III. OPERATIONAL EFFICIENCY OF RECEIVING FINANCIAL SERVICES

Table 19 shows the structure for Pillar III, Operational Efficiency of Receiving Financial Services. Each of this pillar's categories and subcategories will be discussed in more detail in the order shown in the table.

Table 19. Pillar III—Operational Efficiency of Receiving Financial Services

3.1	Loans
3.1.1	Obtaining a Loan
3.1.2	Operational Efficiency of Security Interest and Credit Data Update
3.2	e-Payments
3.2.1	Cost of e-Payments
3.2.2	Time to Receive e-Payments
3.2.3	Usage Level of e-Payments

3.1 Loans

Category 3.1 is divided into two subcategories consisting of several indicators, each of which may, in turn, have several components.

3.1.1 Obtaining a Loan

It is important for businesses to obtain financing in a timely manner to continue their operations, manage volatile cash flow, and expand. Costly and cumbersome processes to obtain financing can discourage firms from applying for and obtaining loans.⁴² Therefore, Subcategory 3.1.1—Obtaining a Loan comprises two indicators (table 20).

Table 20. Subcategory 3.1.1—Obtaining a Loan

	Indicators	Components
1	Time to Obtain a Loan	i) Time for the decision on the loan to be communicated, from the moment the application was submitted
2	Obstacles to Obtaining a Loan	i) Reasons for not applying for a loan ii) Major constraints

3.1.2 Operational Efficiency of Security Interest and Credit Data Update

Having efficient and low-cost processes for registering security interests in collateral registries and for information to be reflected in credit bureaus/registries used for credit reports are beneficial for firms as they make the process of obtaining loans less costly, less burdensome, and more efficient.⁴³ Therefore, Subcategory 3.1.2—Operational Efficiency of Security Interest and Credit Data Update comprises one indicator (table 21).

Table 21. Subcategory 3.1.2—Operational Efficiency of Security Interest and Credit Data Update

	Indicators	Components
1	Operational Efficiency of Security Interest and Credit Data Update	i) Time for the registration of a security interest to be reflected in the database ii) Cost to register a security interest iii) Time to include credit information in database from the moment credit reporting Service provider received such information

3.2 e-Payments

Category 3.2 is divided into three subcategories consisting of several indicators, each of which may, in turn, have several components.

3.2.1 Cost of e-Payments

Having access to electronic payments is a benefit to firms as they provide them with the opportunity to reach more customers, provide them with convenient payment experience, expand their business and enhance transparency of transactions. For firms to reap these benefits, it is essential that e-payments are inexpensive.⁴⁴ Subcategory 3.2.1–Cost of e-Payments comprises two indicators (table 22).

Table 22. Subcategory 3.2.1–Cost of e-Payments

	Indicators	Components
1	Cost of Receiving e-Payments	Cost to accept e-payment, as a percentage of transaction value
2	Cost of Making e-Payments	Cost to make e-payment, as a percentage of transaction value

3.2.2 Time to Receive e-Payments

For firms to reap the benefits detailed under 3.2.1 above, it is essential that e-payments are also fast.⁴⁵ Subcategory 3.2.2–Time to Receive e-Payments comprises one indicator (table 23).

Table 23. Subcategory 3.2.2–Time to receive e-Payments

	Indicators	Components
1	Time to Receive e-Payments	Time to receive money through e-payment from when an order is placed

3.2.3 Usage Level of e-Payments

Efficient e-payment processing combined with safety and flexibility is also reflected in a higher level of usage in both making and receiving payments. Subcategory 3.2.3–Usage Level of e-Payments comprises two indicators (table 24).

Table 24. Subcategory 3.2.3–Usage level of e-Payments

	Indicators	Components
1	Usage Level for Receiving e-Payments	Percentage of monthly sales received electronically
2	Usage Level for Making e-Payments	Percentage of monthly payments done electronically

III. DATA SOURCES

4.1 Data Collection Sources

The data for Pillar I and part of Pillar II are collected through consultations with private sector experts. The data for part of Pillar III related to the operational efficiency of security interest and credit data update, are also collected through consultations from private sector experts. Information related to credit registries (in Pillar II) is collected through public sector experts in economies where credit registries exist, in addition to the information collected through credit bureaus if they exist in the economy. Experts for the Financial Services topic vary depending on the area measured, and include financial lawyers and practitioners in commercial banking, payment services providers, financial services providers, credit bureaus, credit registries, and notaries.

The data for Pillar III are mostly collected through Enterprise Surveys. Enterprise Surveys provide representative data on operational efficiency for loans and e-payments experienced by businesses in practice. A representative sample of companies captures variation of user experience within each economy. Businesses with different characteristics, such as size, region, and sector, participate in the surveys. For more details on the collection of data by the Enterprise Surveys, please refer to the Overview chapter of this Methodology Handbook.

4.2 Screening and Selection of Experts

The Financial Services topic has four questionnaires, one for each area: Commercial Lending; Secured Transactions and Operation of Collateral Registries; e-Payments; Operation of Credit Bureaus and Registries. Each questionnaire targets experts in their respective areas of expertise. In order to select potential experts to participate in the questionnaires, screener questionnaires have been developed (table 25).

Table 25. Screener Questionnaire and Respondent Criteria

Relevant Experts' Professions	
Commercial Lending	Lawyers, financial professionals, researchers in financial services, commercial banks, financial institutions
Secured Transactions	Lawyers and commercial banks
e-Payments	Financial lawyers, commercial banks, payment service providers, researchers in financial services
Credit Bureaus and Registries	Operational private credit bureaus and public registries
Relevant Areas of Specialization	
Commercial Lending	Legal experts in Know Your Customer (KYC) process and regulatory requirements for AML/CFT, compliance, legal and risk departments in financial institutions (banks, lending institutions), identity and background verification service companies
Secured Transactions	Law degree with a focus in banking or finance, currently working in a transactional law firm or the legal department of a commercial bank, in addition to notaries
e-Payments	Legal experts in electronic payments, fintech, financial regulations pertaining to payment service providers
Credit Bureaus and Registries	Experts in economics, banking and finance, accounting, business administration, law, or any related fields –currently working in credit reporting industry (credit bureau/registry)
Assessment of the Experts' Knowledge and Experience Related to Commercial Lending, Secured Transactions, e-Payments, and Credit Information	
Commercial Lending	Experience in the banking and financial sector, notably in KYC handling, opening of accounts, lending to customers, or experience in customer identity verification, compliance, undergoing a KYC process, gathering of customer data, customer due diligence, risk evaluation (AML/CFT). Experience in the banking and financial sector laws and regulations pertaining to customer due diligence.
Secured Transactions	Financial or banking lawyers specialized in commercial lending and secured transactions regulations.
e-Payments	Experience in financial law, payment services, payment systems, electronic payments law, banking law, etc.
Credit Bureaus and Registries	Experience in gathering and reporting credit information data of customers (firms and individuals), business administration and information management.

Note: AML/CFT = Anti-Money Laundering/Combating the Financing of Terrorism; KYC = Know Your Customer.

Thus, the information provided in the screener questionnaires allows the team to better understand the experts' professions, areas of specializations and experts' knowledge or experience related to commercial lending, secured transactions, e-payments, and credit bureaus and registries. Ultimately, this will allow the team to select the experts to respond to the relevant questionnaires.

IV. PARAMETERS

To ensure comparability of the data from expert consultations across economies, the Financial Services topic uses general parameters. A parameter refers to an assumption that is made about the business location and the type of transactions. Questionnaire respondents are presented with these parameters and assumptions and asked to evaluate a standardized scenario that permits comparability across locales, jurisdictions, and economies.

5.1 General Parameters

Many economies have subnational jurisdictions, which require a business location to be specified in order for experts to identify the relevant regulatory framework to be assessed. In addition, it is important to specify the type of transactions as these are relevant for experts to identify the appropriate regulations.

5.1.1 Business Location

Justification:

Geographic location determines the regulations that govern the financial services available to firms and businesses. In addition, it is important to determine the geographical location from a practical standpoint, to identify experts from whom data on regulatory frameworks and practical implementations are collected. The largest city is chosen based on the population size as detailed in the Overview chapter of this Methodology Handbook.

Application:

For Pillar I, the parameter is used in cases where regulations are not applicable at a national level, varying across states or regions. For the economies where regulations differ across states, regulations for the largest city are measured. For Pillar II and III, the location parameter is established for economies where there are several collateral registries (that is, federal systems).

5.1.2 Type of Transactions

Justification:

Type of transactions determines the regulations that govern the financial services available to firms and businesses (for example, domestic versus cross-border transactions). In order to limit the scope of what is measured by the topic, and for experts to identify the relevant regulatory framework to be assessed, the topic focuses on domestic commercial transactions only.

Application:

For Pillar I, the parameter is used in cases where regulations are different across different types of transactions. For the economies where regulations differ across types of transactions, regulations for domestic commercial transactions are measured. For Pillars II and III, the transactions measured are limited to a commercial loan/transaction.

V. TOPIC SCORING

The Financial Services topic has three pillars: Pillar I–Quality of Regulations for Financial Services; Pillar II–Accessibility of Information in Credit Infrastructure; and Pillar III–Operational Efficiency of Receiving Financial Services. The total points for each pillar are further rescaled to values from 0 to 100, and subsequently aggregated into the total topic score. Each pillar contributes one-third to the total topic score. Table 26 shows the scoring for the Financial Services topic. The scores distinguish between benefits to the firm (captured as firm flexibility points) and benefits to society’s broader interests (captured as social benefits points). For further scoring details please see Annex A, which complements this category.

Table 26. Aggregate Scoring Overview

Pillar Number	Pillar	Number of Indicators	Score			Rescaled Points (0-100)	Weight
			Firm Flexibility Points	Social Benefits Points	Total Points		
I	Quality of Regulations for Financial Services	23	21	23	44	100.00	0.33
II	Accessibility of Information in Credit Infrastructure	6	6	6	12	100.00	0.33
III	Operational Efficiency of Receiving Financial Services	8	100	n/a	100	100.00	0.33

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent).

6.1 Pillar I–Quality of Regulations for Financial Services

Pillar I covers 23 indicators with a total score of 44 points (21 points on firm flexibility and 23 points on social benefits) (table 27). The scoring for each category under this pillar is as follows:

- 6.1.1** *Commercial Lending* has 4 indicators with a total maximum score of 6 points (2 points on firm flexibility and 4 points on social benefits). Specifically, the *Customer Due Diligence (CDD) and Risk Factors* Subcategory has 1 indicator; the *Record Keeping of Customer Information* Subcategory has 1 indicator; and the *Availability of Enhanced and Simplified CDD Measures* Subcategory has 2 indicators. A regulatory framework that follows good practices for customer due diligence for commercial lending benefits society (social benefits) and sometimes firms (firm flexibility). Hence, scores are not equally assigned to both categories.
- 6.1.2** *Secured Transactions* has 7 indicators with a total maximum score of 14 points (7 points on firm flexibility and 7 points on social benefits). Specifically, the *Integrated Legal Framework for Secured Transactions* Subcategory has 1 indicator; the *Types of Movable Assets, Debts, and Obligations that Can Be Secured* Subcategory has 4 indicators; and the *Priority/Enforcement of Security Interests* Subcategory has 2 indicators. A regulatory framework that follows good practices for secured transactions benefits society (social benefits) and firms (firm flexibility). Hence, scores are equally assigned to both categories.
- 6.1.3** *e-Payments* has 12 indicators with a total maximum score of 24 points (12 points on firm flexibility and 12 points on social benefits). Specifically, the *Risk Management* Subcategory has 3 indicators; the *Consumer Protection* Subcategory has 6 indicators; and the *Interoperability and Promotion of Competition* Subcategory has 3 indicators. A regulatory framework that follows good practices for e-payments benefits society (social benefits) and firms (firm flexibility). Hence, scores are equally assigned to both categories.

Table 27. Aggregate Scoring Pillar I

Pillar I–Quality of Regulations for Financial Services		No. of Indicators	FFP	SBP	Total Points	Rescaled Points
1.1	Commercial Lending	4	2	4	6	20.00
1.1.1	Customer Due Diligence (CDD) and Risk Factors	1	n/a	1	1	10.00
1.1.2	Record Keeping of Customer Information	1	1	1	2	5.00
1.1.3	Availability of Enhanced and Simplified CDD Measures	2	1	2	3	5.00
1.2	Secured Transactions	7	7	7	14	40.00
1.2.1	Integrated Legal Framework for Secured Transactions	1	1	1	2	10.00
1.2.2	Types of Movable Assets, Debts and Obligations that Can Be Secured	4	4	4	8	20.00

1.2.3	Priority/Enforcement of Security Interests	2	2	2	4	10.00
1.3	e-Payments	12	12	12	24	40.00
1.3.1	Risk Management	3	3	3	6	10.00
1.3.2	Consumer Protection	6	6	6	12	20.00
1.3.3	Interoperability of Payment Systems and Promotion of Competition	3	3	3	6	10.00
	Total	23	21	23	44	100.00

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent).
CDD = Customer Due Diligence; FFP = Firm Flexibility Point; SBP = Social Benefits Point.

6.2 Pillar II–Accessibility of Information in Credit Infrastructure

Pillar II covers 6 indicators with a total score of 12 points (6 points on firm flexibility and 6 points on social benefits) (table 28). The scoring for each category under this pillar is as follows:

- 6.2.1** *Operation of Credit Bureaus and Registries* has 3 indicators with a total maximum score of 6 points (3 points on firm flexibility and 3 points on social benefits). The *Data Coverage*, *Types of Data Collected and Shared*, and *Additional Services and Borrower's Access to Information* features can facilitate access to finance for firms and contribute to stability of the financial sector. Because these measures directly affect firms and society, scores are equally assigned for firm flexibility and social benefits.
- 6.2.2** *Operation of Collateral Registries* has 3 indicators with a total maximum score of 6 points (3 points on firm flexibility and 3 points on social benefits). Specifically, the *Existence of a Centralized and Publicly Available Registry*, *Notice-Based Registry Updates*, and *Autonomy of Secured Creditors to Access and Update the Registry* features make registries more transparent, cheaper, and have more expedited procedures. Thus, these indicators are equally scored as a benefit for both firms as well as society.

Table 28. Aggregate Scoring Pillar II

Pillar II–Accessibility of Information in Credit Infrastructure		No. of Indicators	FFP	SBP	Total Points	Rescaled Points
2.1	Operation of Credit Bureaus and Registries	3	3	3	6	50.00
2.1.1	Data Coverage	1	1	1	2	16.67
2.1.2	Types of Data Collected and Shared	1	1	1	2	16.67
2.1.3	Additional Services and Borrower's Access to Information	1	1	1	2	16.67
2.2	Operation of Collateral Registries	3	3	3	6	50.00
2.2.1	Existence of a Centralized and Publicly Available Registry	1	1	1	2	16.67
2.2.2	Notice-Based Registry Updates	1	1	1	2	16.67
2.2.3	Autonomy of Secured Creditors to Access and Update the Registry	1	1	1	2	16.67
	Total	6	6	6	12	100.00

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

6.3 Pillar III–Operational Efficiency of Receiving Financial Services

Pillar III covers 8 indicators with scores ranging from 0 to 100 (table 29). The scores on indicators under this pillar are assigned to firm flexibility only, as the indicators measure the outcomes of service provision to firms. For example, high fees, complex processes, and long times to obtain financial services have adverse impacts on firms, thus hampering firm flexibility. The scoring for each category under this pillar is as follows:

- 6.3.1** *Loans* has 3 indicators with a total maximum score of 50 points. Specifically, the *Obtaining a Loan* Subcategory has 2 indicators, and the *Operational Efficiency of Security Interest and Credit Data Update* Subcategory has 1 indicator.
- 6.3.2** *e-Payments* has 5 indicators with a total maximum score of 50 points. Specifically, the *Cost of e-Payments* Subcategory has 2 indicators, the *Time to Receive e-Payments* Subcategory has 1 indicator, and the *Usage Level of e-Payments* Subcategory has 2 indicators.

Table 29. Aggregate Scoring Pillar III

Pillar III—Operational Efficiency of Receiving Financial Services		No. of Indicators	Rescaled Points
3.1	Loans	3	50.00
3.1.1	Obtaining a Loan	2	40.00
3.1.2	Operational Efficiency of Security Interest and Credit Data Update	1	10.00
3.2	e-Payments	5	50.00
3.2.1	Cost of e-Payments	2	20.00
3.2.2	Time to Receive e-Payments	1	10.00
3.2.3	Usage Level of e-Payments	2	20.00
Total		8	100.00

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- ¹⁴ BCBS (2014); FATF (2012–2023); Joint Committee of the European Supervisory Authorities (2017).
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- ¹⁷ UNCITRAL (2010, 2019). Terminology and Interpretation: “Intangible assets” means all types of movable assets other than tangible assets and includes incorporeal rights, receivables and rights to the performance of obligations other than receivables. “Movable asset” means a tangible or intangible asset, other than immovable property.
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- ¹⁹ UNCITRAL (2010, 2019).
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- ²³ OCC (2021); World Bank (2016).
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- ³⁴ World Bank (2016, 2020b).
- ³⁵ Credit bureaus and registries differ in terms of their ownership, with the former generally being privately owned companies and the latter established by the government in the majority of cases, usually under the management of the central bank or the banking supervision authority. Regardless of the ownership structure, as credit reporting service providers, both types of organizations can serve the same role by providing information on borrower’s histories that assist creditors in their lending decisions.
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- ⁴² Beck, Demirguc-Kunt, and Maksimovic (2005).
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ANNEX A. FINANCIAL SERVICES-SCORING SHEET

This document outlines the scoring approach for the Financial Services topic. For every indicator, a Firm Flexibility Point (FFP) and/or a Social Benefits Point (SBP) are assigned, along with a clarification on the detailed scoring for each such indicator and a note on the relevant background literature.

PILLAR I-QUALITY OF REGULATIONS FOR FINANCIAL SERVICES					
1.1 COMMERCIAL LENDING					
1.1.1 Customer Due Diligence (CDD) and Risk Factors					
Indicators	FFP	SBP	Total Points	Rescaled Points	Background Literature
Legal Requirement to Conduct CDD, Availability of Risk-Based Approach (including a risk-based approach for AML/CFT review) and Risk factors Considered for Assessment (including risk factors associated with the customer (for example, beneficial owner, ownership structure, involvement in international structure, nominee shareholders or shares in bearer forms, business relationship conducted in unusual circumstances, cash intensive business, high-risk geographical location) and risk factors associated with product, service, delivery channel (for example, private banking, anonymous transactions, payments received from unknown sources, non-face-to-face relation and transactions, operations in high-risk geographical location))	n/a	1	1	10.00	BCBS (2014); European Supervisory Authorities (2013); FATF (2014)
Total Points for Subcategory 1.1.1	0	1	1	10.00	
1.1.2 Record Keeping of Customer Information					
CDD for Existing Customers and Record Keeping (including reliance on CDD for existing customers, CDD undertaken by other institutions, maintaining CDD information for a period of 5 years and maintaining CDD information up to date for high-risk clients)	1	1	2	5.00	BCBS (2014); European Supervisory Authorities (2013); FATF (2014, 2020)
Total Points for Subcategory 1.1.2	1	1	2	5.00	
1.1.3 Availability of Enhanced and Simplified CDD Measures					
Simplified CDD (including availability of simplified AML/CFT review for low-risk clients and the availability of guidance on low-risk)	1	1	2	3.33	BCBS (2014); European Supervisory Authorities (2013); FATF (2014)
Enhanced CDD (including availability of enhanced AML/CFT review for high-risk clients and the availability of guidance on high-risk)	n/a	1	1	1.67	BCBS (2014); European Supervisory Authorities (2013); FATF (2014)

Total Points for Subcategory 1.1.3	1	2	3	5.00	
Total Points for Category 1.1	2	4	6	20.00	
1.2 SECURED TRANSACTIONS					
1.2.1 Integrated Legal Framework for Secured Transactions					
Integrated Legal Framework for Secured Transactions	1	1	2	10.00	UNCITRAL (2010, 2019)
Total Points for Subcategory 1.2.1	1	1	2	10.00	
1.2.2 Types of Movable Assets, Debts, and Obligations that Can Be Secured					
Security Interest in One Category of Movable Assets	1	1	2	5.00	UNCITRAL (2010, 2019)
Security Interest in Combined Category of Movable Assets	1	1	2	5.00	UNCITRAL (2010, 2019)
Security Interest over Future Assets	1	1	2	5.00	UNCITRAL (2010, 2019)
Debts and Obligations	1	1	2	5.00	UNCITRAL (2010, 2019)
Total Points for Subcategory 1.2.2	4	4	8	20.00	
1.2.3 Priority/Enforcement of Security Interests					
Priority of Claims Outside of Insolvency or Bankruptcy	1	1	2	5.00	UNCITRAL (2010, 2019)
Enforcement of Security Interests	1	1	2	5.00	UNCITRAL (2010, 2019)
Total Points for Subcategory 1.2.3	2	2	4	10.00	
Total Points for Category 1.2	7	7	14	40.00	
1.3 E-PAYMENTS					
1.3.1 Risk Management					
External Review and Internal Control	1	1	2	3.33	OCC (2021); World Bank (2016, 2020)
Cybersecurity and Operational Risk	1	1	2	3.33	OCC (2021); World Bank (2016, 2020)
Liquidity Risk	1	1	2	3.33	OCC (2021); World Bank (2016, 2020)
Total Points for Subcategory 1.3.1	3	3	6	10.00	
1.3.2 Consumer Protection					
Obligations of User and Payment Service Provider (PSP)	1	1	2	3.33	EU Second Payment Services Directive 2015/2366 (2015); World Bank (2016, 2020); World Bank Group (2017)
Cancellation of Erroneous Transactions, Protection of Funds Held by Non-Bank PSPs and Liability of Unauthorized Payments	1	1	2	3.33	EU Second Payment Services Directive 2015/2366 (2015); World Bank (2020); World Bank Group (2017, 2019b)

Disclosure of Fees and Notification of Fee Changes	1	1	2	3.33	World Bank (2016, 2020); World Bank Group (2017)
Disclosure of Liability, Use of Data, and Dispute Mechanisms	1	1	2	3.33	World Bank (2016, 2020); World Bank Group (2017)
Disputing a Transaction	1	1	2	3.33	World Bank (2016, 2020); World Bank Group (2017)
Availability of Dispute Mechanisms	1	1	2	3.33	World Bank (2016, 2020); World Bank Group (2017)
Total Points for Subcategory 1.3.2	6	6	12	20.00	
1.3.3 Interoperability of Payment Systems and Promotion of Competition					
Interoperability of Payment Systems	1	1	2	3.33	Boar et al. (2021); Resendiz (2018); World Bank (2020)
Fair Competition	1	1	2	3.33	World Bank (2016, 2020)
Equal Access and Treatment of Different PSPs	1	1	2	3.33	World Bank (2016, 2020)
Total Points for Subcategory 1.3.3	3	3	6	10.00	
Total Points for Category 1.3	12	12	24	40.00	
Total Points for Pillar I	21	23	44	100.00	

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent). AML/CFT = Anti-Money Laundering/Combating the Financing of Terrorism; CDD = Customer Due Diligence; FFP = Firm Flexibility Point; SBP = Social Benefits Point.

PILLAR II–ACCESSIBILITY OF INFORMATION IN CREDIT INFRASTRUCTURE					
2.1 OPERATION OF CREDIT BUREAUS AND REGISTRIES**					
** If the credit bureau or registry is not operational or covers less than 5 percent of the adult population (age 15 to 64), the score is 0. In the case where the bureau or registry is operational but does not distribute credit report by the cut-off date for B-READY, the score is also 0.					
Indicators	FFP	SBP	Total Points	Rescaled Points	Background Literature
Data Coverage (including coverage of data for firms and individuals, data from financial institutions and alternative sources, and data sharing across border and use of technical reporting codes to identify crises-related data)	1	1	2	16.67	Giannetti and Jentzsch (2013); Martinez Peria and Singh (2014); World Bank (2019a); World Bank Group (2011)
Types of Data Collected and Shared (including sharing of both positive and negative information, sharing at least two years of historical data and sharing data on loan amounts below 1% of income per capita)	1	1	2	16.67	World Bank (2019a); World Bank Group (2011)
Additional Services and Borrower's Access to Information (including borrowers having the right to access their data, banks and other financial institutions having online access to credit information, bureaus/registry offer credit scores as a value-added service and borrower's credit information are reviewed in practice)	1	1	2	16.67	World Bank (2019a); World Bank Group (2011)
Total Points for Category 2.1	3	3	6	50.00	
2.2 OPERATION OF COLLATERAL REGISTRIES					
Existence of a Centralized and Publicly Available Registry	1	1	2	16.67	UNCITRAL (2010, 2014, 2019)
Notice-Based Registry Updates	1	1	2	16.67	UNCITRAL (2010, 2014, 2019)
Autonomy of Secured Creditors to Access and Update the Registry	1	1	2	16.67	UNCITRAL (2010, 2014, 2019)
Total Points for Category 2.2	3	3	6	50.00	
Total Points for Pillar II	6	6	12	100.00	

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

PILLAR III-OPERATIONAL EFFICIENCY OF RECEIVING FINANCIAL SERVICES					
3.1 LOANS					
3.1.1 Obtaining a Loan					
Indicators	FFP	SBP	Total Points	Rescaled Points	Background Literature
Time to Obtain a Loan	40	n/a	40	20.00	Beck, Demirgüç-Kunt, and Maksimovic (2005)
Obstacles to Obtaining a Loan	40	n/a	40	20.00	Beck, Demirgüç-Kunt, and Maksimovic (2005)
3.1.2 Operational Efficiency of Security Interest and Credit Data Update					
Operational Efficiency of Security Interest and Credit Data Update	20	n/a	20	10.00	UNCITRAL (2010, 2014, 2019); World Bank Group (2011, 2019a)
Total Points for Category 3.1	100	n/a	100	50.00	
3.2 E-PAYMENTS					
3.2.1 Cost of e-Payments					
Cost of Receiving e-Payments	20	n/a	20	10.00	World Bank (2021)
Cost of Making e-Payments	20	n/a	20	10.00	World Bank (2021)
3.2.2 Time to Receive e-Payments					
Time to Receive e-Payments	20	n/a	20	10.00	World Bank (2021)
3.2.3 Usage Level of e-Payments					
Usage Level for Receiving e-Payments	20	n/a	20	10.00	World Bank (2021)
Usage Level for Making e-Payments	20	n/a	20	10.00	World Bank (2021)
Total Points for Category 3.2	100	n/a	100	50.00	
Total Points for Pillar III	100	n/a	100	100.00	

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent). FFP = Firm Flexibility Point; SBP = Social Benefits Point.

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ANNEX B. FINANCIAL SERVICES–ANNOTATED QUESTIONNAIRE

Annex B consists of a Glossary and Annotated Questionnaires for Commercial Lending, Secured Transactions and Collateral Registries, Electronic Payments (e-payments), and Operation of Credit Bureaus and Registries. The Annotated Questionnaires provide the mapping between each indicator and the corresponding question(s). Due to the presence of multiple questionnaires, the numbering of categories in the Annotated Questionnaire does not match the numbering in the main chapter of the Financial Services Methodology Note.

Glossary

Arrears: Obligations that have not been paid by their due date, meaning, an overdue payment.

Assignment of receivables: The creation of a security right in a receivable that secures the performance of an obligation. Although outright transfers of receivables are transfers not intended to secure an obligation, for convenience of reference the term is included in the assignment of receivables. Example: A company/individual assigns or sells outright its accounts receivable to a lending company in return for a loan. The lending company is repaid from the receivables.

Collateral registry: Also called Security Rights Registry under UNCITRAL Guide on the Implementation of a Security Rights Registry, means the economy's system for receiving, storing, and making accessible to the public certain information about security rights in movable assets.

Credit bureau: A private firm or nonprofit organization that maintains a database on the creditworthiness of borrowers (individuals or firms) in the financial system and facilitates the exchange of credit information among creditors.

Credit registry: A database managed by the public sector, usually by the central bank or the superintendent of banks that collects information on the creditworthiness of borrowers (individuals or firms) in the financial system and facilitates the exchange of credit information among banks and other regulated financial institutions (while their primary objective is to assist banking supervision).

Credit score: A number assigned to a borrower based on the borrower's ability and capacity to repay debt. It also captures the creditworthiness of borrowers. Credit scores are developed based on the credit bureau/registry's data, and include information pooled across many creditors and possibly some public information sources.

Crises-related data: These include data that have been collected (on borrowers) during an unstable or difficult time that could lead to a change of lending decision.

Cross border credit information sharing: The movement or transfer of information between credit bureaus/registries and financial institutions across country borders.

Customer usage limits: Types of measures put in place to mitigate the risks. Examples include per transaction and/or daily limits for users of payment services set by the operator and/or the participating payment service providers.

Default: A failure to meet a financial obligation/pay the loan when its due.

Electronic money (e-money): An electronic store of monetary value on a technical device that may be widely used for making payments to other entities other than the e-money issuer. The device acts as a prepaid bearer instrument, which does not necessarily involve bank accounts in transactions.

Electronic payment (e-payment): Sometimes also called a digital payment, means the transfer of value from one payment account to another using a digital device such as a mobile phone, POS (Point of Sales), or computer, digital channel communication such as mobile wireless data or SWIFT (Society for the Worldwide Interbank Financial Telecommunication). This definition includes payments made with bank transfers, mobile money, and payment cards including credit, debit, and prepaid cards.

Fiduciary transfer of title: A transfer of ownership for security purposes until the debt is extinguished. The debtor may retain possession of the assets. Example: A company/individual transfers the title of a machine to a bank as security for loan and expects to retrieve ownership of the machine following payment of the debt.

Financial institutions: Banks or other companies engaged in the business of dealing with financial and monetary transactions such as deposits, commercial loans, and investments. These include commercial banks, development banks, etc.

Financial lease: An agreement where the lessor receives payments to cover its ownership costs. Such an agreement creates a right in favor of the lessor over a tangible asset—that is, the object of a lease agreement—under which, at the end of the lease: (a) The lessee automatically becomes the owner of the asset that is the object of the lease; (b) The lessee may acquire ownership of the asset by paying no more than a nominal price; or (c) The asset has no more than a nominal residual value. Example: Company/individual “Lessee” agrees to lease a machine from another company “Lessor.” The lessor is usually a financial institution. The lease agreement guarantees the use of the machine and guarantees that the lessor receives regular payments from the lessee for a specified period of time.

Firm: An organization/corporation that requests a loan from a financial institution and has a history in bureau/registry.

Functional equivalents: In the functional approach to secured transactions, all rights in movable assets that are created by agreement and that secure the payment or other performance of an obligation, regardless of the type of transaction or the terminology used by the parties, are considered to be functional equivalents to traditional types of security interests. The four most common types of functional equivalents are: (1) fiduciary transfer of title; (2) financial leases; (3) assignment/transfer of receivables; and (4) sales with retention of title.

Historical data: Borrowing credit history records borrower’s ability to repay debts and demonstrated responsibility in repaying them. It also shows borrowers’ transactions and relevant financial history.

Incorporated entities: Are understood as separate legal entities incorporated through a registration process established by legislation.

Individual: A person who requests a loan from a financial institution and has a history in bureau/registry. A group of individuals (borrowers + third party + partner + sponsors) will be considered as ONE individual borrower, not firm.

Internet banking: A facility that enables customers of a financial institution to execute financial transactions electronically via the internet using a computer or another electronic device.

Mobile banking: A facility that enables customers of a financial institution to execute financial transactions electronically via the internet using a mobile phone.

Mobile money: A pay-as-you-go digital medium of exchange and store of value using mobile money accounts, facilitated by a network of mobile money agents. It is a financial service offered to its clients by a mobile network operator or another entity that partners with mobile network operators, independent of the traditional banking network.

Movable property: A tangible or intangible asset, which is not immovable property. The assessment does not include the movable properties governed by a different regime due to their nature: airplanes, boats, intellectual property, etc.

Non-incorporated entities: Are considered nonregistered partnerships, sole proprietorships, and individuals.

Non-regulated entities: These include retailers, utility companies, trade creditors, and microfinance institutions.

Payment cards: These include credit, debit, and prepaid cards.

Payment service provider (PSP): An entity that provides payment services, including remittances. PSPs include banks and other deposit-taking institutions, as well as specialized entities such as money transfer operators and e-money issuers.

Private sale: A method of selling assets in which the buyer's and seller's identities are not disclosed and the procedure may not be monitored by a government agency.

Public auction: A method of selling assets in a public forum through open and competitive bidding and under the authority of a court or a government agency.

Regulated entities: These include banks or similar financial institutions that are regulated, supervised, and subject to periodic examination by a government agency.

Repayment history: An individual's history of repaying a loan or other financial obligations, including a record of unpaid debts or outstanding credit (even individuals currently have no outstanding loans, defaults, etc.)

Restructured debts: Refinanced debt held by an individual or firm.

Retailers and merchants: These include department stores, furniture stores, car dealers, etc.

Retention of title sale: The sale of goods where the title to the goods remains vested in the seller until certain obligations (usually payment of the purchase price) are fulfilled by the buyer. Example: The title of inventory remains vested with a seller until the purchase price has been paid in full by the buyer company/individual.

Secured transaction: This refers to all transactions, irrespective of the form, that create a right in any type of movable asset to secure the performance of an obligation.

Security interest over a combined category of assets: This interest is created when a security interest is granted over all or several types of movable assets of the entire company in one security instrument.

Common law countries may allow to grant a security interest over a combined category of assets by way of a floating charge or enterprise charge. In civil law countries, this may be possible through a “*nantissement sur fond de commerce*” or “*fondo de comercio/hipoteca mercantile*.”

Utility companies: These include telecommunications, electricity, water, gas, or similar services.

COMMERCIAL LENDING QUESTIONNAIRE

The tables that follow present all indicators (including their components, if applicable) under each pillar, with a reference to the corresponding question number in parenthesis. The questions are listed before each table for ease of reference.

For Y/N questions, the Y response accounts for the score and is considered as the good practice, unless otherwise indicated with the sign “Y/N; N – good practice”.

In the tables that follow, “AND” means all referenced questions must have a good practice response to obtain a score on the indicator.

In the tables that follow, “OR” means one or more referenced questions must have a good practice response to obtain a score on the indicator.

Certain questions are marked as “not scored,” which indicates that they do not impact the score in any way. The purpose of these questions is to further inform and refine the questions design for subsequent years of the rollout, as needed, as well as to substantiate and provide further information for the scored questions.

PILLAR I–QUALITY OF REGULATIONS FOR COMMERCIAL LENDING	
Parameters	
Business Location	The largest (most populous) city in the economy. The parameter is used in cases where regulations may not be applicable at a national level and vary across states or regions.
Type of Transactions	The parameter is used in cases where regulations are different across different types of transactions. Under Pillar 1, domestic commercial loans are considered.

1.1 COMMERCIAL LENDING

1.1.1 Customer Due Diligence (CDD) and Risk Factors

- 1. Are there any legal requirements in your economy’s regulatory framework or provisions to conduct a customer due diligence (*that is, screening of customers, anti-money laundering/combating the financing of terrorism [AML/CFT] measures*) while evaluating a business loan application? (Y/N)**
- 2. If the answer to question 1 is Yes, does the regulatory framework require that upon reviewing a commercial loan application for new customer, the lender verifies: (Y/N)**
 - 2a. The company’s identity
 - 2b. The direct ownership and control structure of the corporate customer
 - 2c. The beneficial owners of the corporate customer
 - 2d. The purpose/intended use of the loan
 - 2e. The geographical location of the corporate customer
- 3. Does the economy’s regulatory framework require implementing a risk-based approach when performing a customer due diligence? (Y/N)**

Note: Risk-based approach refers to, identification, assessment, and understanding of the money laundering, terrorist financing and compliance risks, and taking the appropriate mitigation measures in accordance with the level of risk.

- 4. If the answer to question 3 is Yes, what anti-money laundering/combating the financing of terrorism (AML/CFT) risk factors are considered: (Y/N)**
 - 4a. Risk factors related to the customer's identity
 - 4b. Risk factors related to the customer's products, services, transactions, geography, or delivery channels (*that is, review that goes beyond the specific loan and involves a general review of the business activities of the applicant*)
- 5. If the answer to 4a is Yes, does the regulatory framework specify the following anti-money laundering/combating the financing of terrorism risk factors related to the identity of the customer: (Y/N)**
 - 5a. The beneficial owner of the customer
 - 5b. The ownership structure of the company appears unusual or excessively complex given the nature of the company's business
 - 5c. Applicant firm is involved in or part of an international structure (*for example, owned by a foreign holding, has foreign affiliates*)
 - 5d. The entity/vehicle is a Personal Asset Holding Vehicle (*that is, legal person or arrangement especially created to hold personal assets for investment*)
 - 5e. Companies that have nominee shareholders or shares in bearer form
 - 5f. The business relationship is conducted in unusual circumstances (*for example, significant unexplained geographic distance between the financial institution and the customer*)
 - 5g. Businesses that are cash-intensive/reliant
 - 5h. Applicant firm is located in a high-risk geographical location
 - 5i. Other (please list)
- 6. If the answer to 4b is Yes, does the regulatory framework specify anti-money laundering/combating the financing of terrorism risk factors related to the business activity of the applicant such as whether: (Y/N)**
 - 6a. The applicant is involved in private banking
 - 6b. The applicant had anonymous transactions (*for example, transactions which may include cash*)
 - 6c. Non-face-to-face business relationships or transactions are undertaken
 - 6d. Payments are received from unknown or unassociated third parties
 - 6e. The applicant operates or undertakes activities in a high-risk geographical location
 - 6f. Other (please list)

1.1.3 Availability of Enhanced and Simplified CDD Measures

- 7. Are simplified customer due diligence measures available for low-risk clients applying for commercial loans, under the economy's regulatory framework? (Y/N)**
- 8. Does the framework provide guidance on how to determine a low-risk client? (Y/N)**
- 9. Are enhanced customer due diligence measures available for high-risk clients applying for commercial loans, under the economy's regulatory framework? (Y/N)**
- 10. Does the framework provide guidance on how to determine a high-risk client? (Y/N)**

1.1.2 Record Keeping of Customer Information

11. Does the regulatory framework allow reliance on customer due diligence conducted previously for existing customers, unless there are doubts about the accuracy of that information? (Y/N)
12. Do commercial lenders in the economy rely on an e-KYC system (unified digital ID, RegTechs, third-party identity verification) when performing customer due diligence? (Y/N)
13. Does the regulatory framework require maintaining, for at least five years, all necessary records of transactions, both domestic and international, to enable them to comply swiftly with information requests from the competent authorities? (Y/N)
14. For high-risk cases, does the regulatory framework require that the commercial lender ensure that documents, data, or information collected under the customer due diligence process are kept up to date and relevant by undertaking reviews of existing records? (Y/N)

1.1 COMMERCIAL LENDING			
1.1.1 Customer Due Diligence (CDD) and Risk Factors			
Indicators	FFP	SBP	Total Points
Requirement to Conduct CDD and Risk Factors	n/a	1	1
- Legal requirement to conduct CDD (1)	n/a	0.11	0.11
- Requirement to verify purpose of loan (2d)	n/a	0.11	0.11
- Availability of risk-based approach (3)	n/a	0.11	0.11
- Customer risk factors (beneficial owner) (5a)	n/a	0.07	0.07
- Customer risk factors (ownership structure) (5b)	n/a	0.07	0.07
- Customer risk factors (involvement in international structure) (5c)	n/a	0.03	0.03
- Customer risk factors (personal asset-holding vehicles) (5d)	n/a	0.03	0.03
- Customer risk factors (nominee shareholders or shares in bearer forms) (5e)	n/a	0.07	0.07
- Customer risk factors (business relationship conducted in unusual circumstances) (5f)	n/a	0.03	0.03
- Customer risk factors (cash-intensive) (5g)	n/a	0.03	0.03
- Customer risk factors (located in high-risk geographical location) (5h)	n/a	0.07	0.07
- Product risk factors (private banking) (6a)	n/a	0.03	0.03
- Product risk factors (anonymous transactions) (6b)	n/a	0.07	0.07
- Product risk factors (non-face-to-face relation and transactions) (6c)	n/a	0.07	0.07
- Product risk factors (payments received from unknown sources) (6d)	n/a	0.03	0.03
- Product risk factors (operations in high-risk geographical location) (6e)	n/a	0.07	0.07
Total Points	0	1	1
1.1.2 Record Keeping of Customer Information			
Indicators	FFP	SBP	Total Points
CDD for Existing Customers and Record Keeping	1	1	2
- Record keeping–reliance on CDD for existing customers (11)	0.38	0.38	0.75
- Record keeping–reliance on CDD undertaken by other institutions (e-KYC) (12)	0.38	0.38	0.75
- Record keeping–maintain CDD information for period of 5 years (13)	0.12	0.12	0.25
- Record keeping–ongoing CDD for high-risk clients (14)	0.12	0.12	0.25
Total Points	1	1	2

1.1.3 Availability of Enhanced and Simplified CDD Measures			
Indicators	FFP	SBP	Total Points
Simplified CDD	1	1	2
- Simplified AML/CFT CDD review for low risk (7)	0.5	0.5	1
- Regulatory guidance to determine low risk (8)	0.5	0.5	1
Enhanced CDD	n/a	1	1
- Enhanced AML/CFT CDD review for high risk (9)	n/a	0.5	0.5
- Regulatory guidance to determine high risk (10)	n/a	0.5	0.5
Total Points	1	2	3

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent). AML/CFT = Anti-Money Laundering/Combating the Financing of Terrorism; CDD = Customer Due Diligence; FFP = Firm Flexibility Point; SBP = Social Benefits Point.

PILLAR II–ACCESSIBILITY OF INFORMATION IN CREDIT INFRASTRUCTURE	
Parameters	
Business Location	The parameter is used in cases where there may be several collateral registries in an economy (that is, federal systems). In case of multiple collateral registries, the one in the largest (most populous) city is considered.
Type of Transactions	Transactions under Pillar II consider domestic commercial loans.

15. Do the banks in your economy review credit information from the credit bureaus or credit registries upon deciding on the loan application? (Y/N)

Note: The data for this question is collected by the Customer Due Diligence in Commercial Lending questionnaire, however the response is scored in the Credit Bureaus and Registries questionnaire.

16. If the answer to question 15 is Yes, how often do the banks use this information?

Note: The data for this question is collected by the Customer Due Diligence in Commercial Lending questionnaire, however the response is scored in the Credit Bureaus and Registries questionnaire.

- 16a. Always
- 16b. Sometimes
- 16c. Rarely

17. If the answer to question 15 is No, please select the main reason why banks in your economy do not review credit information from the credit bureaus or credit registries when deciding upon a loan application: (not scored)

- 17a. There are no operational credit reporting service providers
- 17b. Credit bureaus/registries do not cover all the customers
- 17c. Information is not comprehensive, only minimal information is included
- 17d. Information is not useful
- 17e. Access is too expensive
- 17f. Credit information is not timely/relevant
- 17g. Other

18. Do banks in your economy review information from collateral registries to verify borrower's collateral registry records when a loan includes a movable asset?

Note: The data for this question is collected by the Customer Due Diligence in Commercial Lending questionnaire, however the response is scored in the Secured Transactions and Collateral Registries questionnaire.

- 18a. Yes
- 18b. No
- 18c. There are no operational collateral registries

19. How often do the banks use this information? Please select one of the options below.

Note: The data for this question is collected by the Customer Due Diligence in Commercial Lending questionnaire, however the response is scored in the Secured Transactions and Collateral Registries questionnaire.

- 19a. Always
- 19b. Sometimes
- 19c. Rarely

20. Please select the main reason why banks in your economy do not review information from collateral registries to verify borrower's collateral registry records when a loan includes a movable asset: (not scored)

- 20a. Many errors in the records
- 20b. Access is too expensive
- 20c. Other

21. Do banks in your economy review information from the collateral registries to verify borrower's collateral registry records when a loan includes an immovable asset? (not scored)

- 21a. Yes
- 21b. No
- 21c. There are no operational collateral registries

22. How often do the banks use this information? (not scored)

- 22a. Always
- 22b. Sometimes
- 22c. Rarely

23. Please select the main reason why banks in your economy do not review information from collateral registries to verify borrower's collateral registry records when a loan includes an immovable asset: (not scored)

- 23a. Many errors in the records
- 23b. Access is too expensive
- 23c. Other

24. Do banks in your economy review information from the collateral registries to verify borrower's collateral registry records when a loan includes a specialized asset? (not scored)

- 24a. Yes
- 24b. No
- 24c. There are no operational collateral registries

25. How often do the banks use this information? (not scored)

- 25a. Always
- 25b. Sometimes
- 25c. Rarely

26. Please select the main reason why banks in your economy do not review information from collateral registries to verify borrower's collateral registry records when a loan includes a specialized asset: (not scored)

- 26a. Many errors in the records
- 26b. Access is too expensive
- 26c. Other

PILLAR III—OPERATIONAL EFFICIENCY OF RECEIVING FINANCIAL SERVICES	
Type of Transaction	Transactions under Pillar III are limited to commercial loans.

The scores for Pillar III indicators are calculated using the Normal Cumulative Density Function (CDF) transformation method on a scale of 0 to 100, where 0 and 100 represent the lowest and highest possible scores, respectively. The best and worst performers are identified based on the 5th and 95th percentiles of the collected data.

Data for Pillar III on the Operational Efficiency of Receiving Financial Services are collected through firm-level surveys, through the following questions:

- 27. Time to obtain a loan:** How many days did it take from the moment the application was submitted until the decision was communicated?
- 28. Constraints to obtain a loan:** Percent of firms reporting complex procedures, unfavorable interest rates, or collateral too high as main reason for not applying for loans; and percent of firms perceiving access to finance as a constraint.

2.3 LOANS			
Indicators	FFP	SBP	Total Points
Time to obtain a loan (27)	20 (50%)	n/a	20 (50%)
Constraints to obtain a loan (28)	20 (50%)	n/a	20 (50%)
Total Points	40*	n/a	40*

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent). FFP = Firm Flexibility Point; SBP = Social Benefits Point.

* Indicator shared with Secured Transaction and Collateral Registry questionnaire, and Credit Bureaus and Registries questionnaire.

SECURED TRANSACTIONS AND COLLATERAL REGISTRIES QUESTIONNAIRE

The tables that follow present all indicators (including their components, if applicable) under each pillar, with a reference to the corresponding question number in parenthesis. The questions are listed before each table for ease of reference.

For Y/N questions, the Y response accounts for the score and is considered as good practice, unless otherwise indicated with the sign “Y/N; N – good practice”.

In the tables that follow, “AND” means all referenced questions must have a good practice response to obtain a score on the indicator.

In the tables that follow, “OR” means one or more referenced questions must have a good practice response to obtain a score on the indicator.

Certain questions are marked as “not scored,” which indicates that they do not impact the score in any way. The purpose of these questions is to further inform and refine the questions design for subsequent years of the rollout, as needed, as well as to substantiate and provide further information for the scored questions.

PILLAR I–QUALITY OF REGULATIONS FOR SECURED TRANSACTIONS	
Parameters	
Business Location	The largest (most populous) city in the economy. The parameter is used in cases where regulations may not be applicable at a national level and vary across states or regions.
Type of Transactions	The parameter is used in cases where regulations are different across different types of transactions. Under Pillar I, domestic commercial transactions are considered.

1.2 SECURED TRANSACTIONS

1.2.1 Integrated Legal Framework for Secured Transactions

- 1. Are at least 3 out of 4 functional equivalents (fiduciary transfer of title, financial lease, assignment or transfer of receivables and sales with retention of title) regulated under the same law and registered at the same registry to be enforceable against third parties? (Y/N)**
- 2. Is there a law/regulation that covers the creation, priority, and enforcement of fiduciary transfer of title? (Y/N)**
- 3. If the answer to question 2 is Yes, do fiduciary transfers of title have to be registered to be effective against third parties? (Y/N)**
- 4. Is there a law/regulation that covers the creation, priority, and enforcement of financial leases? (Y/N)**
- 5. If the answer to question 4 is Yes, do financial lease rights have to be registered to be effective against third parties? (Y/N)**

6. Is there a law/regulation that covers the creation, priority, and enforcement of assignment of receivables and outright transfer of receivables? (Y/N)
7. If the answer to question 6 is Yes, do assignments of receivables and outright transfers of receivables have to be registered to be effective against third parties? (Y/N)
8. Is there a law/regulation that covers the creation, priority, and enforcement of retention of title sales? (Y/N)
9. If the answer to question 8 is Yes, does retention of title sales have to be registered to be effective against third parties? (Y/N)
10. Are different rules regarding creation, priority, and enforcement applied if the debtor or the creditor is an incorporated or non-incorporated entity? (Y/N; N – good practice)

1.2.2 Types of Movable Assets, Debts, and Obligations that Can Be Secured

11. Can a debtor grant a secured creditor a non-possessory security interest over only its accounts receivable or the outstanding debts owed to the debtor by third parties? (Y/N)

Note: for example, the amounts that the debtor is entitled to receive from a buyer of its goods or services.

12. If the answer to question 11 is Yes, according to the law, can the accounts receivable or outstanding debts be described in general terms both in the security agreement and when the security interest is registered (for example, "all accounts receivable")? (Y/N)

13. Can a debtor grant a secured creditor a non-possessory security interest over only its inventory? (Y/N)

14. If the answer to question 13 is Yes, are there any major restrictions or requirements prescribed by law when using inventory as security? (Y/N; N – good practice)

Note: for example, preserving the stipulated value of inventory, specifically describing the storage location, updating list.

15. If the answer to question 13 is Yes, according to the law, can the inventory be described in general terms both in the security agreement and when the security interest is registered? (Y/N)

Note: for example, "all laptop inventories" rather than "PXS laptop, serial number 3278632, metal-colored, 14-inch screen".

16. Can a debtor grant a secured creditor a non-possessory security interest over only its tangible movable property other than inventory? (Y/N)

Note: for example, machinery, furniture, livestock, crops, etc.

17. If the answer to question 16 is Yes, according to the law, can tangible movable property (other than inventory) be described in general terms both in the security agreement and when the security interest is registered? (Y/N)

Note: for example, "10 printers" rather than "Canon 11-Color plus Chroma Optimizer 24-inch Printer, serial # 12345".

18. According to the law, can a debtor grant a secured creditor a security interest in a combined category of assets? (Y/N)

Note: for example, a floating charge or an enterprise charge.

19. If the answer to question 18 is Yes, according to the law, is there a limitation on the assets that can be included in this security interest? (Y/N; N – good practice)

Note: for example, collateral is accessory to a mortgage, specific description of location of movables, updating of lists of collateral upon change, limit in value.

20. If the answer to question 18 is Yes, according to the law, can this collateral be described in general terms both in the security agreement and when the security interest is registered? (Y/N)

Note: for example, “all combined assets of the enterprise”.

21. Can a debtor use future assets (for example, the debtor knows that it will receive a fleet of trucks in the future and uses them as collateral) as movable assets to secure a loan? (Y/N)

22. Can a debtor use after-acquired property (for example, property that it has not yet acquired and that it may never acquire, or present and future inventory) as movable assets to secure a loan? (Y/N)

23. By law, does the security interest automatically extend to “products” of the original collateral? (Y/N)

Note: for example, if the original collateral covers raw materials, such as lumber, the products of this asset would include furniture manufactured with the raw materials.

24. By law, does the security interest automatically extend to “proceeds” of the original collateral? (Y/N)

Note: for example, if the original collateral covers raw materials, such as lumber, the proceeds will include money and receivables received from the sale of the furniture.

25. By law, does the security interest automatically extend to “replacements” of the original collateral? (Y/N)

Note: for example, if the original collateral covers raw materials, such as lumber, the replacements would be another new lumber used in a subsequent manufacturing process.

26. If the answer to question 23, or 24 or 25 is Yes, if the security interest automatically extends to “products, proceeds and replacements” of the original collateral, does it apply to security interest in one category of movable assets? (Y/N)

27. If the answer to question 23, or 24 or 25 is Yes, if the security interest automatically extends to “products, proceeds and replacements” of the original collateral, does it apply to security interests in a combined category of movable assets? (Y/N)

28. Can current and future debts and obligations be secured with a single category of movable assets? (Y/N)

29. Can current and future debts and obligations be secured with a combined category of movable assets? (Y/N)

30. Can all types of fixed debts and obligations be secured with a single category of movable assets? (Y/N)

31. Can all types of conditional debts and obligations be secured with a single category of movable assets? (Y/N)

32. Can all types of fluctuating debts and obligations be secured with a single category of movable assets? (Y/N)
33. Can all types of fixed debts and obligations be secured with a combined category of movable assets? (Y/N)
34. Can all types of conditional debts and obligations be secured with a combined category of movable assets? (Y/N)
35. Can all types of fluctuating debts and obligations be secured with a combined category of movable assets? (Y/N)
36. By law, can the obligations be described in general terms in the security agreement and when the security interest is registered? (Y/N)
Note: for example, “all obligations between the parties,” or “obligations of a debt of up to US\$1,000,000 [as in a line of credit]; the obligations will fluctuate under that threshold without requiring a new agreement every time a new obligation is created”.
37. If the answer to question 36 is No, please indicate what the description requirements are. (not scored)

1.2.3 Priority/Enforcement of Security Interests

38. Does a secured creditor have an absolute priority over all other creditor claims that were never registered or that were registered afterward before any court proceedings are initiated? Please consider this question for the security interests both in one category and a combined category of movable assets. (Y/N)
Note: that is, is the secured creditor with a pledge paid before any other possible creditor claim, such as labor wages or state taxes.
39. Please provide the priority rankings of different types of creditor claims. (not scored)
Note: Please note that since the debtor is outside any insolvency or bankruptcy procedure, the relevant articles might be found in different laws, such as the labor code or tax law.
40. Does the law allow parties to a security agreement, at the time a security interest is created, to agree to enforce the security interest outside of court if the debtor defaults? Please consider this question for the security interests both in one category and a combined category of movable assets. (Y/N)
Note: that is, upon default, may the secured party (1) take possession of the collateral or (2) sell, exchange, convert into money, collect, or otherwise enforce against the collateral privately or by auction.
41. If the answer to question 40 is Yes, can a sale of the asset take place through a public auction? (Y/N)
42. If the answer to question 40 is Yes, can a sale of the asset take place through a private sale? (Y/N)
43. If the answer to question 40 is Yes, is a “*pactum commissorium*” possible in your economy? *May the secured creditor automatically appropriate the encumbered asset upon default of the debtor?* (Y/N)

44. If the answer to question 43 is Yes, is the creditor allowed to acquire the asset as a full repayment of the debt by agreement? (Y/N)

1.2 SECURED TRANSACTIONS			
1.2.1 Integrated Legal Framework for Secured Transactions			
Indicators	FFP	SBP	Total Points
Integrated Legal Framework for Secured Transactions (option 1)	1	1	2
- Integrated legal framework and same rules apply for incorporated and non-incorporated debtors and creditors (1 AND 10) OR	1 OR	1 OR	2 OR
<i>If 1 is a No and 10 is a No, points can be assigned as follows:</i>			
- Fiduciary transfer of title and same rules apply for incorporated and non-incorporated debtors and creditors (2 AND 3)	0.12	0.12	0.25
- Financial lease agreement and same rules apply for incorporated and non-incorporated debtors and creditors (4 AND 5)	0.12	0.12	0.25
- Assignment of receivables and outright transfer of receivables and same rules apply for incorporated and non-incorporated debtors and creditors (6 AND 7)	0.12	0.12	0.25
- Retention of title sales and same rules for incorporated and non-incorporated debtors and creditors (8 AND 9)	0.12	0.12	0.25
Total Points	1	1	2
1.2.2 Types of Movable Assets, Debts and Obligations that Can Be Secured			
Indicators	FFP	SBP	Total Points
Security Interest in One Category of Movable Assets (11 AND 12 AND 13 AND 14 AND 15 AND 16 AND 17)	1	1	2
Security Interest in Combined Category of Movable Assets (18 AND 19 AND 20)	1	1	2
Security Interest over Future Assets (21 AND 22 AND 23 AND 24 AND 25 AND 26 AND 27)	1	1	2
Debts and Obligations (28 AND 29 AND 30 AND 31 AND 32 AND 33 AND 34 AND 35 AND 36)	1	1	2
Total Points	4	4	8
1.2.3 Priority/Enforcement of Security Interests			
Indicators	FFP	SBP	Total Points
Priority of Claims Outside of Insolvency or Bankruptcy (38)	1	1	2
Enforcement of Security Interests	1	1	2
- Enforcement of security interests out of court (40)			
- Availability of public auction (41)			
- Availability of private sale (42)			
- Availability of <i>pactum commissorium</i> (43 AND 44)			
<i>To obtain a score on this question, the response to 40 must be Yes, in addition to at least two out of the three available methods of enforcement (public auction, private sale and/or pactum commissorium)</i>			
Total Points	2	2	4

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

PILLAR II–ACCESSIBILITY OF INFORMATION IN CREDIT INFRASTRUCTURE	
Parameters	
Business Location	The largest (most populous) city in the economy. The parameter is used in cases where there are different collateral registries in different cities.

2.2 OPERATION OF COLLATERAL REGISTRIES

45. Is the registry in operation? (Y/N)

46. Is the collateral registry (*the database*) either centralized geographically for the entire economy or linked among different geographic regions within the economy? (Y/N)

Note: the “unified collateral registry” is understood either centralized geographically for the entire economy or, if different registries exist, their databases should be unified or linked. Hence, the security interest should only have to be registered once to be effective everywhere in the country as the information among different registries would be consolidated.

47. Is the registration of a non-possessory security interest required in order to be enforceable against third parties? (Y/N)

48. Is the collateral registry limited to security interests granted by certain types of borrowers or creditors? (Y/N; N – good practice)

Note: for example, incorporated entities, only individuals, commercial banks.

49. If different registries exist for different types of debtors (*for example, incorporated and non-incorporated debtors*), do the same rules for the creation of the non-possessory security interest and for third-party effectiveness apply? 49.1 OR 49.3 – good practice

49.1 Yes

49.2 No

49.3 Different registries do not exist for different types of debtors

50. If different registries exist for different types of assets (*for example, tangible assets, intangible assets, receivables, inventory*), do the same rules for the creation of the non-possessory security interest and for third-party effectiveness apply? 50.1 OR 50.3 – good practice

50.1 Yes

50.2 No

50.3 Different registries do not exist for different types of assets

51. Can everyone, including members of the public, access the data in the registry without restriction from any geographic location in the economy? (Y/N)

Note: for example, without intermediaries such as registrars, clerks, notaries... or without being limited to a certain type of users such as state agencies)

52. Does the registry have an electronic database searchable by debtor’s name or unique identifier? (Y/N)

53. Can the collateral be searchable by a serial number in the registry? (Y/N)

54. Is this a notice-based registry? (Y/N)

Note: for example, all documents, such as a copy of the loan contract, are not submitted and/or the registry does not have the authority nor the responsibility to request that the agreement is properly executed.

55. Does the registry verify the legality of the transaction once the notice of security interest has been submitted? (Y/N; N – good practice)

56. Does the registry staff review the correctness, completion, and accuracy of the information in the filing of the notice? (Y/N; N – good practice)

Note: for example, a registry clerk manually reviews and accepts the notice of registration or rejects the notice of registration due to lack or inaccuracy of information in the electronic forms to be completed.

57. Does the registry cover all types of security interests in movable assets (other than vehicles, ships, aircraft, intermediated securities, or intellectual property), including functional equivalents such as fiduciary transfers of title, financial lease agreements, assignments of receivables, and retention of title sales? (Y/N)

58. Who can perform the registration?

Note: all types of secured creditors—incorporated or non-incorporated entities, the creditor's representatives.

59. What is the process of creating an account with the registry?

- 59.1 Online without the participation or approval of any third party
- 59.2 Online with an automated verification of account
- 59.3 Online with the approval or verification of the creation of an account
- 59.4 By email
- 59.5 In person
- 59.6 Through a notary

60. Does the clerk of the registry (or any other third party) review or vet with registering or searching of a security interest? (Y/N; N – good practice)

61. Does the collateral registry have an online system for registrations, amendments, renewals, cancellations, and searches of security interests? (Y/N)

2.2 OPERATION OF COLLATERAL REGISTRIES			
Indicators	FFP	SBP	Total Points
Existence of a Centralized and Publicly Available Registry	1	1	2
- Existence of a centralized and publicly available registry is operational (45)	0.25	0.25	0.5
- Registry is centralized or linked among different geographic regions (46 OR ((49.1 OR 49.3) AND (50.1 OR 50.3)))	0.25	0.25	0.5
- Registration of non-possessory security interest is required, and the registry is open to all types of borrowers or creditors (47 AND 48)	0.25	0.25	0.5
- Anyone can access the data in the registry without restriction from any geographic location in the economy, and the registry has an online database searchable by debtor's name or unique identifier and serial number of the collateral (51, 52, AND 53)	0.25	0.25	0.5
<i>If the answer is No for question 45, the economy is not eligible to score on the remaining questions 46 to 53</i>			
Notice-based Registry Updates (54 AND 55 AND 56 AND 57)	1	1	2

Autonomy of Secured Creditors to Access and Update the Registry	1	1	2
- (58 AND 59.1 AND 60 AND 61) OR (58 AND 59.2 AND 60 AND 61)	0.9	0.9	0.18
- Bank verification of collateral registry records (18 and 19 from CDD questionnaire)*	0.1	0.1	0.2
<i>*These datapoints are collected in the CDD questionnaire but receive a score in the Secured Transactions and Collateral Registries questionnaire</i>			
Total Points	3	3	6

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

PILLAR III—OPERATIONAL EFFICIENCY OF RECEIVING FINANCIAL SERVICES	
Parameters	
Business Location	The parameter is used in cases where there may be several collateral registries in an economy (that is, federal systems). In case of multiple collateral registries, the one in the largest (most populous) city is considered.

The scores for Pillar III indicators are calculated using the Normal Cumulative Density Function (CDF) transformation method on a scale of 0 to 100, where 0 and 100 represent the lowest and highest possible scores, respectively. The best and worst performers are identified based on the 5th and 95th percentiles of the collected data, except for the time for new registration to be reflected in database which used established international standards.

62. Operational Efficiency of security interest and credit data update:

- 62.1 When is a new registration reflected and retrievable in the database? Please provide an estimate. (for example, in real time, within 1 hour, 24 hours, 3 business days, etc.) If not in real time, please provide the reason(s) for the delay.
- 62.2 Are there fees associated with the registration of security interests in the collateral registry? (Y/N - good practice)
- 62.3 If Yes, please specify the fees in local currency. (not scored)

3.1.2 OPERATIONAL EFFICIENCY OF SECURITY INTEREST AND CREDIT DATA UPDATE			
Indicators	FFP	SBP	Total Points
Time for New Registration to be Reflected in Database (62.1)	3.33 (33.3%)	n/a	3.33 (33.3%)
Fees associated with the Registration of Security Interests (62.2)* <i>*Respective scores for time to register security and cost to register a security interest, and time to include credit information (data obtained from the Credit Bureaus and Registries questionnaire, question 43) will be calculated using the Normal Cumulative Density Function (CDF) transformation method on a scale of 0 to 100, where 0 and 100 represent the lowest and highest possible scores, respectively. Average of these scores will be taken to obtain the overall score for the indicator.</i>	3.33 (33.3%)	n/a	3.33 (33.3%)
Total Points	10*	n/a	10**

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent).
FFP = Firm Flexibility Point; SBP = Social Benefits Point.

**Indicator shared with Credit Bureaus and Registries questionnaire.

E-PAYMENTS QUESTIONNAIRE

The tables that follow present all indicators (including their components, if applicable) under each pillar, with a reference to the corresponding question number in parenthesis. The questions are listed before each table for ease of reference.

For Y/N questions, the Y response accounts for the score and is considered as the good practice, unless otherwise indicated with the sign “Y/N; N – good practice”.

In the tables that follow, “AND” means all referenced questions must have a good practice response to obtain a score on the indicator.

In the tables that follow, “OR” means one or more referenced questions must have a good practice response to obtain a score on the indicator.

Certain questions are marked as “not scored,” which indicates that they do not impact the score in any way. The purpose of these questions is to further inform and refine the questions design for subsequent years of the rollout, as needed, as well as to substantiate and provide further information for the scored questions.

For questions that are scored for both bank and non-bank payment service providers (PSPs), the score will be equally divided between answers for the two kinds of PSPs.

PILLAR I–QUALITY OF REGULATIONS FOR ELECTRONIC PAYMENTS	
Parameters	
Business Location	The parameter is used in cases where regulations may not be applicable at a national level and vary across states or regions. For the economies where regulations differ across states, regulations for the largest (most populous) city are measured.
Type of Transactions	The parameter is used in cases where regulations are different across different types of transactions. Under Pillar I, domestic e-payment transactions are considered.

1.3 E-PAYMENTS

- 1. Do electronic payment methods exist in your economy? (Y/N) *(not scored)***
- 2. Please select all e-payment methods that exist in your economy: *(not scored)***
 - 2a. Payments initiated from a transaction account through Internet banking
 - 2b. Payments initiated from a transaction account through Mobile banking
 - 2c. e-money
 - 2d. Mobile Money
 - 2e. Payment cards
- 3. Are there laws/regulations regarding electronic payments in your country? *(not scored)***
(Y/N)

1.3.1 Risk Management

4. Are there provisions in the regulatory framework that mandate external review of regulatory compliance of payment service providers? Please provide the answer for both banks and non-banks. (Y/N)
5. If the answer to question 4 is Yes, what is the scope of the review?
 - 5a. Anti-money laundering/combating of financing of terrorism audit
 - 5b. IT (information technology) risk management review
 - 5c. Data protection and privacy review
 - 5d. Operational and security risk management review
 - 5e. Financial risk management review
 - 5f. Regulatory reporting review (evaluate whether regulatory reporting requirements are properly done and in a timely manner)
 - 5g. Other
6. If the answer to question 4 is Yes, who performs the review? Please select all that apply: *(not scored)*
 - 6a. Regulator or another government authority
 - 6b. External private
 - 6c. Other
7. Does the regulatory framework require the implementation of internal control to safeguard the integrity, authenticity, and confidentiality of data and operating processes? Please provide the answer for both banks and non-banks. (Y/N)
8. Are there provisions in the regulatory framework for e-payments that list requirements for cybersecurity? Please provide the answer for both banks and non-banks. (Y/N)
9. Are there provisions in the regulatory framework for e-payments requiring the development of contingency plans and business continuity procedures in the event of systems and technology failures? *(for example, backup site or process, cyber resilience framework)*. Please provide the answer for both banks and non-banks. (Y/N)
10. Are there provisions in the regulatory framework for banks and non-bank PSPs that define requirements to ensure customers have guaranteed access to their funds *(refers to funds placed with the PSP)* on demand for withdrawal and payments subject to reasonable restrictions? Please provide the answer for both banks and non-banks. (Y/N)
11. Are there any provisions in the regulatory framework that define customer usage limits for users of electronic payment services? Please provide the answer for both banks and non-banks. (Y/N)

1.3.2 Consumer Protection

12. Are there specific considerations for different types of PSPs on the scope of reviews or for any of the responses provided? (Y/N) *(not scored)*
13. Are there provisions in the regulatory framework that limit the use of the payment instrument *(for example, limiting the locations of use or the type of transactions)* and the access to payment accounts by payment service provider? Please provide the answer for both banks and non-

banks. (Y/N) (Y-but only the use of the payment instrument/Y-but only the access to payment accounts/Y-for both/N)

- 14. Does the regulatory framework define the obligations of the payment service user in relation to payment instruments and personalized security credentials? Please provide the answer for both banks and non-banks.** (Y/N)
- 15. Is the payment service provider required to verify the identity of a payment service user (*authentication*) prior to the execution of payment transactions? Please provide the answer for both banks and non-banks.** (Y/N)
- 16. Are there provisions in the regulatory framework that require payment service provider to allow for cancellation or modification of payment transactions by the payer unilaterally up to the time it has been executed by the payer's payment service provider? Please provide the answer for both banks and non-banks.** (Y/N)
- 17. Are there variations in the requirements among different types of transactions?** (*not scored*)
 - 17a. Large value funds transfers
 - 17b. Retail payments
 - 17c. Fast payments
 - 17d. Other
- 18. Does the regulatory framework include provisions that protect customer funds held with non-bank payment service providers?** (Y/N)
- 19. If the answer to question 18 is Yes, please specify which of the following are legally required to protect customer funds:**
 - 19a. Require separation of funds of the customer from the funds of PSP
 - 19b. Require non-bank PSPs to deposit customer funds with the central bank
 - 19c. Prohibit the use of customer funds for purposes other than redeeming e-money and executing fund transfers
 - 19d. Prudentially supervised
 - 19e. Explicitly protected from the potential bankruptcy/insolvency of the PSP
 - 19f. Explicitly protected from the potential bankruptcy/insolvency of any bank or other institution in which the customers' funds are deposited/placed by the PSP
 - 19g. Other
- 20. Are there provisions in the regulatory framework requiring insurance of customer funds held by non-bank payment service providers?** (Y/N)
- 21. If the answer to question 20 is Yes, please specify which of the following provisions are in the regulatory framework requiring insurance of customer funds held by non-bank payment service providers:**
 - 21a. A deposit insurance fund that extends to non-bank PSPs
 - 21b. A deposit insurance fund that covers customer funds of non-bank PSPs deposited with commercial banks
 - 21c. A requirement of commercial insurance for customer funds held with non-bank PSPs
 - 21d. A customer guarantee funds available to non-bank PSPs
 - 21e. Other

- 22. Are there provisions in the regulatory framework requiring the following? Please provide the answer for both banks and non-banks. (Y/N)**
 22a. Notification about suspicious activity
 22b. Rectification of unauthorized or incorrectly executed e-payment transactions
 22c. Other
- 23. Are there general provisions in the regulatory framework that regulate liability for fraud? (Y/N)**
- 24. Are there provisions in the regulatory framework defining the payment service provider's liability for unauthorized payment transactions? Please provide the answer for both banks and non-banks. (Y/N)**
- 25. Are there provisions in the regulatory framework that limit the payer's liability for unauthorized payment transactions to a defined amount? Please provide the answer for both banks and non-banks. (Y/N)**
- 26. Are there provisions in the regulatory framework that require the following? Please select all that apply. Please provide the answer for both banks and non-banks.**
 26a. The disclosure of all fees for the use of e-payment
 26b. Notifying user about changes in fees
 26c. Disclosure of liability
 26d. Disclosure of the use of customer data
 26e. Written policies for complaints handling procedure and system
 26f. General terms of services (*for example, speed of processing, resolution time for any errors, etc.*)
- 27. Are there provisions in the regulatory framework requiring payment service providers to make available a dispute resolution mechanism? Please provide the answer for both banks and non-banks. (Y/N)**
- 28. If the answer to question 27 is Yes, what are the different methods available to dispute a charge of transaction? Please provide the answer for both banks and non-banks. (not scored)**
 28a. Online dispute resolution
 28b. Disputed charge reported via phone call
 28c. Disputed charge reported in writing
 28d. Other
- 29. Is there a time limit in which the payment/charge can be disputed? Please provide the answer for both banks and non-banks. (Y/N)**
- 30. If there is a time limit in which the payment/charge can be disputed, does the time limit vary by type of payment instrument? (Y/N) (not scored)**
- 31. If the answer to question 30 is Yes, please provide types of instruments and associated time limits. (not scored)**
- 32. Is the payment service provider required to acknowledge receipt of dispute notice? Please provide the answer for both banks and non-banks. (Y/N)**
- 33. Are payment service providers required to have an independent unit in charge of dispute resolution? Please provide the answer for both banks and non-banks. (Y/N)**

- 34. Does the regulatory framework establish an independent governmental authority that parties can resort to in case the dispute was not resolved internally? Please provide the answer for both banks and non-banks. (Y/N)**
- 35. Please provide the name of the agency and defined time limit, (maximum number of days from the final decision of the payment service provider's dispute resolution unit) to apply to this independent governmental authority. (not scored)**
- 36. In case a dispute is pending resolution, does the law allow the recipient to continue collecting undisputed charges (when applicable)? Please provide the answer for both banks and non-banks. (Y/N)**

1.3.3 Interoperability of Payment Systems and Promotion of Competition

- 37. How is the level and extent of interoperability characterized in the jurisdiction? Please provide the answer for both banks and non-banks.**

Note: this question refers to interoperability of PSPs within the economy and does not cover cross-border payments.

- 37a. A payer can make payment from his/her payment service provider to only payees with the same payment service provider
- 37b. A payer can make payment to payees in most payment service providers
- 37c. A payer can make a payment to payees in all payment service providers, including non-bank PSPs
- 37d. Other

- 38. For the option chosen in question 37, please select whether it is a de jure requirement, de facto or both: (not scored)**

- 38a. de jure
- 38b. de facto
- 38c. Both

- 39. Is the level and extent of interoperability characterized in the jurisdiction applicable to all payment instruments? (Y/N) (not scored)**

- 40. If answer to question 39 is No, please specify which payment instruments are not interoperable. (not scored)**

- 41. Does the regulatory framework include fair competition provisions for the following?**

Note: examples of fair competition provisions include legal provisions that prohibit agreements with competitors about pricing, customers, market allocation and boycotts, or, in general, engaging in unfair or exclusionary conduct.

- 41a. Electronic payment service providers
- 41b. Payment systems
- 41c. Instruments
- 41d. Products
- 41e. Business models
- 41f. Channels

- 42. Are there provisions in the regulatory framework on new payment service providers, instruments, products, business models and channels granting them equal access to the market as to the existing participants? (Y/N) (Y-there are provisions that directly grant equal access/N-equal**

access is granted indirectly through the lack of restrictions/N-there are restrictions/limitations in the framework denying equal access)

Note: Equal access refers to the possibility that new payment service providers start offering their services to users without restrictions (for example, lack of access to key payment systems, exclusivity contracts of some PSPs with merchants and agents etc.) among the other competitive service providers.

43. Are the rules/procedures for registration and licensing applied for all new payment service providers, instruments, products, business models and channels, in a fair and proportionate manner and ensure a level playing field? (Y/N)

44. Does the regulatory framework set functional requirements for payment service providers? (Y/N)

Note: types of functional requirements can be an external interface, transaction processing, authentication, authorization levels, technical standards (data collection, data storage, data sharing), etc.

45. If answer to question 44 is Yes, please specify if the functional requirements are applied proportionately to all payment service providers? (Y/N)

1.3 E-PAYMENTS			
1.3.1 Risk Management			
Indicators	FFP	SBP	Total Points
External Review and Internal Control	1	1	2
- External review of regulatory compliance of payment service providers (PSP) (4)	0.25	0.25	0.5
- Scope of review (5)*	0.25	0.25	0.5
- Implementation of internal controls (7)	0.5	0.5	1
<i>*A score of 0.25 is allotted if at least half of the items in Q.5 are considered</i>			
Cybersecurity and Operational Risk	1	1	2
- Requirement for cybersecurity (8)	0.5	0.5	1
- Requirement for a contingency plan (9)	0.5	0.5	1
Liquidity Risk	1	1	2
- Requirements to ensure customers have access to funds (10)	0.5	0.5	1
- Customer usage limits (11)	0.5	0.5	1
Total Points	3	3	6
1.3.2 Consumer Protection			
Indicators	FFP	SBP	Total Points
Obligations of User and Payment Service Provider (PSP)	1	1	2
- Limits on use of payment instrument and access to payment accounts (13)*	0.34	0.34	0.68
- Obligations of user in relation to payment instrument and security credentials (14)	0.33	0.33	0.66
- PSP verifies the identity of a payment service user (authentication) prior to the execution of payment transaction (15)	0.33	0.33	0.66
<i>*A score of 0.34 is allotted if limits are for both payment instruments and payment accounts. A score of 0.17 is granted if limit is only for payment instruments or only for payment accounts</i>			

Cancellation of Erroneous Transactions, Protection of Funds Held by Non-Bank PSPs and Liability of Unauthorized Payments	1	1	2
- Allow for cancellation or modification of payment transaction by payer unilaterally up to processing time (16)	0.12	0.12	0.25
- Protection of customer funds held with non-bank PSPs (18)	0.06	0.06	0.12
- Measures to protect customer funds (19)*	0.06	0.06	0.12
- Insurance requirements of customer funds held by non-bank PSPs (20)	0.06	0.06	0.12
- Approaches for insurance of customer funds (21)**	0.06	0.06	0.12
- Requirement for notification about suspicious activity (22a)	0.12	0.12	0.25
- Requirement to rectify unauthorized or incorrectly executed transactions (22b)	0.12	0.12	0.25
- General provisions on liability for fraud (23)	0.12	0.12	0.25
- PSP's liability for unauthorized payments (24)	0.12	0.12	0.25
- Payer's liability for unauthorized payment (25)	0.12	0.12	0.25
<i>*The score is granted if any option is considered</i>			
<i>**The score is granted if any option is considered</i>			
Disclosure of Fees and Notification of Fee Changes	1	1	2
- Disclosure of all fees for use of e-payment (26a)	0.5	0.5	1
- Notify user about changes in fees (26b)	0.5	0.5	1
Disclosure of Liability, Use of Data, and Dispute Mechanisms	1	1	2
- Disclosure of liability (26c)	0.25	0.25	0.5
- Disclosure of use of customer data (26d)	0.25	0.25	0.5
- Written policies for complaints handling procedures (26e)	0.25	0.25	0.5
- General terms of services (26f)	0.25	0.25	0.5
Disputing a Transaction	1	1	2
- Time limit in which payment can be disputed (29)	0.34	0.34	0.68
- PSP to acknowledge receipt of dispute notice (32)	0.33	0.33	0.66
- Recipient continue collecting undisputed charges while a dispute is pending resolution (36)	0.33	0.33	0.66
Availability of Dispute Mechanisms	1	1	2
- PSP to have independent unit in charge of dispute resolution (33)	0.33	0.33	0.67
- Requirement to make available dispute resolution mechanism (27)	0.33	0.33	0.67
- Availability of independent governmental authority as a resort for disputes that were not resolved internally (34)	0.33	0.33	0.67
Total Points	6	6	12
1.3.3 Interoperability of Payment Systems and Promotion of Competition			
Indicators	FFP	SBP	Total Points
Interoperability of Payment Systems	1	1	2
- Level and extent of interoperability characterized in the jurisdiction (37)	1	1	2
<i>A full score is allotted if interoperability is across all or most payment service providers (including non-bank PSPs). No points are allotted if interoperability is among same payment service providers</i>			
Fair Competition	1	1	2
- Fair competition provisions (41)*	0.5	0.5	1
- Rules and procedures for registration applied for all new payment service providers (43)	0.5	0.5	1
<i>*Full score of 0.5 is allotted only if fair competition provisions are considered for all options</i>			
Equal Access and Treatment of Different PSPs	1	1	2
- Providing new PSPs equal access to market as existing participants (42)*	0.5	0.5	1

- Functional requirements for PSP (44 AND 45) <i>*Score is allotted if equal access is either granted directly through provisions in the regulatory framework or indirectly through lack of restrictions</i>	0.5	0.5	1
Total Points	3	3	6

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

PILLAR III—OPERATIONAL EFFICIENCY OF RECEIVING FINANCIAL SERVICES	
Parameters	
Type of Transaction	Under Pillar III, commercial transactions are considered only (e.g., payments to government or payroll are not included).

The scores for Pillar III indicators are calculated using the Normal Cumulative Density Function (CDF) transformation method on a scale of 0 to 100, where 0 and 100 represent the lowest and highest possible scores, respectively. The best and worst performers are identified based on the 5th and 95th percentiles of the collected data.

Data for Pillar III on the Operational Efficiency of Receiving Financial Services are collected through firm-level surveys, through the following questions:

46. Cost to receive an e-payment:

46a. Cost per transaction: As a percentage of a typical transaction, how much does it cost to accept payments.

46b. Other costs: What is the cost per month to accept payments? Please include all monthly fees, subscription costs, point of sales terminal costs, maintenance, and other costs.

47. Cost to make an e-payment: As a percentage of a typical transaction, how much does it cost to make payments?

48. Time to receive an e-payment: How many days does it take on average from when an order is placed until the money is received?

49. Usage level in receiving an e-payment: What percentage of total sales for a typical month does this establishment receive from its customers through electronic payments: that is, other than cash or check payments?

50. Usage level in making an e-payment: What percentage of the total payments that this establishment makes in a typical month is done through electronic payments that is, other than cash or check payments, excluding payments to government and payroll?

3.2 E-PAYMENTS			
3.2.1 Cost of e-Payments			
Indicators	FFP	SBP	Total Points
Cost to Receive an e-Payment (46)	10 (20%)	n/a	10 (20%)
Cost to Make an e-Payment (47)	10 (20%)	n/a	10 (20%)

3.2.2 Time to Receive an e-Payment			
Indicators	FFP	SBP	Total Points
Time to Receive an e-Payment (48)	10 (20%)	n/a	10 (20%)
3.2.3 Usage Level of e-Payments			
Indicators	FFP	SBP	Total Points
Usage Level in Receiving an e-Payment (49)	10 (20%)	n/a	10 (20%)
Usage Level in Making an e-Payment (50)	10 (20%)	n/a	10 (20%)
Total Points	50	n/a	50

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent).
FFP = Firm Flexibility Point; SBP = Social Benefits Point.

CREDIT BUREAUS AND REGISTRIES QUESTIONNAIRE

The tables that follow present all indicators (including their components, if applicable) under each pillar, with a reference to the corresponding question number in parenthesis. The questions are listed before each table for ease of reference.

For Y/N questions, the Y response accounts for the score and is considered as the good practice, unless otherwise indicated with the sign “Y/N; N – good practice”.

In the tables that follow, “AND” means all referenced questions must have a good practice response to obtain a score on the indicator.

In the tables that follow, “OR” means one or more referenced questions must have a good practice response to obtain a score on the indicator.

Certain questions are marked as “not scored,” which indicates that they do not impact the score in any way. The purpose of these questions is to further inform and refine the questions design for subsequent years of the rollout, as needed, as well as to substantiate and provide further information for the scored questions.

PILLAR II–ACCESSIBILITY OF INFORMATION IN CREDIT INFRASTRUCTURE

2.1 OPERATION OF CREDIT BUREAUS AND REGISTRIES

- 1. Is there a law or regulation that regulates the establishment and operation of credit bureau/registry? (Y/N) *(not scored)***
If Yes, proceed to the next questions.
If No, No practice for the economy on this topic.

- 2. Please list all credit bureaus and/or registries operating in your economy. *(not scored)***

- 3. For borrowers with credit references in the past 5 years. For the next set of questions, consider credit references on repayment history from both regulated and non-regulated entities. Please provide the number of individuals and firms listed in the database of the bureau with at least 1 credit reference (positive or negative) from January 2, 2018, to January 1, 2023.**

Note: list the number of firms and individuals, NOT the number of credit references. An individual who has 4 loans would be counted as 1 individual even if there are 4 credit references listed for her in the database. (coverage rate)

3a. Number of individuals

3b. Number of firms

- 4. For borrowers without credit references. Please provide the number of individuals and firms listed in the database of the credit bureau/registry, who had no borrowing history in the past 5 years, but for whom at least 1 lender requested a credit report from the credit bureau/registry in the period between January 2, 2022, and January 1, 2023.**

Note: list the number of firms and individuals, NOT the number of credit inquiries – An individual about whose credit history 3 lenders have inquired would be counted as 1 individual, even if there are 3 credit inquiries recorded in the database. (coverage rate)

4a. Number of individuals

4b. Number of firms

5. **Please enter the date (*month/year*) of establishment of the credit bureau/registry and the actual start of operations. (*cut-off date*)**
 - 5a. Establishment (*when the bureau/registry was legally authorized to operate as a bureau/registry*)
 - 5b. Start of operations (*when the bureau/registry started issuing credit reports*)
6. **Please provide the number of credit reports issued by the credit bureau/registry, including those issued online and via batch processing, over the last year. (*not scored*)**
 - 6a. On individuals
 - 6b. On firms
7. **If applicable, please provide the number of inquiries for credit scores provided by your credit bureau/registry over the last year. (*not scored*)**
 - 7a. On individuals
 - 7b. On firms
8. **Are data on loans for individuals being collected from financial institutions (the question refers to data on individuals and not on group of individuals)? (Y/N) (*not scored*)**
9. **Are data on loans for individuals being shared with financial institutions (the question refers to data on individuals and not on group of individuals)? (Y/N)**
10. **Are data on original amount of loan and outstanding amount of loan for individuals collected from and shared with financial institutions?**
 - 10a. Original amount of loan collected from financial institutions
 - 10a1. Always
 - 10a2. Only after a default
 - 10a3. Never
 - 10b. Outstanding amount of loan collected from financial institutions
 - 10b1. Always
 - 10b2. Only after a default
 - 10b3. Never
 - 10c. Original amount of loan shared with financial institutions
 - 10c1. Always
 - 10c2. Only after a default
 - 10c3. Never
 - 10d. Outstanding amount of loan shared with financial institutions
 - 10d1. Always
 - 10d2. Only after a default
 - 10d3. Never
11. **Are data on the loan payments of individuals collected from and shared with financial institutions?**
 - 11a. On-time payments collected/shared
 - 11b. Historical pattern of repayments collected/shared
 - 11c. Defaults or restructured debts collected/shared
 - 11d. Number of defaults or restructured debts collected/shared
 - 11e. Amount of defaults or restructured debts collected/shared
 - 11f. Arrears or late payments collected/shared
 - 11g. Number of arrears or late payments collected/shared
 - 11h. Number of days loan is past due collected/shared
 - 11i. Amount or value of arrears or late payments collected/shared

- 12. After how many days does your credit bureau/registry define the late payments of individuals as each of the following? (not scored)**
 12a. Arrears
 12b. Defaults
- 13. Are data on loans for firms being collected from financial institutions? (Y/N) (not scored)**
- 14. Are data on loans for firms being shared with financial institutions? (Y/N)**
- 15. Are data on original amount of loan and outstanding amount of loan for firms collected from and shared with financial institutions?**
 15a. Original amount of loan collected from financial institutions
 15a1. Always
 15a2. Only after a default
 15a3. Never
 15b. Outstanding amount of loan collected from financial institutions
 15b1. Always
 15b2. Only after a default
 15b3. Never
 15c. Original amount of loan shared with financial institutions
 15c1. Always
 15c2. Only after a default
 15c3. Never
 15d. Outstanding amount of loan shared with financial institutions
 15d1. Always
 15d2. Only after a default
 15d3. Never
- 16. Are data on the loan payments of firms collected from and shared with financial institutions?**
 16a. On-time payments collected/shared
 16b. Historical pattern of repayments collected/shared
 16c. Defaults or restructured debts collected/shared
 16d. Number of defaults or restructured debts collected/shared
 16e. Amount of defaults or restructured debts collected/shared
 16f. Arrears or late payments collected/shared
 16g. Number of arrears or late payments collected/shared
 16h. Number of days loan is past due collected/shared
 16i. Amount or value of arrears or late payments collected/shared
- 17. After how many days does your credit bureau/registry define the late payments of firms as each of the following? (not scored)**
 17a. Arrears
 17b. Defaults
- 18. Which of the following institutions in your economy submit information to the credit bureau/registry or retrieve information from it (or both)? (not scored)**
 18a. Private commercial banks
 18b. Public commercial banks
 18c. Public development banks
 18d. Microfinance institutions
 18e. Cooperatives

- 18f. Retailers and merchants
- 18g. Utility companies
- 18h. Court
- 18i. Taxes
- 18j. Rental data
- 18k. Internet, mobile phones
- 18l. E-Commerce platforms
- 18m. Other financial institutions (*for example, fintech, digital lenders, other alternative lenders, leasing companies*)
- 18n. Other data providers (*for example, trade creditors, collateral registry, company registry, etc.*)

19. Please indicate the number of the selected institutions in each category selected in Q18 above.

Note: for example, if private commercial banks provide information, provide the number of private commercial banks that participate.

- 19a. Private commercial banks
- 19b. Public commercial banks
- 19c. Public development banks
- 19d. Microfinance institutions
- 19e. Cooperatives
- 19f. Retailers and merchants
- 19g. Utility companies
- 19h. Court
- 19i. Taxes
- 19j. Rental data
- 19k. Internet, mobile phones
- 19l. E-Commerce platforms
- 19m. Other financial institutions (*for example, fintech, digital lenders, other alternative lenders, leasing companies*)
- 19n. Other data providers (*for example, trade creditors, collateral registry, company registry, etc.*)

20. Does the regulatory framework require that the reported credit information be reflected in the database within a certain time? (Y/N) (*not scored*)

21. If the answer to question 20 is Yes, what is the timeliness requirement? (*in days*) (*not scored*)

22. Does the regulatory framework allow cross border credit information sharing? (Y/N) (*not scored*)

23. Does your credit bureau/registry share credit information cross-border in practice? (Y/N)

24. Does the credit bureau/registry use technical reporting codes or special reporting to identify crises-related data? (*for example, financial, health, and climate related arrears*)? (Y/N)

25. For how long are historical data (*both positive and negative information*) preserved in the database and shared in credit reports?

- 25a. Preserved in the database – positive information (in years)
- 25b. Preserved in the database – negative information (in years)
- 25c. Available to be shared in the credit report – positive information (in years)
- 25d. Available to be shared in the credit report – negative information (in years)

- 26. If the credit bureau/registry collects information on default or restructured debts and on arrears or late payments, after how long is this information erased from the credit report? (*Please select the applicable option*).**
- 26a. Defaults or restructured debts – if repaid
 - 26a1. Immediately
 - 26a2. Never
 - 26a3. After certain period of time
 - 26b. Arrears or late payments – if repaid
 - 26b1. Immediately
 - 26b2. Never
 - 26b3. After certain period of time
 - 26c. Defaults or restructured debts – if never repaid
 - 26c1. Immediately
 - 26c2. Never
 - 26c3. After certain period of time
 - 26d. Arrears or late payments – if never repaid
 - 26d1. Immediately
 - 26d2. Never
 - 26d3. After certain period of time
- 27. If the answer to question 26 is “after certain period time” for any of the answer options, please specify the duration (*in days*), when applicable.**
- 28. If the answer to question 26 is “immediately” or “after certain period of time” for any of the answer options, please indicate whether there are different rules on the deletion of different types of information from the credit report. (*not scored*)**
- 29. What is the minimum loan size (*in local currency*) that is included in the database, if any? If your credit bureau/registry has no minimum loan requirement, please enter “0”. If different minimum loan amounts apply to individuals and firms, please use the lesser amount.**
- 30. If different minimum loan amounts apply to individuals and firms, please clarify. (*not scored*)**
- 31. Is a borrower’s right to access their own credit data guaranteed by law or regulation? (Y/N)**
- 32. Does the law or regulation establish the right of the borrower to request corrections of any mistakes in the data? (Y/N)**
- 33. What is the cost in local currency for borrowers to access their data? Please enter the cost in local currency.**
- 34. Can the borrower access their credit data online? (Y/N)**
- 35. Does the law or regulation require a notification to the customer/borrower of negative information reported to the credit bureau or registry? (Y/N)**
- 36. Do banks and other financial institutions have online access to the data of the credit bureau/registry?**
- 36a. Yes
 - 36b. No

37. If Yes, by which means do banks and other financial institutions access the data of the credit bureau/registry? *(not scored)*
 37a. Through a web interface
 37b. Through system-to-system connection
 37c. Both
38. If not, what is the most common mean to access data? *(not scored)*
39. On what date did online access become available? Please indicate the approximate date *(month/year)*. If it has been available since the start of operations of your credit bureau/registry, please confirm so. *(not scored)*
 39a. Date:
 39b. Available since the start of operations
40. Does your credit bureau/registry provide credit scores as a value-added service to banks and other financial institutions? (Y/N)
41. When did your credit bureau/registry start providing the credit scoring service? (DATE MM/YYYY) *(not scored)*
42. If the credit bureau/registry offers credit scores, does its website include explanations on how to interpret a credit score and what elements can affect a borrower's score? *(not scored)*
 42a. Yes, explanations on how to interpret a credit score only
 42b. Yes, explanation on what elements can affect a borrower's score only
 42c. Yes, both
 42d. No

2.1 OPERATION OF CREDIT BUREAUS AND REGISTRIES			
Indicators	FFP	SBP	Total Points
Data Coverage - Data on firms and individuals are shared (9 AND 14)* - Data from alternative sources are shared (19)** - Cross-border information sharing (23) - Crisis reporting (24) <i>*A full score is granted if responses are "yes" for both borrowers</i> <i>** In addition to financial institutions (Private commercial banks, Public commercial banks OR/AND Public development banks), data from 4 out the 9 alternative data (Microfinance institutions, Cooperatives, Retailers and merchants, Utility companies, Court, Taxes, Rental data, Internet, mobile phones and E-Commerce platforms) are shared</i>	1 0.4 0.4 0.1 0.1	1 0.4 0.4 0.1 0.1	2 0.8 0.8 0.2 0.2
Types of Data Collected and Shared - Both positive credit information and negative information are shared (10 AND 11 AND 15 AND 16)* - At least two years of historical data are shared (25 AND 26)** - Data on loan amounts below 1% of income per capita are shared (29)*** <i>* The coding rule for positive info: must provide on-time payments AND either original or outstanding loan amount</i> <i>The coding rule for negative info: must provide BOTH defaults/cancelled debts AND arrears/late payments.</i>	1 0.33 0.33 0.33	1 0.33 0.33 0.33	2 0.66 0.66 0.66

<p><i>If the agency distributes info for both firms and individuals, positive and negative data must be provided for both to get full point.</i></p> <p>** At least two years of historical data are shared. Credit bureaus and registries that erase data on defaults as soon as they are repaid or distribute negative information more than 10 years after defaults are repaid receive a score of 0 for this component.</p> <p>*** Minimum loan amount must be lower than 1% of GNI per capita to obtain a score on this question</p>			
Additional Services and Borrower's Access to Information	1	1	2
- By law, borrowers have the right to access their data in the largest credit bureau or registry (31 AND 32 AND 33** AND 34)*	0.15	0.15	0.3
- Notification of negative information (35)	0.15	0.15	0.3
<p><i>* If by law, borrowers have the right to access their data (access is inexpensive, online and borrowers have the right to request fixing the data) in the credit bureau or registry in the economy, half of the point is granted. Another half point is granted if law or regulation requires a notification to the customer/borrower of negative information reported)</i></p> <p>**Cost must be lower than 1% of GNI per capita to obtain a score on this question</p>			
- Banks and other financial institutions have online access to credit information (36a)	0.3	0.3	0.6
- Bureau or registry credit scores are offered as a value-added service (40)	0.3	0.3	0.6
- Borrower's credit information are always verified in practice (15* AND 16a*) OR	0.1 OR	0.1 OR	0.2 OR
- Borrower's credit information are sometimes verified in practice (15* AND 16b*)	0.05	0.05	0.1
<i>*The data is obtained from the Customer Due Diligence in Commercial Lending questionnaire questions 15 and 16</i>			
Total Points	3	3	6

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

If the credit bureau or registry is not operational or covers less than 5 percent of the adult population (age 15 to 64), the score is 0. If the bureau or registry is operational but does not distribute a credit report by the cut-off date for B-READY, the score is also 0. If there are two or more credit bureaus (registries), the bureau (registry) with the highest coverage rate of the working-age population will be considered (scored).

PILLAR III—OPERATIONAL EFFICIENCY OF RECEIVING FINANCIAL SERVICES

The scores for Pillar III indicators are calculated using the Normal Cumulative Density Function (CDF) transformation method on a scale of 0 to 100, where 0 and 100 represent the lowest and highest possible scores, respectively. The best and worst performers for the time it takes for information to be reflected in a credit report database are identified according to the thresholds established by international standards.

43. How long does it take in practice from the moment the information is submitted to the credit bureau/registry for it to be reflected in the database used for credit reports? Please enter the number of days.

3.1.2 OPERATIONAL EFFICIENCY OF SECURITY INTEREST AND CREDIT DATA UPDATE			
Indicators	FFP	SBP	Total Points

Time it Takes for Information to be Reflected in a Credit Report Database (43)* <i>*Respective scores for time to register a security interest and cost to register a security interest (data obtained from the Secured Transactions and Collateral Registries questionnaire, question 62), and time to include credit information will be calculated using the Normal Cumulative Density Function (CDF) transformation method on a scale of 0 to 100, where 0 and 100 represent the lowest and highest possible scores, respectively. Average of these scores will be taken to obtain the overall score for the indicator</i>	3.33 (33.3%)	n/a	3.33 (33.3%)
Total Points	10**	n/a	10**

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent).

FFP = Firm Flexibility Point; SBP = Social Benefits Point.

**Indicator shared with Secured Transactions and Collateral Registries questionnaire.

CHAPTER 7. INTERNATIONAL TRADE—METHODOLOGY NOTE

I. MOTIVATION

International trade is a key driver of economic growth and private sector development. Through competition among domestic and foreign firms, it promotes specialization and resource reallocation to the most productive firms.¹ While there are winners and losers among firms, workers, and consumers, international trade can generate overall benefits for the private sector and society.² To remain competitive, firms must continuously adapt, innovate, and improve their efficiency, resulting in aggregate productivity growth and welfare.³ Trade openness may generate further productivity gains by creating economies of scale and providing access to cheaper intermediate inputs of higher quality and variety, as well as facilitating knowledge and technology transfers.⁴ Increased access to foreign inputs may enhance productivity and export performance, and it may provide opportunities to diversify the economy and reduce its dependence on a single product or market. This shows the complementarities between exports and imports and emphasizes the importance of trade openness to reap the benefits of international trade.⁵

To fully realize the benefits of international trade, a conducive business environment that reduces trade barriers and lowers compliance and transaction costs for firms is necessary. Firms' access to global markets depends on the quality of the regulatory frameworks in which they operate, as well as on relevant public services. A regulatory framework that establishes a nondiscriminatory, transparent, predictable, and safe trading environment generates incentives to engage in international trade and provides a level playing field. Furthermore, an effective regulatory framework pursues legitimate public policy objectives, including protecting public health and the environment, imposing restrictive trade measures that can create market distortions that impede trade.⁶ It is crucial to have regulations that strike a balance between these objectives and the restrictive requirements they impose, which must be proportional to the pursued objectives.

In addition, governments can provide public services to facilitate trade processes. Policies that improve the quality of physical and digital infrastructure, as well as border management, enable the private sector to maximize benefits and minimize the burden imposed by the regulatory framework. These trade facilitation efforts reduce the time and cost borne by the private sector, which represents a substantial barrier to trade, and increase participation in international trade for small, medium, and large firms.⁷ By doing so, firms can leverage increased competition, economies of scale, and access to higher-quality inputs, to increase productivity, hence benefiting the private sector as well as the broader economy.

II. INDICATORS

The International Trade topic measures different aspects of international trade—trade in goods, trade in services, and digital trade—across three different dimensions, here referred to as pillars. The first pillar assesses the quality of regulations pertaining to international trade, covering de jure features of a regulatory framework that are necessary to establish a nondiscriminatory, transparent, predictable, and safe environment to harness the potential of international trade. The second pillar assesses digital and physical infrastructure concerning international trade and the quality of border management, thus assessing de facto provision of public services for international trade facilitation. The third pillar measures the time and cost to comply with export and import requirements, as well as to engage in digital trade. Each pillar is divided into categories—defined by common features that inform the grouping into a particular category—and each category is further divided into subcategories. Each subcategory consists of several indicators, each of which may, in turn, have several components. Relevant points are assigned to each indicator and subsequently aggregated to obtain the number of points for each subcategory, category, and pillar. Table 1 summarizes all three pillars and their respective categories for all aspects measured by the topic.

Table 1. Summary Table of All Three Pillars for the International Trade topic

Pillar I—Quality of Regulations for International Trade (94 indicators)	
1.1	Practices Supporting International Trade (35 indicators)
1.1.1	International Trade in Goods and Services (14 indicators)
1.1.2	Digital and Sustainable Trade (includes gender and environment) (12 indicators)
1.1.3	International Trade Cooperation (9 indicators)
1.2	Regulatory Restrictions on International Trade (59 indicators)
1.2.1	International Trade in Goods (includes gender) (23 indicators)
1.2.2	International Trade in Services (22 indicators)
1.2.3	Digital Trade (14 indicators)
Pillar II—Quality of Public Services for the Facilitation of International Trade (50 indicators)	
2.1	Digital and Physical Infrastructure (29 indicators)
2.1.1	Electronic Systems and Interoperability of Services (10 indicators)
2.1.2	Transparency and Availability of Information (12 indicators)
2.1.3	Trade Infrastructure (7 indicators)
2.2	Border Management (21 indicators)
2.2.1	Risk Management (8 indicators)
2.2.2	Coordinated Border Management (7 indicators)
2.2.3	Trusted Trader Programs (6 indicators)
Pillar III—Operational Efficiency of Exporting Goods, Importing Goods, and Engaging in Digital Trade (7 indicators)	
3.1	Compliance with Export Requirements (2 indicators)
3.1.1	Total Time to Comply with Export Requirements (1 indicator)
3.1.2	Total Cost to Comply with Export Requirements (1 indicator)
3.2	Compliance with Import Requirements (2 indicators)
3.2.1	Total Time to Comply with Import Requirements (1 indicator)
3.2.2	Total Cost to Comply with Import Requirements (1 indicator)
3.3	Participation in Cross-Border Digital Trade (1 indicator)
3.3.1	Share of Trading Firms Exporting Digitally Ordered Goods (1 indicator)
3.4	Perceived Major Obstacles: Business Transportation, Customs and Trade Regulations (2 indicators)
3.4.1	Share of Firms Identifying Customs and Trade Regulations as Major or Severe Constraints (1 indicator)
3.4.2	Share of Firms Identifying Business Transportation as Major or Severe Constraints (1 indicator)

1. PILLAR I. QUALITY OF REGULATIONS FOR INTERNATIONAL TRADE

Table 2 shows the structure for Pillar I, Quality of Regulations for International Trade. Each of this pillar's categories and subcategories will be discussed in more detail in the order shown in the table.

Table 2. Pillar I—Quality of Regulations for International Trade

1.1	Practices Supporting International Trade
1.1.1	International Trade in Goods and Services
1.1.2	Digital and Sustainable Trade (includes gender and environment)
1.1.3	International Trade Cooperation
1.2	Regulatory Restrictions on International Trade
1.2.1	International Trade in Goods (includes gender)
1.2.2	International Trade in Services
1.2.3	Digital Trade

1.1 Practices Supporting International Trade

Category 1.1 is divided into three subcategories consisting of several indicators, each of which may, in turn, have several components.

1.1.1 International Trade in Goods and Services

This set of indicators measures the adequacy of the legal framework on international trade in goods and services. The existence of dedicated laws and regulations, implementation of international standards, as well as regulatory and legal obligations that mandate the disclosure of reasons for license rejection and the right to appeal such rejections, all contribute to the creation of a fair, transparent, and predictable international trading system.⁸ Similarly, setting a duty de minimis rule reduces the time and cost associated with imports and exports of low-value consignments, promoting firms' access to cross-border trade.⁹ Therefore, Subcategory 1.1.1–International Trade in Goods and Services has 14 indicators (table 3).

Table 3. Subcategory 1.1.1–International Trade in Goods and Services

	Indicators	Components
1	Establishment of Maritime Single Window*	Implementation of the Convention (2005) on Facilitation of International Maritime Traffic
2	Temporary Admission of Goods	Implementation of the Convention (1990) on the Temporary Admission of Goods (Istanbul Convention)
3	Rules on Liability of Carriers*	Implementation of the International Convention on the Carriage of Goods by Sea (Hamburg Rules, 1978)
4	Simplified Visa Regime–Foreign Crew Members and Service Providers**	Absence of restrictions on visa processes for crew members and service providers (no visa exemption or on arrival, or no crew member visa): i) Maritime freight transport services ii) Road freight transport services iii) Air freight transport services
5	Reasons for License Rejection, Suspension, and Cancellation (Freight Transport)	Informing applicants reasons for license rejection, suspension, and cancellation in the freight transport services sector
6	Reasons for License Rejection, Suspension, and Cancellation (Logistics Services)	Informing applicants reasons for license rejection, suspension, and cancellation in the logistics services sector
7	Right to Appeal (Goods)–Administrative	Existence of a right of direct exporters or importers to administratively appeal all regulatory decisions of the responsible administrative authority on areas affecting international trade: i) Duties and taxes (of any kind), fees and charges ii) Customs classification and valuation procedures iii) Technical non-tariff measures (NTMs) iv) Non-technical NTMs, contingent trade protection measures, and rules of origin v) Export-related areas
8	Right to Appeal (Goods)–Judicial	Existence of a right of direct exporters or importers to judicially appeal regulatory decisions of the responsible administrative authority on areas affecting international trade in goods to the courts: i) Duties and taxes (of any kind), fees and charges ii) Customs classification and valuation procedures iii) Technical non-tariff measures (NTMs) iv) Non-technical NTMs, contingent trade protection measures, and rules of origin v) Export-related areas
9	Right to Appeal (Services)–Administrative (Freight Transport)	Existence of a right of service providers to administratively appeal regulatory decisions of the responsible administrative authority in freight transport services sector
10	Right to Appeal (Services)–Administrative (Logistics Services)	Existence of a right of service providers to administratively appeal regulatory decisions of the responsible administrative authority in logistics services sector
11	Right to Appeal (Services)–Judicial (Freight Transport)	Existence of a right of service providers to judicially appeal regulatory decisions of the responsible administrative authority to the courts in freight transport services sector
12	Right to Appeal (Services)–Judicial (Logistics Services)	Existence of a right of service providers to judicially appeal regulatory decisions of the responsible administrative authority to the courts in logistics services sector

13	De Minimis Value	The duty de minimis value in force
14	Legal Requirements for the Imposition of Non-Tariff Measures	<p>Existence of regulations governing the imposition of non-tariff measures</p> <ul style="list-style-type: none"> i) Sanitary and phytosanitary measures ii) Technical barriers to trade iii) Pre-inspection measures iv) Anti-dumping measures v) Countervailing measures vi) Safeguard measures vii) Import quotas viii) Import licenses ix) Price controls x) Local content requirement xi) Export restrictions

* Landlocked economies will not be assessed by this indicator. Their total subcategory points will be rescaled accordingly. See Section 5.1.1.

** Only two components among transport freight services subsectors apply per each economy depending on geographical location. See Sections 5.1.2. and 5.2.7.

1.1.2 Digital and Sustainable Trade (includes gender and environment)

This set of indicators measures practices on digital and sustainable trade. Legal requirements for digital transactions—such as recognition of foreign electronic contracts and signatures, and provisions on technology neutrality and cross-border electronic payments—facilitate trade. They promote access to digital markets and increased participation of end consumers.¹⁰ Similarly, legal instruments that govern the imposition of restrictions on cross-border data flows aim to balance the need for data protection with the promotion of trade and the flow of information across borders.¹¹ In addition, the regulatory framework can establish a sustainable trading system by adopting policies that pursue relevant environmental and social objectives. These may include reducing tariffs for environmental goods, adopting cross-border carbon pricing instruments, and adopting other international standards to mitigate adverse effects of maritime transportation and on restricting cross-border waste movements.¹² Therefore, Subcategory 1.1.2–Digital and Sustainable Trade (includes gender and environment) has 12 indicators (table 4).

Table 4. Subcategory 1.1.2–Digital and Sustainable Trade (includes gender and environment)

	Indicators	Components
1	Electronic Contracts	Existence of legal mandate to prescribe legal validity and enforceability to foreign issued electronic contracts
2	Electronic Signatures	Existence of legal mandate to prescribe legal validity and enforceability to foreign electronic signatures
3	Technology Neutrality	Existence of legal mandate to recognize the principle of technology neutrality
4	Cross-Border Data Flows	Existence of regulatory framework on personal data protection that regulates cross-border data flows
5	Cross-Border Carbon Pricing Instruments	Adoption of a cross-border carbon pricing instrument
6	Tariffs on Environmental Goods	Effectively applied rate of the tariffs for the importation of top environmental goods (APEC list)
7	Endangered Species	Implementation of CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora)
8	Oil, Chemical, Sewage and Air pollution	Implementation of MARPOL Convention (International Convention for the Prevention of Pollution from Ships).
9	Hazardous Chemicals or Pesticides	Implementation of Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade
10	Freedom of Association and Right to Collective Bargaining	Provisions on freedom of association and the effective recognition of the right to collective bargaining in trade agreements
11	Gender Equality in Trade Agreements	Provisions on elimination of gender-based discrimination with respect to employment and occupation in trade agreements

12	Women's Participation in Economic and Development Activity	Provisions on women's participation in economic and development activity in trade agreements
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Note: APEC = Asia-Pacific Economic Cooperation.

1.1.3 International Trade Cooperation

This set of indicators measures practices on international trade cooperation. Increased international cooperation and regulatory convergence may lead to a more predictable trading environment and reduced compliance costs. Trade agreements increase regulatory convergence and facilitate trade. An increase in their depth contributes to trade growth and positive spillover effects.¹³ Establishing well-coordinated competent authorities to oversee the implementation of trade agreements enables smoother implementation of such commitments, enhancing regulatory convergence.¹⁴ Therefore, Subcategory 1.1.3–International Trade Cooperation has 9 indicators (table 5).

Table 5. Subcategory 1.1.3–International Trade Cooperation

	Indicators	Components
1	Absence of Non-Notified PTAs*	WTO members' participation in PTAs not notified to the WTO
2	Duty Free Trade	Provisions on tariff preferences and export taxes in trade agreements
3	Digital Trade	Provisions on digital trade in trade agreements
4	Investment and Movement of Capital	Provisions on investment and movement of capital in trade agreements
5	Trade in Services	Provisions on trade in services in trade agreements
6	Harmonization of Regulation on Non-Tariff Measures	Provisions on Non-Tariff measures in trade agreements: i) Sanitary and phytosanitary measures ii) Technical barriers to trade
7	Freight Transport Services Sector	Provisions on freight transport services sector in trade agreements
8	Logistics Services Sector	Provisions on logistic services sector in trade agreements
9	Competent Authorities to Oversee the Implementation of PTAs	Establishment of competent authorities to oversee the implementation of all PTAs

Note: PTAs = Preferential Trade Agreements; WTO = World Trade Organization.

*Non-WTO members will not be assessed by this indicator. Their total subcategory points will be rescaled accordingly. See Section 5.2.8.

1.2 Regulatory Restrictions on International Trade

Category 1.2 is divided into three subcategories consisting of several indicators, each of which may, in turn, have several components.

1.2.1 International Trade in Goods (includes gender)

This set of indicators measures restrictions on international trade in goods. Trade policies can include restrictive trade measures. Whereas tariffs have declined, non-tariff measures (NTMs) have been steadily rising in importance as key barriers to trade.¹⁵ Although such barriers may be important to protect public safety, health, and the environment as well as to address market failures, they can impede trade flows.¹⁶ Similarly, regulatory requirements for transportation and logistics service providers, which are inputs to trade in goods, may pursue a legitimate public policy objective while hindering competition in these sectors.¹⁷ Therefore, Subcategory 1.2.1–International Trade in Goods (includes gender) has 23 indicators (table 6).

Table 6. Subcategory 1.2.1–International Trade in Goods (includes gender)

	Indicators	Components
1	Sanitary and Phytosanitary Measures	i) Health inspections and/or certifications ii) Phytosanitary inspection and/or certifications iii) Fumigation or disinfection and/or certifications

		iv) Pest control inspection and/or certifications
2	Sanitary and Phytosanitary Measures (National Treatment)	Additional restrictions breaching the principle of national treatment
3	Technical Barriers to Trade	i) Technical regulations pertaining to product characteristics ii) Technical regulations pertaining to product-related processes and production methods iii) Technical regulations pertaining to terminology or symbols iv) Technical regulations pertaining to packaging v) Technical regulations pertaining to labeling and marking
4	Technical Barriers to Trade (National Treatment)	Additional restrictions breaching the principle of national treatment
5	Absence of Pre-Shipment Inspections	i) Quality control ii) Conformity verification iii) Customs valuation
6	Absence of Contingent Trade-Protective Measures	i) Anti-dumping measures ii) Countervailing measures iii) Safeguards measures
7	Absence of Quantity Control Measures	i) Non-automatic import licensing (agricultural goods) ii) Import quotas (agricultural goods) iii) Import prohibitions (agricultural goods) iv) Quantity-control measures (agricultural goods) v) Non-automatic import licensing (manufactured goods) vi) Import quotas (manufactured goods) vii) Import prohibitions (manufactured goods) viii) Quantity-control measures (manufactured goods)
8	Absence of Price Control Measures	i) Price-control measures (agricultural goods) ii) Price-control measures (manufactured goods)
9	Absence of Finance Measures	i) Finance measures (agricultural goods) ii) Finance measures (manufactured goods)
10	Absence of Export Restrictions	i) Export restrictions (agricultural goods) ii) Export restrictions (manufactured goods)
11	Absence of Caps on the Number of Operating Licenses (Freight Transport)*	i) Maritime freight transport services ii) Road freight transport services iii) Air freight transport services
12	Absence of Price Floors and Price Guidelines (Freight Transport)*	i) Maritime freight transport services ii) Road freight transport services iii) Air freight transport services
13	Absence of Mandatory Use of Certified Operators (Freight Transport)*	i) Maritime freight transport services ii) Road freight transport services iii) Air freight transport services
14	Absence of Caps on the Number of Operating Licenses (Logistics)	i) Cargo handling ii) Storage and warehousing iii) Customs brokerage
15	Absence of Price Floors and Price Guidelines (Logistics)	i) Cargo handling ii) Storage and warehousing iii) Customs brokerage
16	Absence of Mandatory Use of Certified Operators (Logistics)	i) Cargo handling ii) Storage and warehousing iii) Customs brokerage
17	Safety Regulations–Certification for Operators (Freight Transport)*	i) Maritime freight transport services ii) Road freight transport services iii) Air freight transport services
18	Safety Regulations–Equipment (Freight Transport)*	i) Maritime freight transport services ii) Road freight transport services iii) Air freight transport services
19	Safety Regulations–Maximum Hours (Freight Transport)*	i) Maritime freight transport services ii) Road freight transport services iii) Air freight transport services
20	Safety Regulations–Certification for Operators (Logistics)	i) Cargo handling ii) Storage and warehousing
21	Safety Regulations–Equipment (Logistics)	i) Cargo handling

		ii) Storage and warehousing
22	Safety Regulations–Maximum Hours (Logistics)	i) Cargo handling ii) Storage and warehousing
23	Absence of Additional Restrictions for Female Service Providers*	i) Maritime freight transport services ii) Road freight transport services iii) Air freight transport services iv) Cargo handling v) Storage and warehousing vi) Custom brokerage

*Only two components among transport freight services subsectors apply per each economy depending on geographical location. See Sections 5.1.2 and 5.2.7.

1.2.2 International Trade in Services

This set of indicators measures restrictions on international trade in services. Trade policies that restrict market access/foreign entry and establishment, limit cross-border movements of natural persons, and provide other discriminatory measures are trade restrictive.¹⁸ By hindering competition, these measures impose negative externalities on other market actors, including consumers. In fact, barriers to trade and investment in services are often much higher than for goods.¹⁹ Therefore, Subcategory 1.2.2–International Trade in Services has 22 indicators (table 7).²⁰

Table 7. Subcategory 1.2.2–International Trade in Services

	Indicators	Components
1	Absence of Restrictions on Foreign Registration of Vessels Under National Flags (Maritime Freight Only)*	Maritime freight transport services
2	Absence of Restrictions on Cabotage/Access Rights (Maritime Freight Only)*	Maritime freight transport services
3	Absence of Restrictions on the Use of Local Port Services (Maritime Freight Only)*	Maritime freight transport services
4	Absence of Restrictions on Quotas (Freight Transport)**	i) Maritime freight transport services ii) Road freight transport services iii) Air freight transport services
5	Absence of Restrictions Subject to an Economic Needs Test (Freight Transport)**	i) Maritime freight transport services ii) Road freight transport services iii) Air freight transport services
6	Absence of Restrictions on Acquisition and Use of Land and Real Estate (Freight Transport)**	i) Maritime freight transport services ii) Road freight transport services iii) Air freight transport services
7	Absence of Restrictions on Quotas (Logistics)	i) Cargo handling ii) Storage and warehousing iii) Custom brokerage
8	Absence of Restrictions Subject to an Economic Needs Test (Logistics)	i) Cargo handling ii) Storage and warehousing iii) Custom brokerage
9	Absence of Restrictions on Acquisition and Use of Land and Real Estate (Logistics)	i) Cargo handling ii) Storage and warehousing iii) Custom brokerage
10	Absence of Restrictions on Quotas (Financial Services)	i) Commercial Banking ii) Insurance
11	Absence of Restrictions Subject to an Economic Needs Test (Financial Services)	i) Commercial Banking ii) Insurance
12	Absence of Restrictions on Acquisition and Use of Land and Real Estate (Financial Services)	i) Commercial Banking ii) Insurance
13	Absence of Additional Restrictions on Licensing or Authorization Requirements (Freight Transport)**	i) Maritime freight transport services ii) Road freight transport services iii) Air freight transport services

14	Absence of Additional Quotas for Foreign Contractual and Independent Service Providers (Freight Transport)**	i) Maritime freight transport services ii) Road freight transport services iii) Air freight transport services
15	Absence of Labor Market Tests for Foreign Contractual and Independent Service Providers (Freight Transport)**	i) Maritime freight transport services ii) Road freight transport services iii) Air freight transport services
16	Absence of Additional Restrictions on Licensing or Authorization Requirements (Logistics)	i) Cargo handling ii) Storage and warehousing iii) Custom brokerage
17	Absence of Additional Quotas for Foreign Contractual and Independent Service Providers (Logistics)	i) Cargo handling ii) Storage and warehousing iii) Custom brokerage
18	Absence of Labor Market Tests for Foreign Contractual And Independent Service Providers (Logistics)	i) Cargo handling ii) Storage and warehousing iii) Custom brokerage
19	Absence of Additional Restrictions on Licensing or Authorization Requirements (Financial Services)	i) Commercial Banking ii) Insurance
20	Absence of Additional Quotas for Foreign Contractual and Independent Service Providers (Financial Services)	i) Commercial Banking ii) Insurance
21	Absence of Labor Market Tests for Foreign Contractual and Independent Service Providers (Financial Services)	i) Commercial Banking ii) Insurance
22	Absence of Procedural Hurdles for Visa for Business Purposes (Freight Transport)**	i) Maritime freight transport services ii) Road freight transport services iii) Air freight transport services

* Landlocked economies will not be assessed by this indicator. Their total subcategory points will be rescaled accordingly. See Section 5.1.1.

** Only two components among transport freight services subsectors apply per each economy depending on geographical location. See Sections 5.1.2 and 5.2.7.

1.2.3 Digital Trade

This set of indicators measures restrictions on digital trade. Trade policies on issues surrounding data protection, privacy, digital advertising, and digital copyrights provide legal protection to digital trade users and service providers, thereby enhancing safety and trust in the digital trading environment.²¹ However, discriminatory policies on digital trade—bans on online sales of digitally ordered goods and services, restrictive standards on cross-border data flows, and taxation measures that may breach the tax neutrality principle—as applied to digital trade restrict trade.²² By hindering competition, these measures impose negative externalities on other market actors, including consumers. Therefore, Subcategory 1.2.3–Digital Trade has 14 indicators (table 8).²³

Table 8. Subcategory 1.2.3–Digital Trade

	Indicators	Components
1	Absence of Additional Government Licenses	Requirement to obtain an additional government license (beyond a general business license) to digitally offer goods or services
2	Absence of Online Selling Bans	Prohibition of online sales of digitally ordered goods and services (tobacco, alcohol, etc.), except transactions that require verifying the buyer's identity
3	No Breach of Tax Neutrality Principle	Enactment of a specific tax regime that imposes an additional burden to cross-border digitally ordered goods and services with respect to domestic digitally ordered goods and services
4	Absence of Charges on Incoming Cross-Border E-Payments	Incoming cross-border electronic payments subject to taxes and fees
5	Absence of Charges on Outgoing Cross-Border E-Payments	Outgoing cross-border electronic payments subject to taxes and fees

6	Absence of Limits on Cross-Border E-Payments	Limits to the value of the transactions on cross-border e-payments
7	Limitations to Cross-Border Data Flows	Existence of legal provisions requiring specific data transfer agreements or a formal consent from data subjects for cross-border transfers of personal data
8	Disclosure of Relevant Information	<ul style="list-style-type: none"> i) Merchant information (address, business registration number and contact details) ii) Product/services specifications iii) Delivery options iv) Payment process v) Out-of-court complaints process vi) Refunds and cancellations policy
9	Consumer Rights-Limits on Advertising	Limits on advertising (spam, unsolicited communications, and others)
10	Consumer Rights to Cancel Online Purchases	Option to cancel online purchases during a specific period of time without any justification or penalty
11	Consumer Rights to Receive Refunds	Option to receive refunds/replacements/returns for damaged goods
12	Penalties for Noncompliance with Online Consumer Protection Provisions	Imposition of penalties for not complying with the online consumer protection provisions with regard to cross-border consumers
13	Online Dispute Resolution Mechanism	Existence of an online dispute resolution mechanism (ODR) to handle and resolve digital trade complaints, including cross-border transactions
14	Online Dispute Resolution Mechanism (Free of Charge Filing)	Existence of a right for cross-border consumers to file enforceable ODR cases related to cross-border digital trade free of charge

2. PILLAR II. QUALITY OF PUBLIC SERVICES FOR THE FACILITATION OF INTERNATIONAL TRADE

Table 9 shows the structure for Pillar II, Quality of Public Services for the Facilitation of International Trade. Each of this pillar's categories and subcategories will be discussed in more detail in the order shown in the table.

Table 9. Pillar II–Quality of Public Services for the Facilitation of International Trade

2.1	Digital and Physical Infrastructure
2.1.1	Electronic Systems and Interoperability of Services
2.1.2	Transparency and Availability of Information
2.1.3	Trade Infrastructure
2.2	Border Management
2.2.1	Risk Management
2.2.2	Coordinated Border Management
2.2.3	Trusted Trader Programs

2.1 Digital and Physical Infrastructure

Category 2.1 is divided into three subcategories consisting of several indicators, each of which may, in turn, have several components.

2.1.1 Electronic Systems and Interoperability of Services

This set of indicators measures the availability, scope, connectivity, and functionality of an economy's electronic systems for trade operations. Among these systems, electronic single windows and other advanced Integrated Customs Management Systems have become one of the main instruments of trade facilitation. Such mechanisms enhance the exchange of trade-related information between government agencies and other trade actors, support paperless trade features, and may also have bilateral, regional, or

multilateral interoperability.²⁴ Although challenging to implement, they streamline procedures and reduce compliance costs while increasing transparency, compliance, and security of the transaction. These platforms may integrate not only government agencies, but also private sector actors. Therefore, Subcategory 2.1.1–Electronic Systems and Interoperability of Services has 10 indicators (table 11).

Table 11. Subcategory 2.1.1–Electronic Systems and Interoperability of Services

	Indicators	Components
1	Availability of an Advanced Electronic System for International Trade	Availability of at least one of the following electronic systems for international trade: i) Electronic Single Window for international trade ii) Integrated Customs Management System
2	Agency Integration into the Advanced Electronic System for International Trade	Integration of agencies to the electronic system for international trade (either Electronic Single Window for international trade or Integrated Customs Management System) and interoperability of the services provided: i) Tax administration ii) Sanitary and phytosanitary agencies iii) Standardization agencies iv) Environmental agencies v) Transport agency vi) Ministry of Trade (or equivalent domestic ministry)
3	Stakeholder Integration into the Advanced Electronic System for International Trade	Integration of stakeholders to the electronic system for international trade (either Electronic Single Window for international trade or Integrated Customs Management System): i) Exporters and importers ii) Customs brokers iii) Transport operators iv) Cargo handling and storage operators v) Chambers of commerce vi) Financial institutions (that is, banks, insurance companies)
4	Features of the Advanced Electronic System for International Trade	Features available through the electronic system for international trade (either Electronic Single Window for international trade or Integrated Customs Management System): i) Submission of commercial and transport documents ii) Lodging of customs declarations and releases iii) Processing of licenses, permits and authorizations iv) Processing of veterinary, sanitary, and phytosanitary certificates v) Processing of technical standards certificates vi) Processing of certificates of origin
5	Exchange of Information with Trading Partners' Electronic Systems for International Trade	The electronic system for international trade (either Electronic Single Window for international trade or Integrated Customs Management System) exchanges information on commercial and transport documents, and customs declaration with any trading partner's Electronic Single Window for trade or Integrated Customs Management System
6	Single Point of Access of the Advanced Electronic System for International Trade	The electronic system for international trade (Electronic Single Window for international trade) has a centralized entry point to access the systems or services pertaining to international trade
7	Single Sign-On of the Advanced Electronic System for International Trade	The electronic system for international trade (Electronic Single Window for international trade) allows users to log-in only once to gain access to all the services of the agencies selected above without needing to re-authenticate for each one separately
8	Single Submission of Data of the Advanced Electronic System for International Trade	The electronic system for international trade (Electronic Single Window for international trade) allows users to enter or upload information and documents only once and make them available to all the relevant authorized users of this system
9	Single Point of Decision Making of the Advanced Electronic System for International Trade	The electronic system for international trade (Electronic Single Window for international trade) allows communication of results of procedures

10	Single Point of Payment of the Advanced Electronic System for International Trade	The electronic system for international trade (Electronic Single Window for international trade) allows payments regarding any service provided by all the integrated public sector agencies to be made through a single point
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2.1.2 Transparency and Availability of Information

This set of indicators measures the implementation of good practices on transparency and availability of information, as well as stakeholder consultation. A dedicated government website or trade information portal—where users can access up-to-date information pertinent to trade in goods and services—increases the transparency and predictability of the trading environment and reduces information asymmetry.²⁵ The publication of information fosters trust and cooperation among trading partners, supporting businesses in making informed decisions and increasing their competitiveness.²⁶ This information should include regulatory requirements and procedures, applicable rates of duties and taxes, rules for classification or valuation, fees and charges, and appeal procedures. Furthermore, when drafting international trade regulations or before introducing changes to trade policy, it is necessary to make advance notices public and conduct stakeholder consultations within a reasonable time period.²⁷ Therefore, Subcategory 2.1.2–Transparency and Availability of Information has 12 indicators (table 10).

Table 10. Subcategory 2.1.2–Transparency and Availability of Information

	Indicators	Components
1	Trade Information Portal (TIP)	Public availability of a TIP providing the following types of information: i) Laws, regulations, instructions, notifications, and any other legal instruments relating to trade and compliance ii) Commodity classification and associated tariffs iii) Agreements with any country or countries, as well as unilateral agreements, including status and updates iv) Special measures applicable to specific commodities or products (for example, sanitary or phytosanitary measures or technical standards required of specific categories of products) v) Penalty provisions for breach of formalities and procedures for appeal or review vi) Instructions and forms used to apply for permits, licenses, and customs clearance and lists of codes required in various documents (for example, country codes, units of measurement, currency codes, etc.)
2	Publication–Duties, Taxes, Fees, and Non-Tariff Measures	Public availability of the following information: i) Applied rates of duties, taxes, and fees of any kind imposed on or in connection with importation or exportation ii) Laws, regulations, and administrative rulings on non-tariff measures
3	Publication–Procedures and Advance Rulings	Public availability of the following information: i) Procedures for importation, exportation, and transit ii) Issued advance rulings
4	Publication–Penalties and Procedures for Appeal	Public availability of the following information: i) Penalty provisions for breaches of import, export, or transit formalities ii) Procedures for appeal or review
5	Publication–Licensing Criteria (Freight Transport)	Public availability of licensing criteria for transport services (maritime freight and road freight)
6	Publication–Licensing Criteria (Logistics Services)	Public availability of licensing criteria for logistics services (cargo handling, storage and warehousing, customs brokerage)
7	Publication–Proposals of Laws and Draft Regulations	Public availability through electronic means of proposals of draft laws and regulations affecting international trade in practice to explain their purpose
8	Publication–Advance Notices	Public availability through electronic means of advance notices prior to enacting regulatory changes in the areas of customs and international trade

9	Enquiry Points	Establishment of enquiry points for information requests and provision of information to oversight bodies in practice
10	Consultation–Practice	Consultation with interested parties/stakeholders in practice before introducing or enacting changes to laws and regulations affecting international trade
11	Consultation–Reasonable Opportunity	Provision of a reasonable opportunity of at least 30 calendar days to provide comments is given in practice to interested parties/stakeholders before introducing or changing laws and regulations affecting international trade
12	Consultation–Process to Consider Comments	Provision of justification in case comments received in the areas affecting international trade are not incorporated

2.1.3 Trade Infrastructure

This set of indicators measures the quality of an economy's trade infrastructure. Adequate trade infrastructure reduces trade and transport costs and enables integration in regional and global value chains.²⁸ The quality of trade infrastructure can be measured by assessing the availability of facilities, equipment, and services necessary for border control, cargo handling, examination, and warehousing and storage, together with the availability of internet connection and information technology systems. Importantly, such an assessment must consider the geography of the locations measured considering, for example, there are no land border posts and no seaports on island and landlocked economies, respectively. For comparability purposes, only two main border types are measured in each economy. Therefore, Subcategory 2.1.3–Trade Infrastructure has 7 indicators (table 12).

Table 12. Subcategory 2.1.3–Trade Infrastructure

	Indicators	Components
1.	Equipment & Facilities (Border 1–Land Border or Airport)*	i) Intrusive and non-intrusive examination areas ii) Deconsolidation and unbundling areas for cargo iii) Fixed or mobile scanners iv) Weight-in-Motion (WIM) scales v) Seizure warehouse vi) Testing laboratory for samples
2	Services and Amenities (Border 1–Land Border or Airport)*	i) Parking areas for trucks ii) Covered storage facilities iii) Cold storage facilities iv) Customs bonded warehouses
3	Equipment and Facilities (Border 2–Port or Airport)*	i) Intrusive and non-intrusive examination areas ii) Deconsolidation and unbundling areas for cargo iii) Fixed or mobile scanners iv) Weight-in-Motion (WIM) scales v) Seizure warehouse vi) Testing laboratory for samples
4	Services and Amenities (Border 2–Port or Airport)*	i) Parking areas for trucks ii) Covered storage facilities iii) Cold storage facilities iv) Customs bonded warehouses
5	Connection to the Electronic Single Window (Port or Airport)	Full integration of the measured seaport or airport with the Electronic Single Window for international trade
6	Information Systems (Port or Airport)	Availability of information systems at the measured port or airport: i) Maritime single window (applies only to seaports)** ii) Port community system (applies only to seaports)** iii) Terminal operating system (seaports or airports) iv) Truck booking system
7	Consultative Committee (Port or Airport)	Availability of port consultative committee, which includes private sector representatives and meets at least twice a year, at the measured port or airport

* Only two main border types are measured in each economy depending on geographical location. See Section 5.2.6. In case only one border may be measured, the total subcategory points will be rescaled accordingly.

** Landlocked economies will not be assessed by these components. Their total indicator points will consider only the remaining components. See Section 5.1.1.

2.2 Border Management

Category 2.2 is divided into three subcategories consisting of several indicators, each of which may, in turn, have several components.

2.2.1 Risk Management

This set of indicators measures the features, level of integration, and operability of risk management systems. Release and clearance times at the border are not only affected by the performance of Customs agencies, but also by the performance of other border control agencies. Risk management systems allow relevant agencies to efficiently focus resources on high-risk shipments while preventing arbitrary discrimination and unnecessary delays in the clearance of goods.²⁹ The most efficient risk management systems integrate all border control agencies.³⁰ The use of sophisticated techniques, advance targeting, and post-clearance audits also affects the performance of risk management systems, especially by minimizing the need for inspections and additional controls.³¹ Therefore, Subcategory 2.2.1–Risk Management has 8 indicators (table 13).

Table 13. Subcategory 2.2.1–Risk Management

	Indicators	Components
1	Customs Risk Management Availability	Customs agency has a risk management system
2	Customs Risk Management Coverage	Customs risk management system works at all borders with offices or physical presence of Customs with the same levels of effectiveness and efficiency
3	Sanitary and Phytosanitary Agency Integration	Advanced integration of sanitary and phytosanitary agencies into the integrated risk management system
4	Standardization Agency Integration	Advanced integration of standardization agencies into the integrated risk management system
5	Environmental Agency Integration	Advanced integration of environmental agencies into the integrated risk management system
6	Security Border Agency Integration	Advanced integration of security border agencies into the integrated risk management system
7	Automated Profiling and Targeting	Use of advanced level of automated profiling and targeting by Customs based on objective selectivity criteria
8	Post-Clearance Audits	Use of risk-based post-clearance audits for imports using selectivity criteria

2.2.2 Coordinated Border Management

This set of indicators measures the extent of border and behind-the-border cooperation between domestic border control agencies, as well as the external cooperation with similar agencies in trading partner economies. Increased coordination between Customs and other border control agencies, both within and across borders, plays a vital role in leveraging resources to streamline procedures and avoid duplications and delays.³² Therefore, Subcategory 2.2.2–Coordinated Border Management has 7 indicators (table 14).

Table 14. Subcategory 2.2.2–Coordinated Border Management

	Indicators	Components
1	Unique Consignment Reference	Use of a unique consignment reference by the Customs agency and other agencies
2	Joint Controls (Internal)	Conduct by the local border control authorities of joint inspections with or delegation of inspections to other national agencies
3	Integrated Border Checkpoint*	Existence of an integrated border checkpoint with the main trading partner sharing land border

4	Exchange of Information	Exchange of information by the Customs agency on commercial and transport documents and customs declaration at the border with the Customs agency of the main trading partner
5	Joint Controls (External)	Recognition by border control agencies of inspections conducted by partner economy's border control agencies or conducting joint inspections
6	Alignment of Operating Hours*	Customs operating hours coincide with those of the main trading partner sharing land border
7	Unified Document or Set of Documents*	There is a unified document or set of documents that is presented to the border control agencies of the main trading partner

* Island economies will not be assessed by this indicator. Their total subcategory points will be rescaled accordingly. See Section 5.1.1.

2.2.3 Trusted Trader Programs

This set of indicators measures the availability and features of Trusted Trader Programs. Trusted Trader Programs, such as Authorized Economic Operator (AEO) schemes, have become an important instrument for strengthening international supply chains and improving security standards conducted by border control agencies.³³ Successful Trusted Trader Programs include diverse types of operators and cover a long list of benefits.³⁴ Agencies in charge of such programs seek to expand Mutual Recognition Agreements (MRAs) and simplify processes of obtaining and renewing the relevant certificates.³⁵ Therefore, Subcategory 2.2.3–Trusted Trader Programs has 6 indicators (table 15).

Table 15. Subcategory 2.2.3–Trusted Trader Programs

	Indicators	Components
1	Availability of a Trusted Trader Program for Exporters and Importers	Trusted Trader certification program has been implemented for the following operators: i) Exporters ii) Importers
2	Availability of a Trusted Trader Program for Other Operators	Trusted Trader certification program has been implemented for the following operators: i) Warehouse operators ii) Customs brokers iii) Logistics operators iv) Carriers/transport operators v) Manufacturers
3	Benefits of the Trusted Trader Program	Benefits of being a Trusted Trader Program operator: i) Pre-arrival release of goods ii) Priority clearance and release of shipments iii) Use of periodic declarations iv) Lower rate of documentary reviews and physical inspections by Customs and other agencies
4	Inter-Agency Recognition of the Trusted Trader Program	Trusted Trader Program status is recognized by other border control agencies, besides the Customs agency: i) Sanitary and phytosanitary agencies ii) Standardization agencies iii) Security border agencies
5	Mutual Recognition Agreements of the Trusted Trader Program	Trusted Trader Programs' Mutual Recognition Agreements signed with any of the three main trading partners
6	Electronic Certification and Renewal Process of the Trusted Trader Program	Possibility to carry out the Trusted Trader Program certification of the renewal process through the Electronic Single Window for Trade, Customs management system or dedicated trade portal

3 PILLAR III. OPERATIONAL EFFICIENCY OF EXPORTING GOODS, IMPORTING GOODS, AND ENGAGING IN DIGITAL TRADE

Table 16 shows the structure for Pillar III, Operational Efficiency of Exporting Goods, Importing Goods, and Engaging in Digital Trade. Each of this pillar's categories and indicators will be discussed in the order shown in table 16.

Table 16. Pillar III—Operational Efficiency of Exporting Goods, Importing Goods, and Engaging in Digital Trade

3.1	Compliance with Export Requirements
3.1.1	Total Time to Comply with Export Requirements
3.1.2	Total Cost to Comply with Export Requirements
3.2	Compliance with Import Requirements
3.2.1	Total Time to Comply with Import Requirements
3.2.2	Total Cost to Comply with Import Requirements
3.3	Participation in Cross-Border Digital Trade
3.3.1	Share of Trading Firms Exporting Digitally Ordered Goods
3.4	Perceived Major Obstacles: Business Transportation, Customs, and Trade Regulations
3.4.1	Share of Firms Identifying Customs and Trade Regulations as Major or Severe Constraints
3.4.2	Share of Firms Identifying Transportation as Major or Severe Constraints

3.1 Compliance with Export Requirements

Category 3.1 is divided into two subcategories consisting of one indicator each.

3.1.1 Total Time to Comply with Export Requirements

Operational and transaction costs associated with exporting have become increasingly important. Factors such as cumbersome customs clearance procedures, lack of coordination among border agencies, inadequate trade infrastructure and limited logistics services increase time to comply with export requirements.³⁶ Therefore, Subcategory 3.1.1—Total Time to Comply with Export Requirements comprises one indicator (table 17).

Table 17. Subcategory 3.1.1—Total Time to Comply with Export Requirements

	Indicators	Components
1	Total Time to Comply with Export Requirements	The period (in days) required for directly exported goods to be released by all border control agencies, including clearance procedures prior to arrival at the point of exit

3.1.2 Total Cost to Comply with Export Requirements

Factors such as cumbersome customs clearance procedures, lack of coordination among border agencies, inadequate trade infrastructure and limited logistics services increase costs to comply with export requirements.³⁷ Therefore, Subcategory 3.1.2—Total Cost to Comply with Export Requirements comprises one indicator (table 18).

Table 18. Category 3.1.2—Total Cost to Comply with Export Requirements

	Indicators	Components
1	Total Cost to Comply with Export Requirements	The total costs associated with complying with all export requirements, including customs fees, other required payments, and payments made to customs brokers or freight forwarders, transportation freight, trade finance, and insurance services

3.2 Compliance with Import Requirements

Category 3.2 is divided into two subcategories consisting of one indicator each.

3.2.1 Total Time to Comply with Import Requirements

Similarly, operational and transaction costs associated with importing can become costly for firms that are looking to trade internationally. Factors such as lengthy customs clearance procedures, lack of coordination among border agencies, inadequate trade infrastructure and limited logistics services significantly increase time to comply with import requirements.³⁸ Therefore, Subcategory 3.2.1–Total Time to Comply with Import Requirements comprises one indicator (table 19).

Table 19. Subcategory 3.2.1–Total Time to Comply with Import Requirements

	Indicators	Components
1	Total Time to Comply with Import Requirements	The period (in days) required for directly imported material inputs and supplies (or finished goods and materials purchased to resell) to be released by all border control agencies, including clearance procedures prior to arrival at the point of entry until all material inputs and supplies were released

3.2.2 Total Cost to Comply with Import Requirements

Factors such as lengthy customs clearance procedures, lack of coordination among border agencies, inadequate trade infrastructure and limited logistics services significantly increase time to comply with import requirements.³⁹ Therefore, Subcategory 3.2.2–Total Cost to Comply with Import Requirements comprises one indicator (table 20).

Table 20. Category 3.2.2–Total Cost to Comply with Import Requirements

	Indicators	Components
1	Total Cost to Comply with Import Requirements	The total costs associated with complying with all import requirements, including customs fees, other required payments, and payments made to customs brokers or freight forwarders

3.3 Participation in Cross-Border Digital Trade

Category 3.3 is composed of one subcategory consisting of one indicator.

3.3.1 Share of Trading Firms Exporting Digitally Ordered Goods

Operational and transaction costs, as well as lengthy procedures for exporting digitally ordered goods, create barriers and challenges for firms engaging in digital exports. These factors may limit the firms in this sector and constrain their growth potential, affecting how many trading firms export low-value goods ordered online and cleared as a mail parcel or courier delivery. Therefore, Subcategory 3.3.1–Share of Trading Firms Exporting Digitally Ordered Goods comprises one indicator (table 21).

Table 21. Subcategory 3.3.1–Share of Trading Firms Exporting Digitally Ordered Goods

	Indicators	Components
1	Share of Trading Firms Exporting Digitally Ordered Goods	The percentage of firms in an economy, that export digitally ordered goods (valued below the applicable de minimis threshold and cleared as a mail parcel or courier delivery)

3.4 Perceived Major Obstacles: Business Transportation, Customs and Trade Regulations

Category 3.4 is divided into two subcategories consisting of one indicator each.

3.4.1 Share of Firms Identifying Customs and Trade Regulations as a Major or Severe Constraints

Perception-based questions on major obstacles to international trade capture subjective experiences and viewpoints of firms, shedding light on the challenges that businesses face when trading internationally.

Trading firms' perceptions of trade regulations as obstacles to trade may play a crucial role in shaping their trade strategies, market selection, risk management approach, and trade outcomes. Therefore, Subcategory 3.4.1 comprises one indicator (table 22).

Table 22. Subcategory 3.4.1–Share of Firms Identifying Customs and Trade Regulations as a Major or Severe Constraints

	Indicators	Components
1	Share of Firms Identifying Customs and Trade Regulations as a Major or Severe Constraints	The percentage of firms in an economy that answered that customs and trade regulations represent a major or severe constraint to international trade

3.4.2 Share of Firms Identifying Business Transportation as a Major or Severe Constraints

Trading firms' perceptions of transportation as an obstacle to trade may play a crucial role in shaping their trade strategies, market selection, risk management approach, and trade outcomes. Therefore, Subcategory 3.4.2–Share of Firms Identifying Business Transportation as a Major or Severe Constraints comprises one indicator (table 23).

Table 23. Subcategory 3.4.2–Share of Firms Identifying Business Transportation as a Major or Severe Constraints

	Indicators	Components
1	Share of Firms Identifying Business Transportation as a Major or Severe Constraints	The percentage of firms in an economy that answered that business transportation represents a major or severe constraint to international trade

III. DATA SOURCES

4.1 Data Collection Sources

The data for Pillar I and Pillar II are collected through expert consultations with private sector experts. Private sector experts include trade economists, trade lawyers, freight forwarders, customs brokers, clearing agents, shipping lines, and other trade experts.

The data for Pillar III are collected through Enterprise Surveys. These surveys provide representative data on time and cost to import and export goods and participating in digital trade experienced by businesses in practice. A representative sample of companies captures the variation of user experience within each economy. Businesses with different characteristics, such as size, region, and sector, participate in the surveys. For more details on the collection of data by the Enterprise Surveys, please refer to the Overview chapter of this Methodology Handbook.

4.2 Screening and Selection of Experts

The International Trade topic has four questionnaires: trade in goods, trade in services, public services, and digital trade. Each questionnaire targets experts in their respective areas of expertise. In order to select potential experts to participate in the questionnaires, screener questionnaires have been developed (table 24).

The data for the digital trade questionnaire are collected through the Utility Services (Internet), Financial Services (Electronic Payments), and Taxation questionnaires. Therefore, the International Trade topic does not select experts to participate in this questionnaire.

Table 24. Screener Questionnaire and Respondent Criteria

Relevant Experts' Professions	
Trade in Goods	International trade economists, international trade lawyers, international trade consultants, international trade managers, other trade experts, etc.
Trade in Services	International trade economists, international trade lawyers, international trade consultants, international trade managers, other trade experts, etc.
Public Services	Freight forwarders, customs brokers, clearing agents, and shipping lines, trade consultants, trade managers, etc.
Relevant Areas of Specialization	
Trade in Goods	Expertise in international trade economics, international trade law, other areas relevant to international trade
Trade in Services	Expertise in international trade economics, international trade law, other areas relevant to international trade
Public Services	Expertise in services related to international trade, including freight forwarding, customs brokerage, customs clearance, and shipping lines, trade consultancy, among others.
Assessment of the Experts' Knowledge and Experience Related to International Trade in Goods and Services, and Public Services for the Facilitation of International Trade	
Trade in Goods	Experience working on WTO commitments in goods, domestic regulations on trade in goods, non-tariff measures and other trade barriers, trade agreements, and sustainable trade; providing advice or consultation services on issues of international trade regulations; negotiating, drafting or implementing regulations on international trade in goods; involvement in disputes of any form related to international trade; analysis of regulations or policy changes, quantitative analysis, or research in the area of international trade
Trade in Services	Experience working on WTO commitments in services, domestic regulations on trade in services, trade agreements, and sustainable trade; providing advice or consultation services on issues of international trade regulations; negotiating, drafting or implementing regulations on international trade in services; involvement in disputes of any form related to international trade; analysis of regulations or policy changes, quantitative analysis, or research in the area of international trade
Public Services	Experience with contract negotiation, customs release and clearance, customs disputes, express delivery, logistics (supply chains), and payment arrangements with banks; experience with documentary requirements and procedures required for exporting, importing, or transiting goods; experience working on WTO commitments in goods, domestic regulations on trade, non-tariff measures and other trade barriers, trade agreements, and sustainable trade

Note: WTO = World Trade Organization.

Thus, the information provided in the screener questionnaires allows the team to better understand the experts' professions; areas of specializations and experts' knowledge or experience related to international trade in goods, services and digital trade and related regulations, services, and processes. Ultimately, this will allow the team to select the experts to respond to the relevant questionnaires. Data on Digital Trade is collected by the Utility Services, Financial Services, and Taxation topics. Hence, digital trade expert selection will follow the respective topic's screening processes.

IV. PARAMETERS

To ensure comparability of the data from expert consultations across economies, the International Trade topic uses general and specific parameters. A parameter refers to an assumption made about the characteristics of border types, service sectors and the specific characteristics of trade transactions. Questionnaire respondents are presented with these parameters and assumptions and asked to evaluate a standardized scenario that permits comparability across economies.

5.1 General Parameters

The International Trade topic utilizes two general parameters on the geographic nature of an economy and relevant service subsectors.

5.1.1 Geographic Nature

Justification:

The geographic nature of an economy is linked to the possibilities available for the development of its trade infrastructure and supply of transportation services. Depending on the geographic location, an economy can be categorized into one of the three following groups: a coastal, an island, or a landlocked economy.

- Coastal Economy: A coastal economy refers to an economy with means to conduct export and import through seaport, land border crossing, and airport without transiting through a third country.
- Island Economy: An island economy refers to an economy with means to conduct export and import only through seaport and airport without transiting through a third country.
- Landlocked Economy: A landlocked economy refers to an economy with means to conduct export and import only through land border crossing and airport without transiting through a third country.

Application:

This parameter applies to both Pillars I and II. Specifically, it determines the transport services subsectors measured in Pillars I and II, as well as the specific border(s) to be measured under Trade Infrastructure in Pillar II.

5.1.2 Services Sectors and Subsectors

Justification:

Regulations on trade in services vary at the subsector level. For the International Trade topic, considering certain service sectors' crucial roles as inputs and facilitators for international trade in goods, eight subsectors across freight transport, logistics services, and financial services are thus selected as general parameters. The subsectors considered are maritime freight, road freight, air freight, cargo handling, storage and warehousing, customs brokerage, commercial banking, and insurance. Considering the geographic nature of the economy under assessment, only two freight transport subsectors will be considered, thus totaling seven subsectors across freight transport, logistics services, and financial services measured in each economy (see Section 5.2.7 for more details).

Application:

This parameter applies to both Pillars I and II in all questions related to trade in services.

5.2 Specific Parameters

Trade regulations and their applicability may vary depending on the traded products and the trading partners. To strike a balance between cross-country comparability and economy-specific representativeness, the International Trade topic utilizes the following specific parameters to provide contextual information for experts to identify the appropriate regulations to be assessed in different pillars.

5.2.1 Agricultural Product Chapters

Justification:

This parameter refers to preselected harmonized system (HS) chapters (2-digit level) that are of agricultural nature. When it comes to non-tariff measures (NTMs), not all product chapters are created equal. Certain chapters may be more susceptible to NTMs, while others are less so. For this reason, it is important to define globally those products chapters that may be more prone to become the target of various NTMs, which are imposed for consumer protection, environmental and social goals, or protection of domestic industries/producers. There are 24 preselected agricultural product chapters (HS 2-digit level) which are chosen according to data on frequency of NTM applications by HS chapters from the World Integrated Trade Solutions (WITS) database at the world-level.

Application:

This parameter is primarily used in Pillar I within the section on regulatory restrictions on international trade in goods, specifically for the questions related to the application of non-technical NTMs, including contingent trade-protective measures, import prohibitions, and quotas. This parameter is also used in defining the premises of specific traded agricultural products at the economy level, which is described further in section 5.2.3 for traded products.

Manufactured Product Chapters

Justification:

This parameter refers to preselected harmonized system (HS) chapters (2-digit level) that are of manufactured nature. Like the agricultural product chapters, not all product chapters are the same concerning the application of NTMs on manufactured products. There may be manufactured product chapters that are more susceptible to various technical measures when being traded, while others are less so. Therefore, it is important to define globally those products chapters that may be more prone to various NTMs, which are imposed for consumer protection, environmental and social goals, or protection of domestic industries/producers. There are 24 preselected manufactured product chapters (HS 2-digit level) which are chosen according to data on frequency of NTM applications by HS chapters from the World Integrated Trade Solutions (WITS) database at the world-level.

Application:

This parameter is primarily used in Pillar I within the section on regulatory restrictions on international trade in goods, specifically for the questions related to the application of non-technical NTMs, including contingent trade-protective measures, import prohibitions, and quotas etc. This parameter is also used in defining the premises of specific traded manufactured products at the economy level, which is described further in section 5.2.3 on traded products.

5.2.2 Traded Products

Justification:

This parameter refers to the most imported manufactured and agricultural products by total import value between 2015 and 2019 at Harmonized System (HS) subheading level (6-digit) within the predefined HS chapters as discussed in Sections 5.2.1 and 5.2.2. How trade regulations are applied is closely related to the type of products being traded. Thus, defining the products traded is critical for the experts to refer to the most relevant regulations and their applicability. Specifically, many trade regulations are applied at a more granular level in terms of products, meaning it may not be enough to only define the products at HS chapter level. That is the precise reason to define the product at the subheading level to capture the specificity associated with the application of these regulations. Product selections are done based on United Nations Commodity Trade (UN COMTRADE) database, using import data between 2015 and 2019.

Application:

This parameter is used in Pillar I within the section on regulatory restrictions on international trade in goods, specifically for the questions related to the application of technical NTMs including sanitary and phytosanitary measures, technical barriers to trade, and pre-shipment inspections.

5.2.3 Traded Environmental Goods

Justification:

This parameter refers to the top five most traded environmental products by total trade value at the world level between 2015-2019 (UN COMTRADE) within the Asia-Pacific Economic Cooperation (APEC) list of environmental goods at HS subheading level (6-digit). These products are HS 854140, HS 901380, HS 847989, HS 903289, and HS 903180. Tariffs and duties applied to the importation of environmental goods may vary depending on products that are being traded. The selection of the global top five most imported environmental goods achieves a balance between representativeness and comparability. It considers both

the selected environmental goods' relevance to the economies covered, while also taking into consideration cross-country comparison.

Application:

This parameter is used in Pillar I within the section on sustainable trade policy, specifically for the question on the effectively applied tariff rate on these top five most traded environmental goods at the world level.

5.2.4 Main Trading Partner(s)

Justification:

This parameter refers to the natural partners of an economy by different trade categories between 2015 and 2019. In the context of trade cooperation and border agency programs, trading partner(s) refer(s) to an economy's top three trade partners in goods (UN COMTRADE) and services (OECD) imports. In the context of external coordination, trading partner(s) refer(s) to the main trading partner of goods for the economy, or the main trading partner of goods sharing a land border (UN COMTRADE). Incentives for trade cooperation and external coordination with other trading partners may vary depending on their relevance. In addition, measuring the top three trading partners in trade cooperation mitigates the possibility of no agreements with main partners that are unwilling to cooperate. Partner selections are conducted based on UN COMTRADE database, using bilateral import data between 2015 and 2019.

Application:

This parameter is used in Pillar I under the section covering practices on international trade cooperation, and in Pillar II under sections covering trade infrastructure, external cooperation, and border agency programs.

5.2.5 Main Border

Justification:

The main border per each mode of transportation (by maritime, air, or road freight) is determined by the total trade value by border by mode of transportation. Considering the economy's geographic nature, only the main borders referring to the two most relevant types of transportation freight are measured (see 5.2.6). For coastal economies, which have no land border posts with any neighboring trading partner, only ports and airports will be assessed. Similarly, for landlocked economies, which have no land border posts with neighboring trading partners, only airports will be assessed. To measure trade infrastructure, it is important to identify the borders that are most relevant to the economy in terms of trade value. It is also crucial to differentiate the relevance of borders by transportation type, as facilities, amenities, and infrastructure can vary across different types of borders (that is, port, land border post, or airport). The selection of the main border by mode of transportation is based on data from ancillary government sources (such as statistical agencies) and confirmed by experts.

Application:

This parameter is used in Pillar II within the sections on trade infrastructure and external coordination, where identifying the main border will provide sufficient context for experts to respond to questions related to facilities, amenities, and other infrastructure setup.

5.2.6 Transportation Freight

Justification:

Considering the economy's geographic nature, the two most relevant types of transportation freight are measured. For each economy, depending on its geographic nature, the relevant transportation freight services may vary. As detailed in section 5.1.1, the International Trade topic predesignates an economy's geographic nature. Hence, this parameter defines what type of transportation freight service is being measured according to the economy's categorization (coastal, island, or landlocked).

Application:

This parameter is used in Pillar I under questions on the regulatory restrictions on international trade in services, specifically concerning questions on subsectors in the transport freight sector. Coastal economies are assessed on road and sea freight services, island economies are assessed on air and sea freight services, and landlocked economies are assessed on air and road freight services.

5.2.7 WTO Membership

Justification:

An economy's status for WTO membership (that is, Member, Observer, or none). In the context of trade cooperation, for certain areas measured by the International Trade topic, it is important to differentiate economies that are WTO members, and those that are not. It provides the necessary context to assess the applicability of any WTO-related obligations.

Application:

This parameter is primarily used in Pillar I under the section on trade cooperation, regarding notifications of preferential trade agreements (PTAs) to the WTO.

V. TOPIC SCORING

The International Trade topic has three pillars: Pillar I–Quality of Regulations for International Trade; Pillar II–Quality of Public Services for the Facilitation of International Trade; and Pillar III–Operational Efficiency of Exporting Goods, Importing Goods, and Engaging in Digital Trade. The total points for each Pillar are further rescaled to values from 0 to 100, and subsequently aggregated into the total topic score. Each pillar contributes one-third to the total topic score. Table 25 shows the scoring for the International Trade topic. The scores distinguish between benefits to the firm (captured as firm flexibility points) and benefits to society's broader interests (captured as social benefits points). For further scoring details please see Annex A, which complements this category.

Table 25. Aggregate Scoring Overview

Pillar Number	Pillar	Number of Indicators	Score			Rescaled Points (0–100)	Weight
			Firm Flexibility	Social Benefits	Total Points		
I	Quality of Regulations for International Trade	94	72	94	166	100	0.33
II	Quality of Public Services for the Facilitation of International Trade	50	50	50	100	100	0.33
III	Operational Efficiency of Exporting Goods, Importing Goods, and Engaging in Digital Trade	7	100	n/a	100	100	0.33

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent).

6.1 Pillar I–Quality of Regulations for International Trade

Pillar I covers 94 indicators with a total score of 166 points (72 points on firm flexibility and 94 points on social benefits) (table 26). The scoring for each category under this pillar is as follows:

6.1.1 *Practices Supporting International Trade* has 35 indicators with a total maximum score of 64 points (29 points on firm flexibility and 35 points on social benefits). Specifically, the *International Trade in Goods and Services* Subcategory has 14 indicators; the *Digital and Sustainable Trade (includes gender and environment)* Subcategory has 12 indicators; and the *International Trade Cooperation*

Subcategory has 9 indicators. Some indicators on cross-border carbon pricing instruments, international commitments on sustainable trade, and gender equality in trade agreements in this category have an ambiguous impact on firm flexibility and hence do not receive firm flexibility points.

- 6.1.2** *Regulatory Restrictions on International Trade* has 59 indicators with a total maximum score of 102 points (43 points on firm flexibility and 59 points on social benefits). Specifically, the *International Trade in Goods (includes gender)* Subcategory has 23 indicators, the *International Trade in Services* Subcategory has 22 indicators, and the *Digital Trade* Subcategory has 14 indicators.

Table 26. Aggregate Scoring for Pillar I

Pillar I—Quality of Regulations for International Trade		No. of Indicators	FFP	SBP	Total Points	Rescaled Points
1.1	Practices Supporting International Trade	35	29	35	64	50.00
1.1.1	International Trade in Goods and Services	14*	14*	14*	28*	16.67
1.1.2	Digital and Sustainable Trade (includes gender and environment)	12	6	12	18	16.67
1.1.3	International Trade Cooperation	9**	9**	9**	18**	16.67
1.2	Regulatory Restrictions on International Trade	59	43	59	102	50.00
1.2.1	International Trade in Goods (includes gender)	23	15	23	38	20.00
1.2.2	International Trade in Services	22***	22***	22***	44***	20.00
1.2.3	Digital Trade	14	6	14	20	10.00
Total		94	72	94	167	100.00

Note: FFP = Firm Flexibility Point. SBP = Social Benefits Point.

* Landlocked economies may score a total of 24 points, which will be rescaled to the same total rescaled points obtained by other economies (16.67).

** Non-WTO members may score a total of 16 points, which will be rescaled to the same total rescaled points obtained by WTO members (16.67).

*** Landlocked economies may score a total of 38 points, which will be rescaled to the same total rescaled points obtained by other economies (20).

6.2 Pillar II—Quality of Public Services for the Facilitation of International Trade

Pillar II covers 50 indicators with a total score of 100 points (50 points on firm flexibility and 50 points on social benefits) (table 27). The scoring for each category under this pillar is as follows:

- 6.2.1** *Digital and Physical Infrastructure* has 29 indicators with a total maximum score of 58 points (29 points on firm flexibility and 29 points on social benefits). Specifically, the *Electronic systems and interoperability of services* Subcategory has 10 indicators, the *Transparency and availability of information* Subcategory has 12 indicators, and the *Trade Infrastructure* Subcategory has 7 indicators.
- 6.2.2** *Border Management* has 21 indicators with a total maximum score of 42 points (21 points on firm flexibility and 21 points on social benefits). Specifically, the *Risk Management* Subcategory has 8 indicators, the *Coordinated Border Management* Subcategory has 7 indicators, and the *Trusted Trader Programs* Subcategory has 6 indicators.

Table 27. Aggregate Scoring for Pillar II

Pillar II—Quality of Public Services for the Facilitation of International Trade		No. of Indicators	FFP	SBP	Total Points	Rescaled Points
2.1	Digital and Physical Infrastructure	29	29	29	58	50.00
2.1.1	Electronic Systems and Interoperability of Services	10	10	10	20	16.67
2.1.2	Transparency and Availability of Information	12	12	12	24	16.67
2.1.3	Trade Infrastructure	7*	7*	7*	14*	16.67
2.2	Border Management	21	21	21	42	50.00
2.2.1	Risk Management	8	8	8	16	20.00
2.2.2	Coordinated Border Management	7**	7**	7**	14**	20.00
2.2.3	Trusted Trader Programs	6	6	6	12	10.00
Total		94	73	94	167	100.00

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

*Considering the economy's geographic nature, only the main borders referring to the two most relevant types of transportation freight are measured (see 5.2.6). While the number of components for the Information systems indicator differs between island and coastal economies (4 components) and landlocked economies (2 components), the maximum score assigned to this indicator is the same for all economies. In case only one border can be measured for an economy, the total subcategory points will be rescaled to the same total rescaled points applicable to other economies (16.67).

** Island economies may score a total of 8 points, which will be rescaled to the same total rescaled points applicable to other economies (20)

6.3 PILLAR III—Operational Efficiency of Exporting Goods, Importing Goods, and Engaging in Digital Trade

Pillar III has 7 indicators with scores ranging from 0 to 100 (table 28). The scores on indicators under this pillar are assigned to firm flexibility only, as the indicators measure the time and costs incurred to firms as they import, export, and engage in digital trade. For example, longer clearance time and higher transaction costs hinder firms' ability to conduct international trade, thus adversely impacting firm flexibility.

Table 28. Aggregate Scoring for Pillar III

Pillar III—Operational Efficiency of Exporting Goods, Importing Goods, and Engaging in Digital Trade		No. of Indicators	Rescaled Points
3.1	Compliance with Export Requirements	2	40
3.1.1	Total Time to Comply with Export Requirements	1	20
3.1.2	Total Cost to Comply with Export Requirements	1	20
3.2	Compliance with Import Requirements	2	40
3.2.1	Total Time to Comply with Import Requirements	1	20
3.2.2	Total Cost to Comply with Import Requirements	1	20
3.3	Participation in Cross-Border Digital Trade	1	10
3.3.1	Share of Trading Firms Exporting Digitally Ordered Goods	1	10
3.4	Perceived Major Obstacles: Business Transportation, Customs and Trade Regulation	2	10
3.4.1	Share of Firms Identifying Customs and Trade Regulations as Major or Severe Constraints	1	5
3.4.2	Share of Firms Identifying Transportation as Major or Severe Constraints	1	5
Total		7	100

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- ⁴ Goldberg et al. (2010); Madsen (2007).
- ⁵ Feng, Lie, and Swenson (2016).
- ⁶ Fernandes, Ferro, and Wilson (2019); Nordås and Rouzet (2015).
- ⁷ Fontagné, Orefice, and Piermartini (2020); Hummels and Schaur (2013).
- ⁸ Handley (2014); World Bank (2018a); Johns and Saltane (2016); OECD (2008, 2009).
- ⁹ For good regulatory practices, see, among others, UNCITRAL's Model Law on Electronic Commerce, Model Law on Electronic Transferable Records, and Model Law on Electronic Signatures, and the UN Convention on the Use of Electronic Communications in International Contracts, as well as the WCO's Cross-Border E-Commerce Framework of Standards. This indicator will expand currently available databases—such as the World Bank Group's Digital Business Indicators (DBI) and Global Data Regulations Diagnostic (GDRD), the UN's Global Survey on Digital and Sustainable Trade Facilitation (GSDSTF), ECIPE's Digital Trade Restrictiveness Index (DTRI), and the Digital Policy Alert (DPA)—by increasing geographic scope and time period of coverage.
- ¹⁰ Bai et al. (2020); Daza Jaller, Gaillard, and Molinuevo (2020); Ferrantino and Koten (2019).
- ¹¹ UNCTAD (2016).
- ¹² Parry et al. (2021); Pirlot (2021); Shapiro (2020). See the International Convention for the Prevention of Pollution from Ships (MARPOL Convention) and the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (Basel Convention).
- ¹³ Dhingra, Freeman, and Huang (2021); Mattoo, Mulabdic, and Ruta (2017a, 2017b).
- ¹⁴ Baccini, Dür, and Elsig (2015); Steger (2012).
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- ¹⁷ World Bank Group (2018).
- ¹⁸ Acharya et al. (2019); Kee, Nicita, and Olarreaga (2009); Van der Marel and Shepherd (2020).
- ¹⁹ Jafari and Tarr (2017).
- ²⁰ For good regulatory practices, see, among others, GATS and WTO's Declaration on the Conclusion of Negotiations on Services Domestic Regulations. This indicator will expand currently available databases—such as I-TIP, WBSTRI, and the OECDSTRI—by increasing geographic scope and time period of coverage.
- ²¹ Bai et al. (2020); Daza Jaller, Gaillard, and Molinuevo (2020); Ferrantino and Koten (2019); WTO (2021).
- ²² Daza Jaller, Gaillard, and Molinuevo (2020); Ferrantino and Koten (2019).
- ²³ For good regulatory practices, see, among others, UNCITRAL's Model Laws on Electronic Commerce, the UN's Convention on the Use of Electronic Communications in International Contracts, and OECD's Recommendation on Consumer Protection for E-commerce and Guidelines on the Protection of Privacy, WCO's Cross-Border E-Commerce Framework of Standards, and EU's General Data Protection Regulation. This indicator will expand currently available databases—such as DBI, GDRD, GSDSTF, DTRI, and DPA—by increasing geographic scope and time period of coverage.
- ²⁴ UNECE. 2017. Recommendation No. 36: Single Window Interoperability. (ECE/TRADE/431).
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- ²⁶ WCO (2016).
- ²⁷ For good regulatory practices, see, among others, the World Trade Organization's (WTO) Trade Facilitation Agreement (TFA), the Customs Valuation Agreement and Agriculture Agreement, the World Customs Organization's (WCO) Revised Kyoto Convention (RKC) and SAFE Framework of Standards to Secure and Facilitate Global Trade (SAFE Framework), and the United Nations Economic Commission for Europe's (UNECE) Recommendation No. 35 on Establishing a Legal Framework for International Trade Single Window.
- ²⁸ Donaubauer et al. (2018). For additional good practices, see, among others, International Maritime Organization's Convention of Facilitation of International Maritime Traffic (FAL Convention). This indicator will expand the World Bank Group's Logistics Performance Index, the World Bank Group and IHS Markit's Container Port Performance Index (CPPI), and UNCTAD's Liner Shipping Connectivity Index by adding specific measures not covered by those indexes.
- ²⁹ WCO (2011).
- ³⁰ UNECE and ITC (2022).
- ³¹ Pérez Azcárraga et al. (2022).
- ³² For additional good practices, see, among others, WCO's Coordinated Border Management Compendium.
- ³³ ITC (2020, 70–75).
- ³⁴ APEC (2020). APEC's Manual of Best Practices According to the AEO Benefits Survey Under Pillar 3 WCO Safe Framework.
- ³⁵ Sierra Galindo and Domínguez Rodríguez (2020).
- ³⁶ Hummels and Schaur (2013); Volpe Martincus, Carballo, and Graziano (2015).
- ³⁷ Volpe Martincus, Carballo, and Graziano (2015).
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ANNEX A. INTERNATIONAL TRADE–SCORING SHEET

This document outlines the scoring approach for the International Trade topic. For every indicator, a Firm Flexibility Point (FFP) and/or a Social Benefits Point (SBP) are assigned, along with a clarification on the detailed scoring for each such indicator and a note on the relevant background literature.

PILLAR I–QUALITY OF REGULATIONS FOR INTERNATIONAL TRADE					
1.1 PRACTICES SUPPORTING INTERNATIONAL TRADE					
1.1.1 International Trade in Goods and Services					
Indicators	FFP	SBF	Total Points	Rescaled Points	Background Literature
Establishment of Maritime Single Window*	1	1	2	1.19	IMO (2003)
Temporary Admission of Goods	1	1	2	1.19	WCO (1990b, 2006b, 2022)
Rules on Liability of Carriers*	1	1	2	1.19	UN (1978)
Simplified Visa Regime–Foreign Crew Members and Service Providers	1	1	2	1.19	Geloso Grosso et al. (2014); WTO (1994c, 2019)
Reasons for License Rejection, Suspension, and Cancellation (Freight Transport)	1	1	2	1.19	OECD (2009); UNCTAD (2011); WTO (2013)
Reasons for License Rejection, Suspension, and Cancellation (Logistics Services)	1	1	2	1.19	OECD (2009); UNCTAD (2011); WTO (2013)
Right to Appeal (Goods)–Administrative	1	1	2	1.19	OECD (2009); UNCTAD (2011); WTO (2013)
Right to Appeal (Goods)–Judicial	1	1	2	1.19	OECD (2009); UNCTAD (2011); WTO (2013)
Right to Appeal (Services)–Administrative (Freight Transport)	1	1	2	1.19	OECD (2009); UNCTAD (2011); WTO (2013)
Right to Appeal (Services)–Administrative (Logistics Services)	1	1	2	1.19	OECD (2009); UNCTAD (2011); WTO (2013)
Right to Appeal (Services)–Judicial (Freight Transport)	1	1	2	1.19	OECD (2009); UNCTAD (2011); WTO (2013)
Right to Appeal (Services)–Judicial (Logistics Services)	1	1	2	1.19	OECD (2009); UNCTAD (2011); WTO (2013)
De Minimis Value	1	1	2	1.19	GEA (2016); ICC (2015); WCO (1999); WTO (2013); Holloway and Rae (2012)
Legal Requirements for the Imposition of Non-Tariff Measures	1	1	2	1.19	APEC and World Bank (2007); Francois (2001); Ing, Cadot, and Walz (2018); Van Tongeren (2009); WTO (1994a, 1994b, 2013)
Total Points for Subcategory 1.1.1	14	14	28	16.67	

1.1.2 Digital and Sustainable Trade (includes gender and environment)					
Electronic Contracts	1	1	2	1.85	APEC (2020b); Daza Jaller, Gaillard, and Molinuevo (2020); Ferrantino and Koten (2019); UN (2007); UNCITRAL (1996, 2001, 2022); UNESCAP (2021); WCO (2018)
Electronic Signatures	1	1	2	1.85	APEC (2020b); Daza Jaller, Gaillard, and Molinuevo (2020); Ferrantino and Koten (2019); UN (2007); UNCITRAL (1996, 2001, 2022); UNESCAP (2021); WCO (2018)
Technology Neutrality	1	1	2	1.85	APEC (2020b); Daza Jaller, Gaillard, and Molinuevo (2020); Ferrantino and Koten (2019); UN (2007); UNCITRAL (1996, 2001, 2022); UNESCAP (2021); WCO (2018)
Cross-Border Data Flows	1	1	2	1.85	APEC (2020b); Daza Jaller, Gaillard, and Molinuevo (2020); Ferrantino and Koten (2019); UN (2007); UNCITRAL (1996, 2001, 2022); UNESCAP (2021); WCO (2018)
Cross-Border Carbon Pricing Instruments	n/a	1	1	0.93	Brenton and Chemutai (2021); EC (2021); OECD, (2020); Parry et al. (2021); Pirlot (2021); Shapiro (2020); UN (2020); World Bank (2007, 2022);
Tariffs on Environmental Goods	1	1	2	1.85	Brenton and Chemutai (2021); Casella and Melo, (2021); Islam and Managi (2019); Shapiro (2020); World Bank (2007)
Endangered Species	n/a	1	1	0.93	CITES (1973), Rotterdam Convention (1998), Basel Convention (1989)
Oil, Chemical, Sewage and Air Pollution	n/a	1	1	0.93	MARPOL (1973)
Hazardous Chemicals or Pesticides	n/a	1	1	0.93	Rotterdam Convention (1998)
Freedom of Association and Right to Collective Bargaining	n/a	1	1	0.93	ILO (1998)
Gender Equality in Trade Agreements	n/a	1	1	0.93	Laperle-Forget (2022); Monteiro (2018)
Women's Participation in Economic and Development Activity	1	1	2	1.85	Laperle-Forget (2022); Monteiro (2018)
Total Points for Subcategory 1.1.2	6	12	18	16.67	
1.1.3 International Trade Cooperation					
Absence of Non-Notified PTAs**	1	1	2	1.85	Mattoo, Rocha, and Ruta (2020); UNCTAD (2006a); WTO (2022)
Duty Free Trade	1	1	2	1.85	Baccini, Dür, and Elsig (2015); Dhingra, Freeman, and Huang (2021); Fernandes, Rocha, and Ruta (2021); Gray (2014); Hofmann, Osnago, and Ruta (2017); Larget et al. (2018); Mattoo, Mulabdic, and Ruta (2017a, 2017b); Mattoo, Rocha, and Ruta (2020)

Digital Trade	1	1	2	1.85	Baccini, Dür, and Elsig (2015); Dhingra, Freeman, and Huang (2021); Fernandes, Rocha, and Ruta (2021); Gray (2014); Hofmann, Osnago, and Ruta (2017); Larget et al. (2018); Mattoo, Mulabdic, and Ruta (2017a, 2017b); Mattoo, Rocha, and Ruta (2020)
Investment and Movement of Capital	1	1	2	1.85	Baccini, Dür, and Elsig (2015); Dhingra, Freeman, and Huang (2021); Fernandes, Rocha, and Ruta (2021); Gray (2014); Hofmann, Osnago, and Ruta (2017); Larget et al. (2018); Mattoo, Mulabdic, and Ruta (2017a, 2017b); Mattoo, Rocha, and Ruta (2020)
Trade in Services	1	1	2	1.85	Baccini, Dür, and Elsig (2015); Dhingra, Freeman, and Huang (2021); Fernandes, Rocha, and Ruta (2021); Gray (2014); Hofmann, Osnago, and Ruta (2017); Larget et al. (2018); Mattoo, Mulabdic, and Ruta (2017a, 2017b); Mattoo, Rocha, and Ruta (2020)
Harmonization of Regulation on Non-Tariff Measures	1	1	2	1.85	Baccini, Dür, and Elsig (2015); Dhingra, Freeman, and Huang (2021); Fernandes, Rocha, and Ruta (2021); Gray (2014); Hofmann, Osnago, and Ruta (2017); Larget et al. (2018); Mattoo, Mulabdic, and Ruta (2017a, 2017b); Mattoo, Rocha, and Ruta (2020)
Freight Transport Services Sector	1	1	2	1.85	Baccini, Dür, and Elsig (2015); Dhingra, Freeman, and Huang (2021); Fernandes, Rocha, and Ruta (2021); Gray (2014); Hofmann, Osnago, and Ruta (2017); Larget et al. (2018); Mattoo, Mulabdic, and Ruta (2017a, 2017b); Mattoo, Rocha, and Ruta (2020)
Logistics Services Sector	1	1	2	1.85	Baccini, Dür, and Elsig (2015); Dhingra, Freeman, and Huang (2021); Fernandes, Rocha, and Ruta (2021); Gray (2014); Hofmann, Osnago, and Ruta (2017); Larget et al. (2018); Mattoo, Mulabdic, and Ruta (2017a, 2017b); Mattoo, Rocha, and Ruta (2020)
Competent Authorities to Oversee the Implementation of PTAs	1	1	2	1.85	ADB (2008); Baccini, Dür, and Elsig (2015); Steger (2012)
Total Points for Subcategory 1.1.3	9	9	18	16.67	
Total Points for Category 1.1	29	35	64	50.00	
1.2 REGULATORY RESTRICTIONS ON INTERNATIONAL TRADE					
1.2.1 International Trade in Goods (includes gender)					
Sanitary and Phytosanitary Measures	n/a	1	1	0.53	Crivelli and Groeschl (2016); Disdier and Fugazza (2020); Fontagné et al. (2015); Murina and Nicita (2017); UNCTAD (2017, 2020); UNCTAD and World Bank Group (2018); WTO (1994a, 2012, 2013)

Sanitary and Phytosanitary Measures (National Treatment)	1	1	2	1.05	Crivelli and Groeschl (2016); Disdier and Fugazza (2020); Fontagné et al. (2015); Murina and Nicita (2017); UNCTAD (2017, 2020); UNCTAD and World Bank Group (2018); WTO (1994a, 2013)
Technical Barriers to Trade	n/a	1	1	0.53	de Melo and Shepherd (2018); Disdier and Fugazza (2020); Fernandes, Ferro, and Wilson (2019); Fontagné and Orefice (2018); UNCTAD (2017, 2020); UNCTAD and World Bank Group (2018); WTO (1994b, 2012, 2013)
Technical Barriers to Trade (National Treatment)	1	1	2	1.05	de Melo and Shepherd (2018); Disdier and Fugazza (2020); Fernandes, Ferro, and Wilson (2019); Fontagné and Orefice (2018); UNCTAD (2017, 2020); UNCTAD and World Bank Group (2018); WTO (1994b, 2012, 2013)
Absence of Pre-Shipment Inspections	1	1	2	1.05	de Melo and Shepherd (2018); Disdier and Fugazza (2020); Kee, Nicita, and Olarreaga (2009); UNCTAD (2017, 2020); UNCTAD and World Bank Group (2018); UNECE (1999); WTO (1994b, 2012, 2013)
Absence of Contingent Trade-Protective Measures	1	1	2	1.05	Bratt (2017); Cadot, Gourdon, and van Tongeren (2018); de Melo and Shepherd (2018); Disdier and Fugazza (2020); Kee, Nicita, and Olarreaga (2009); Niu et al. (2018); UNCTAD (2017, 2020); UNCTAD and World Bank Group (2018); WTO (2012, 2013)
Absence of Quantity Control Measures	1	1	2	1.05	Bratt (2017); Cadot, Gourdon, and van Tongeren (2018); de Melo and Shepherd (2018); Disdier and Fugazza (2020); Kee, Nicita, and Olarreaga (2009); Niu et al. (2018); UNCTAD (2017, 2020); UNCTAD and World Bank Group (2018); WTO (2012, 2013)
Absence of Price Control Measures	1	1	2	1.05	Bratt (2017); Cadot, Gourdon, and van Tongeren (2018); de Melo and Shepherd (2018); Disdier and Fugazza (2020); Kee, Nicita, and Olarreaga (2009); Niu et al. (2018); UNCTAD (2017, 2020); UNCTAD and World Bank Group (2018); WTO (2012, 2013)
Absence of Finance Measures	1	1	2	1.05	Bratt (2017); Cadot, Gourdon, and van Tongeren (2018); de Melo and Shepherd (2018); Disdier and Fugazza (2020); Kee, Nicita, and Olarreaga (2009); Niu et al. (2018); UNCTAD (2017, 2020); UNCTAD and World Bank Group (2018); WTO (2012, 2013)
Absence of Export Restrictions	1	1	2	1.05	Bratt (2017); Cadot, Gourdon, and van Tongeren (2018); de Melo and Shepherd (2018); Disdier and Fugazza (2020); Kee, Nicita, and Olarreaga (2009); Niu et al. (2018); UNCTAD (2017, 2020); UNCTAD and World Bank Group (2018); WTO (2012, 2013)
Absence of Caps on The Number of Operating Licenses (Freight Transport)	1	1	2	1.05	Crozet, Milet, and Mirza (2016); Ngai and Petrongolo (2017); World Bank (2012b, 2018a); WTO (1994c, 2019)

Absence of Price Floors and Price Guidelines (Freight Transport)	1	1	2	1.05	Crozet, Milet, and Mirza (2016); Ngai and Petrongolo (2017); World Bank (2012b, 2018a); WTO (1994c, 2019)
Absence of Mandatory Use of Certified Operators (Freight Transport)	1	1	2	1.05	Crozet, Milet, and Mirza (2016); Ngai and Petrongolo (2017); World Bank (2012b, 2018a); WTO (1994c, 2019)
Absence of Caps on the Number of Operating Licenses (Logistics)	1	1	2	1.05	Crozet, Milet, and Mirza (2016); Ngai and Petrongolo (2017); World Bank (2012b, 2018a); WTO (1994c, 2019)
Absence of Price Floors and Price Guidelines (Logistics)	1	1	2	1.05	Crozet, Milet, and Mirza (2016); Ngai and Petrongolo (2017); World Bank (2012b, 2018a); WTO (1994c, 2019)
Absence of Mandatory Use of Certified Operators (Logistics)	1	1	2	1.05	Crozet, Milet, and Mirza (2016); Ngai and Petrongolo (2017); World Bank (2012b, 2018a); WTO (1994c, 2019)
Safety Regulations—Certification for Operators (Freight Transport)	n/a	1	1	0.53	Crozet, Milet, and Mirza (2016); Ngai and Petrongolo (2017); World Bank (2012b, 2018a); WTO (1994c, 2019)
Safety Regulations—Equipment (Freight Transport)	n/a	1	1	0.53	Crozet, Milet, and Mirza (2016); Ngai and Petrongolo (2017); World Bank (2012b, 2018a); WTO (1994c, 2019)
Safety Regulations—Maximum Hours (Freight Transport)	n/a	1	1	0.53	Crozet, Milet, and Mirza (2016); Ngai and Petrongolo (2017); World Bank (2012b, 2018a); WTO (1994c, 2019)
Safety Regulations—Certification for Operators (Logistics)	n/a	1	1	0.53	Crozet, Milet, and Mirza (2016); Ngai and Petrongolo (2017); World Bank (2012b, 2018a); WTO (1994c, 2019)
Safety Regulations—Equipment (Logistics)	n/a	1	1	0.53	Crozet, Milet, and Mirza (2016); Ngai and Petrongolo (2017); World Bank (2012b, 2018a); WTO (1994c, 2019)
Safety Regulations—Maximum Hours (Logistics)	n/a	1	1	0.53	Crozet, Milet, and Mirza (2016); Ngai and Petrongolo (2017); World Bank (2012b, 2018a); WTO (1994c, 2019)
Absence of Additional Restrictions for Female Service Providers	1	1	2	1.05	Crozet, Milet, and Mirza (2016); Ngai and Petrongolo (2017); World Bank (2012b, 2018a); WTO (1994c, 2019)
Total Points for Subcategory 1.2.1	15	23	38	20.00	
1.2.2 International Trade in Services					
Absence of Restrictions on Foreign Registration of Vessels under National Flags (Maritime Freight Only)*	1	1	2	0.91	Geloso Grosso et al. (2014); Kee, Nicita, and Olarreaga (2009); Mattoo, Rocha, and Ruta (2020); Miller (1999); Sugie et al. (2015); Rouzet et al. (2014); WTO (1994c, 2021)
Absence of Restrictions on Cabotage/Access Rights (Maritime Freight Only)*	1	1	2	0.91	Geloso Grosso et al. (2014); Kee, Nicita, and Olarreaga (2009); Mattoo, Rocha, and Ruta (2020); Miller (1999); Sugie et al. (2015); Rouzet et al. (2014); WTO (1994c, 2021)
Absence of Restrictions on the Use of Local Port Services (Maritime Freight Only)*	1	1	2	0.91	Geloso Grosso et al. (2014); Kee, Nicita, and Olarreaga (2009); Mattoo, Rocha, and Ruta (2020); Miller (1999); Sugie et al. (2015); Rouzet et al. (2014); WTO (1994c, 2021)
Absence of Restrictions on Quotas (Freight Transport)	1	1	2	0.91	Geloso Grosso et al. (2014); Kee, Nicita, and Olarreaga (2009); Mattoo, Rocha, and Ruta (2020); Miller (1999); Sugie et al. (2015); Rouzet et al. (2014); WTO (1994c, 2021)

Absence of Restrictions Subject to an Economic Needs Test (Freight Transport)	1	1	2	0.91	Geloso Grosso et al. (2014); Kee, Nicita, and Olarreaga (2009); Mattoo, Rocha, and Ruta (2020); Miller (1999); Sugie et al. (2015); Rouzet et al. (2014); WTO (1994c, 2021)
Absence of Restrictions on Acquisition and Use of Land and Real Estate (Freight Transport)	1	1	2	0.91	Geloso Grosso et al. (2014); Kee, Nicita, and Olarreaga (2009); Mattoo, Rocha, and Ruta (2020); Miller (1999); Sugie et al. (2015); Rouzet et al. (2014); WTO (1994c, 2021)
Absence of Restrictions on Quotas (Logistics)	1	1	2	0.91	Geloso Grosso et al. (2014); Kee, Nicita, and Olarreaga (2009); Mattoo, Rocha, and Ruta (2020); Miller (1999); Sugie et al. (2015); Rouzet et al. (2014); WTO (1994c, 2021)
Absence of Restrictions Subject to an Economic Needs Test (Logistics)	1	1	2	0.91	Geloso Grosso et al. (2014); Kee, Nicita, and Olarreaga (2009); Mattoo, Rocha, and Ruta (2020); Miller (1999); Sugie et al. (2015); Rouzet et al. (2014); WTO (1994c, 2021)
Absence of Restrictions on Acquisition and Use of Land and Real Estate (Logistics)	1	1	2	0.91	Geloso Grosso et al. (2014); Kee, Nicita, and Olarreaga (2009); Mattoo, Rocha, and Ruta (2020); Miller (1999); Sugie et al. (2015); Rouzet et al. (2014); WTO (1994c, 2021)
Absence of Restrictions on Quotas (Financial Services)	1	1	2	0.91	Geloso Grosso et al. (2014); Kee, Nicita, and Olarreaga (2009); Mattoo, Rocha, and Ruta (2020); Miller (1999); Sugie et al. (2015); Rouzet et al. (2014); WTO (1994c, 2021)
Absence of Restrictions Subject to an Economic Needs Test (Financial Services)	1	1	2	0.91	Geloso Grosso et al. (2014); Kee, Nicita, and Olarreaga (2009); Mattoo, Rocha, and Ruta (2020); Miller (1999); Sugie et al. (2015); Rouzet et al. (2014); WTO (1994c, 2021)
Absence of Restrictions on Acquisition and Use of Land and Real Estate (Financial Services)	1	1	2	0.91	Geloso Grosso et al. (2014); Kee, Nicita, and Olarreaga (2009); Mattoo, Rocha, and Ruta (2020); Miller (1999); Sugie et al. (2015); Rouzet et al. (2014); WTO (1994c, 2021)
Absence of Additional Restrictions on Licensing or Authorization Requirements (Freight Transport)	1	1	2	0.91	Geloso Grosso et al. (2014); Kee, Nicita, and Olarreaga (2009); Mattoo, Rocha, and Ruta (2020); Miller (1999); Sugie et al. (2015); Rouzet et al. (2014); WTO (1994c, 2021)
Absence of Additional Quotas for Foreign Contractual and Independent Service Providers (Freight Transport)	1	1	2	0.91	Geloso Grosso et al. (2014); Kee, Nicita, and Olarreaga (2009); Mattoo, Rocha, and Ruta (2020); Miller (1999); Sugie et al. (2015); Rouzet et al. (2014); WTO (1994c, 2021)
Absence of Labor Market Tests for Foreign Contractual and Independent Service Providers (Freight Transport)	1	1	2	0.91	Geloso Grosso et al. (2014); Kee, Nicita, and Olarreaga (2009); Mattoo, Rocha, and Ruta (2020); Miller (1999); Sugie et al. (2015); Rouzet et al. (2014); WTO (1994c, 2021)

Absence of Additional Restrictions on Licensing or Authorization Requirements (Logistics)	1	1	2	0.91	Geloso Grosso et al. (2014); Kee, Nicita, and Olarreaga (2009); Mattoo, Rocha, and Ruta (2020); Miller (1999); Sugie et al. (2015); Rouzet et al. (2014); WTO (1994c, 2021)
Absence of Additional Quotas for Foreign Contractual and Independent Service Providers (Logistics)	1	1	2	0.91	Geloso Grosso et al. (2014); Kee, Nicita, and Olarreaga (2009); Mattoo, Rocha, and Ruta (2020); Miller (1999); Sugie et al. (2015); Rouzet et al. (2014); WTO (1994c, 2021)
Absence of Labor Market Tests for Foreign Contractual and Independent Service Providers (Logistics)	1	1	2	0.91	Geloso Grosso et al. (2014); Kee, Nicita, and Olarreaga (2009); Mattoo, Rocha, and Ruta (2020); Miller (1999); Sugie et al. (2015); Rouzet et al. (2014); WTO (1994c, 2021)
Absence of Additional Restrictions on Licensing or Authorization Requirements (Financial Services)	1	1	2	0.91	Geloso Grosso et al. (2014); Kee, Nicita, and Olarreaga (2009); Mattoo, Rocha, and Ruta (2020); Miller (1999); Sugie et al. (2015); Rouzet et al. (2014); WTO (1994c, 2021)
Absence of Additional Quotas for Foreign Contractual and Independent Service Providers (Financial Services)	1	1	2	0.91	Geloso Grosso et al. (2014); Kee, Nicita, and Olarreaga (2009); Mattoo, Rocha, and Ruta (2020); Miller (1999); Sugie et al. (2015); Rouzet et al. (2014); WTO (1994c, 2021)
Absence of Labor Market Tests for Foreign Contractual and Independent Service Providers (Financial Services)	1	1	2	0.91	Geloso Grosso et al. (2014); Kee, Nicita, and Olarreaga (2009); Mattoo, Rocha, and Ruta (2020); Miller (1999); Sugie et al. (2015); Rouzet et al. (2014); WTO (1994c, 2021)
Absence of Procedural Hurdles for Visa for Business Purposes (Freight Transport)	1	1	2	0.91	Geloso Grosso et al. (2014); Kee, Nicita, and Olarreaga (2009); Mattoo, Rocha, and Ruta (2020); Miller (1999); Sugie et al. (2015); Rouzet et al. (2014); WTO (1994c, 2021)
Total Points for Subcategory 1.2.2	22	22	44	20.00	
1.2.3 Digital Trade					
Absence of Additional Government Licenses	1	1	2	1.00	APEC (2020b); Daza Jaller, Gaillard, and Molinuevo (2020); Ferrantino and Koten (2019); UN (2007); UNCITRAL (1996, 2001, 2022); UNESCAP (2021); WCO (2018)
Absence of Online Selling Bans	1	1	2	1.00	APEC (2020b); Daza Jaller, Gaillard, and Molinuevo (2020); Ferrantino and Koten (2019); UN (2007); UNCITRAL (1996, 2001, 2022); UNESCAP (2021); WCO (2018)
No Breach of Tax Neutrality Principle	1	1	2	1.00	APEC (2020b); Daza Jaller, Gaillard, and Molinuevo (2020); Ferrantino and Koten (2019); UN (2007); UNCITRAL (1996, 2001, 2022); UNESCAP (2021); WCO (2018)

Absence of Charges on Incoming Cross-Border E-Payments	1	1	2	1.00	APEC (2020b); Daza Jaller, Gaillard, and Molinuevo (2020); Ferrantino and Koten (2019); UN (2007); UNCITRAL (1996, 2001, 2022); UNESCAP (2021); WCO (2018)
Absence of Charges on Outgoing Cross-Border E-Payments	1	1	2	1.00	APEC (2020b); Daza Jaller, Gaillard, and Molinuevo (2020); Ferrantino and Koten (2019); UN (2007); UNCITRAL (1996, 2001, 2022); UNESCAP (2021); WCO (2018)
Absence of Limits on Cross-Border E-Payments	1	1	2	1.00	APEC (2020b); Daza Jaller, Gaillard, and Molinuevo (2020); Ferrantino and Koten (2019); UN (2007); UNCITRAL (1996, 2001, 2022); UNESCAP (2021); WCO (2018)
Limitations to Cross-Border Data Flows	n/a	1	1	0.50	APEC (2020b, 2021); Daza Jaller, Gaillard, and Molinuevo (2020); EU (2016); Ferrantino and Koten (2019); OECD (2013, 2016); UN (2007); UNCITRAL (1996, 2016); WCO (2018); WTO (2013)
Disclosure of Relevant Information	n/a	1	1	0.50	APEC (2020b, 2021); Daza Jaller, Gaillard, and Molinuevo (2020); EU (2016); Ferrantino and Koten (2019); OECD (2013, 2016); UN (2007); UNCITRAL (1996, 2016); WCO (2018); WTO (2013)
Consumer Rights - Limits on Advertising	n/a	1	1	0.50	APEC (2020b, 2021); Daza Jaller, Gaillard, and Molinuevo (2020); EU (2016); Ferrantino and Koten (2019); OECD (2013, 2016); UN (2007); UNCITRAL (1996, 2016); WCO (2018); WTO (2013)
Consumer Rights to Cancel Online Purchases	n/a	1	1	0.50	APEC (2020b, 2021); Daza Jaller, Gaillard, and Molinuevo (2020); EU (2016); Ferrantino and Koten (2019); OECD (2013, 2016); UN (2007); UNCITRAL (1996, 2016); WCO (2018); WTO (2013)
Consumer Rights to Receive Refunds	n/a	1	1	0.50	APEC (2020b, 2021); Daza Jaller, Gaillard, and Molinuevo (2020); EU (2016); Ferrantino and Koten (2019); OECD (2013, 2016); UN (2007); UNCITRAL (1996, 2016); WCO (2018); WTO (2013)
Penalties for Non-Compliance with Online Consumer Protection Provisions	n/a	1	1	0.50	APEC (2020b, 2021); Daza Jaller, Gaillard, and Molinuevo (2020); EU (2016); Ferrantino and Koten (2019); OECD (2013, 2016); UN (2007); UNCITRAL (1996, 2016); WCO (2018); WTO (2013)
Online Dispute Resolution Mechanism	n/a	1	1	0.50	APEC (2020b, 2021); Daza Jaller, Gaillard, and Molinuevo (2020); EU (2016); Ferrantino and Koten (2019); OECD (2013, 2016); UN (2007); UNCITRAL (1996, 2016); WCO (2018); WTO (2013)
Online Dispute Resolution Mechanism (Free of Charge Filing)	n/a	1	1	0.50	APEC (2020b, 2021); Daza Jaller, Gaillard, and Molinuevo (2020); EU (2016); Ferrantino and Koten (2019); OECD (2013, 2016); UN (2007); UNCITRAL (1996, 2016); WCO (2018); WTO (2013)

Total Points for Subcategory 1.2.3	6	14	20	10.00	
Total Points for Category 1.2	43	59	102	50.00	
Total Points for Pillar I	72	94	166	100.00	

Note: n/a = not applicable – refers to the cases when the impact on firms or society is either ambiguous or nonexistent.

* Landlocked economies will not be assessed by this indicator. Their total subcategory points will be rescaled accordingly.

**Non-WTO members will not be assessed by this indicator. Their total subcategory points will be rescaled accordingly.

PILLAR II—QUALITY OF PUBLIC SERVICES FOR THE FACILITATION OF INTERNATIONAL TRADE					
2.1 DIGITAL AND PHYSICAL INFRASTRUCTURE					
2.1.1 Electronic Systems and Interoperability of Services					
Indicators	FFP	SBF	Total Points	Rescaled Points	Background Literature
Availability of an Advanced Electronic System for International Trade	1	1	2	1.67	UNECE (2013, 2017); UNECE/UN-CEFACT (2005, updated 2020); WCO (1999, 2017); WTO (2013)
Agency Integration into the Advanced Electronic System for International Trade	1	1	2	1.67	UNECE (2013, 2017); UNECE/UN-CEFACT (2005, updated 2020); WCO (1999, 2017); WTO (2013)
Stakeholder Integration into the Advanced Electronic System for International Trade	1	1	2	1.67	UNECE (2013, 2017); UNECE/UN-CEFACT (2005, updated 2020); WCO (1999, 2017); WTO (2013)
Features of the Advanced Electronic System for International Trade	1	1	2	1.67	UNECE (2013, 2017); UNECE/UN-CEFACT (2005, updated 2020); WCO (1999, 2017); WTO (2013)
Exchange of Information with Trading Partners' Electronic Systems for International Trade	1	1	2	1.67	UNECE (2013, 2017); UNECE/UN-CEFACT (2005, updated 2020); WCO (1999, 2017); WTO (2013)
Single Point of Access of the Advanced Electronic System for International Trade	1	1	2	1.67	UNECE (2013, 2017); UNECE/UN-CEFACT (2005, updated 2020); WCO (1999, 2017); WTO (2013)
Single Sign-On of the Advanced Electronic System for International Trade	1	1	2	1.67	UNECE (2013, 2017); UNECE/UN-CEFACT (2005, updated 2020); WCO (1999, 2017); WTO (2013)
Single Submission of Data of the Advanced Electronic System for International Trade	1	1	2	1.67	UNECE (2013, 2017); UNECE/UN-CEFACT (2005, updated 2020); WCO (1999, 2017); WTO (2013)
Single Point of Decision Making of the Advanced Electronic System for International Trade	1	1	2	1.67	UNECE (2013, 2017); UNECE/UN-CEFACT (2005, updated 2020); WCO (1999, 2017); WTO (2013)
Single Point of Payment of the Advanced Electronic System for International Trade	1	1	2	1.67	UNECE (2013, 2017); UNECE/UN-CEFACT (2005, updated 2020); WCO (1999, 2017); WTO (2013)
Total Points for Subcategory 2.1.1	10	10	20	16.67	
2.1.2 Transparency and Availability of Information					
Trade Information Portal (TIP)	1	1	2	1.39	UNECE (2021); WCO (1999); World Bank (2012a); WTO (2013)
Publication—Duties, Taxes, Fees, and Non-Tariff Measures	1	1	2	1.39	UNECE (2021); Van der Marel and Shepherd (2020); WCO (1999, 2005, upd. 2021); WTO (1994c, 1994d, 1994e, 2013, 2021a)
Publication—Procedures and Advance Rulings	1	1	2	1.39	UNECE (2021); Van der Marel and Shepherd (2020); WCO (1999, 2005, upd 2021); WTO (1994c, 1994d, 1994e, 1994f, 2013, 2021a)

Publication—Penalties, Procedures for Appeal	1	1	2	1.39	UNECE (2021); Van der Marel and Shepherd (2020); WCO (1999, 2005, upd. 2021); WTO (1994c, 1994d, 1994e, 2013, 2021a, 2021b)
Publication—Licensing Criteria (Freight Transport)	1	1	2	1.39	UNECE (2021); Van der Marel and Shepherd (2020); WCO (1999, 2005, upd. 2021); WTO (1994c, 1994d, 1994e, 1994f, 2013, 2021a)
Publication—Licensing Criteria (Logistics Services)	1	1	2	1.39	UNECE (2021); Van der Marel and Shepherd (2020); WCO (1999, 2005, upd. 2021); WTO (1994c, 1994d, 1994e, 1994f, 2013, 2021a)
Publication—Proposals of Laws and Draft Regulations	1	1	2	1.39	UNECE (2021); Van der Marel and Shepherd (2020); WCO (1999, 2005, upd. 2021); WTO (1994c, 1994d, 1994e, 2013, 2021a)
Publication—Advance Notices	1	1	2	1.39	Van der Marel and Shepherd (2020); WCO (1999, 2005, upd. 2021); WTO (1994c, 1994d, 2013, 2021a)
Enquiry Points	1	1	2	1.39	UNECE (2021); Van der Marel and Shepherd (2020); WCO (1999, 2005, upd. 2021); World Bank (2012a); WTO 1994c, 1994d, 2013, 2021a)
Consultation—Practice	1	1	2	1.39	Bandelet (2016); Van der Marel and Shepherd (2020); WCO (1999, 2005, upd. 2021); WTO (1994c, 1994d, 2013, 2021a)
Consultation—Reasonable Opportunity	1	1	2	1.39	Bandelet (2016); Van der Marel and Shepherd (2020); WCO (1999, 2005, upd. 2021); WTO (1994c, 1994d, 2013, 2021a)
Consultation—Process to Consider Comments	1	1	2	1.39	Bandelet (2016); Van der Marel and Shepherd (2020); WCO (1999, 2005, upd. 2021); WTO (1994c, 1994d, 2013, 2021a)
Total Points for Subcategory 2.1.2	12	12	24	16.67	
2.1.3 Trade Infrastructure					
Equipment & Facilities (Border 1—Land Border or Airport)	1	1	2	2.38	Arvis et al. (2018); Donaubauer et al. (2018); Doyle et al. (2010); Guash (2011); Kunaka and Carruthers (2014); OSCE/UNECE (2012); UNECE (2021); WCO (1999); World Bank (2010)
Services & Amenities (Border 1—Land Border or Airport)	1	1	2	2.38	Arvis et al. (2018); Donaubauer et al. (2018); Doyle et al. (2010); Guash (2011); Kunaka and Carruthers (2014); OSCE/UNECE (2012); UNECE (2021); WCO (1999); World Bank (2010)
Equipment & Facilities (Border 2—Port or Airport)	1	1	2	2.38	Donaubauer et al. (2018); Doyle et al. (2010); IMO (1965, updated 2022); Kunaka and Carruthers (2014); OSCE/UNECE (2012); UNECE (2021); WCO (1999); World Bank (2010)
Services & Amenities (Border 2—Port or Airport)	1	1	2	2.38	Donaubauer et al. (2018); Doyle et al. (2010); IMO (1965, updated 2022); Kunaka and Carruthers (2014);

					OSCE/UNECE (2012); UNECE (2021); WCO (1999); World Bank (2010)
Connection to the ESW (Port or Airport)	1	1	2	2.38	Donaubauer et al. (2018); Doyle et al. (2010); Guash (2011); Kunaka and Carruthers (2014); OSCE/UNECE (2012); UNECE (2021); WCO (1999); World Bank (2010)
Information Systems (Port or Airport)	1	1	2	2.38	Donaubauer et al. (2018); Doyle et al. (2010); Guash (2011); Kunaka and Carruthers (2014); OSCE/UNECE (2012); UNECE (2021); WCO (1999); World Bank (2010)
Consultative Committee (Port or Airport)	1	1	2	2.38	Donaubauer et al. (2018); Doyle et al. (2010); Guash (2011); Kunaka and Carruthers (2014); OSCE/UNECE (2012); UNECE (2021); WCO (1999); World Bank (2010)
Total Points for Subcategory 2.1.3	7*	7*	14*	16.67	
Total Points for Category 2.1	29	29	58	50.00	
2.2 BORDER MANAGEMENT					
2.2.1 Risk Management					
Customs Risk Management Availability	1	1	2	2.50	De Wulf and Sokol (2005); IMF (2022); ITC (2020, 2022); USAID (2018); WCO (1999; 2003; 2005, updated 2021; 2011); Widdowson (2014); WTO (2013)
Customs Risk Management Coverage	1	1	2	2.50	De Wulf and Sokol (2005); IMF (2022); ITC (2020, 2022); USAID (2018); WCO (1999; 2003; 2005, updated 2021; 2011); Widdowson (2014); WTO (2013)
Sanitary and Phytosanitary Agency Integration	1	1	2	2.50	De Wulf and Sokol (2005); IMF (2022); ITC (2020, 2022); USAID (2018); WCO (1999; 2003; 2005, updated 2021; 2011); Widdowson (2014); WTO (2013)
Standardization Agency Integration	1	1	2	2.50	De Wulf and Sokol (2005); IMF (2022); ITC (2020, 2022); USAID (2018); WCO (1999; 2003; 2005, updated 2021; 2011); Widdowson (2014); WTO (2013)
Environmental Agency Integration	1	1	2	2.50	De Wulf and Sokol (2005); IMF (2022); ITC (2020, 2022); USAID (2018); WCO (1999; 2003; 2005, updated 2021; 2011); Widdowson (2014); WTO (2013)
Security Border Agency Integration	1	1	2	2.50	De Wulf and Sokol (2005); IMF (2022); ITC (2020, 2022); USAID (2018); WCO (1999; 2003; 2005, updated 2021; 2011); Widdowson (2014); WTO (2013)
Automated Profiling and Targeting	1	1	2	2.50	De Wulf and Sokol (2005); IMF (2022); ITC (2020, 2022); USAID (2018); WCO (1999; 2003; 2005, updated 2021; 2011); Widdowson (2014); WTO (2013)
Post-Clearance Audits	1	1	2	2.50	De Wulf and Sokol (2005); IMF (2022); ITC (2020, 2022); USAID, 2018; WCO (1999; 2003; 2005, updated 2021; 2011); Widdowson (2014); WTO (2013)
Total Points for Subcategory 2.2.1	8	8	16	20.00	

2.2.2 Coordinated Border Management					
Unique Consignment Reference	1	1	2	2.86	Doyle et al. (2010); IDB (2010); OSCE/UNECE (2012); UNESCAP (2021); WCO (2006, updated 2020); WTO (2013)
Joint Controls (Internal)	1	1	2	2.86	Doyle et al. (2010); IDB (2010); OSCE/UNECE (2012); UNESCAP (2021); WCO (2006, updated 2020); WTO (2013); Aniszewski (2009)
Integrated Border Checkpoint*	1	1	2	2.86	Doyle et al. (2010); IDB (2010); OSCE/UNECE (2012); UNESCAP (2021); WCO (2006, updated 2020); WTO (2013); Aniszewski (2009)
Exchange of Information	1	1	2	2.86	Doyle et al. (2010); IDB (2010); OSCE/UNECE (2012); UNESCAP (2021); WCO (2006, updated 2020); WTO (2013); Aniszewski (2009)
Joint Controls (External)	1	1	2	2.86	Doyle et al. (2010); IDB (2010); OSCE/UNECE (2012); UNESCAP (2021); WCO (2006, updated 2020); WTO (2013); Aniszewski (2009)
Alignment of Operating Hours*	1	1	2	2.86	Doyle et al. (2010); IDB (2010); OSCE/UNECE (2012); UNESCAP (2021); WCO (2006, updated 2020); WTO (2013); Aniszewski (2009)
Unified Documents or Set of Documents*	1	1	2	2.86	Doyle et al. (2010); IDB (2010); OSCE/UNECE (2012); UNESCAP (2021); WCO (2006, updated 2020); WTO (2013); Aniszewski (2009)
Total Points for Subcategory 2.2.2	7	7	14	20.00	
2.2.3 Trusted Trader Programs					
Availability of a Trusted Trader Program for Exporters and Importers	1	1	2	1.67	APEC (2016, 2020a); De Wulf and Sokol (2005); Doyle et al. (2010); WCO (1999; 2005, updated 2021; 2006, updated 2018); WTO (2013)
Availability of a Trusted Trader Program for Other Operators	1	1	2	1.67	APEC (2016, 2020a); De Wulf and Sokol (2005); Doyle et al. (2010); WCO (1999; 2005, updated 2021; 2006 updated 2018); WTO (2013)
Benefits of the Trusted Trader Program	1	1	2	1.67	APEC (2016, 2020a); De Wulf and Sokol (2005); Doyle et al. (2010); WCO (1999; 2005, updated 2021; 2006 updated 2018); WTO (2013)
Inter-Agency Recognition of the Trusted Trader Program	1	1	2	1.67	APEC (2016, 2020a); De Wulf and Sokol (2005); Doyle et al. (2010); WCO (1999; 2005, updated 2021; 2006 updated 2018); WTO (2013)
Mutual Recognition Agreements of the Trusted Trader Program	1	1	2	1.67	APEC (2016, 2020a); De Wulf and Sokol (2005); Doyle et al. (2010); WCO (1999; 2005, updated 2021; 2006 updated 2018); WTO (2013)

Electronic Certification and Renewal Process of the Trusted Trader Program	1	1	2	1.67	APEC (2016, 2020a); De Wulf and Sokol (2005); Doyle et al. (2010); WCO (1999; 2005, updated 2021; 2006 updated 2018); WTO (2013)
Total Points for Subcategory 2.2.3	6	6	12	10.00	
Total Points for Category 2.2	21	21	42	50.00	
Total Points for Pillar II	50	50	100	100.00	

Note: n/a = not applicable – refers to the cases when the impact on firms or society is either ambiguous or nonexistent. ESW = Electronic Single Window.

* Island economies will not be assessed by this indicator. Their total subcategory points will be rescaled accordingly.

PILLAR III—OPERATIONAL EFFICIENCY OF EXPORTING GOODS, IMPORTING GOODS, AND ENGAGING IN DIGITAL TRADE					
3.1 COMPLIANCE WITH EXPORT REQUIREMENTS					
Indicators	FFP	SBF	Total Points	Rescaled Points	Background Literature
Total Time to Comply with Export Requirements	50	n/a	50	20.00	Hummels, David, and Schaur (2013); Volpe Martincus et al. (2015); WCO (2002, updated 2018); WTO (2013)
Total Cost to Comply with Export Requirements	50	n/a	50	20.00	Hummels, David, and Schaur (2013); Volpe Martincus et al. (2015); WCO (2002, updated 2018); WTO (2013)
Total Points for Category 3.1	100	n/a	100	40.00	
3.2 COMPLIANCE WITH IMPORT REQUIREMENTS					
Total Time to Comply with Import Requirements	50	n/a	50	20.00	Hummels, David, and Schaur (2013); Volpe Martincus et al. (2015); WCO (2002, updated 2018); WTO (2013)
Total Cost to Comply with Import Requirements	50	n/a	50	20.00	Hummels, David, and Schaur (2013); Volpe Martincus et al. (2015); WCO (2002, updated 2018); WTO (2013)
Total Points for Category 3.2	100	n/a	100	40.00	
3.3 PARTICIPATION IN CROSS-BORDER DIGITAL TRADE					
Share of Trading Firms Exporting Digitally Ordered Goods	100	n/a	100	10.00	Hummels, David, and Schaur (2013); Volpe Martincus et al. (2015); WCO (2002, updated 2018); WTO (2013)
Total Points for Category 3.3	100	n/a	100	10.00	
3.4 PERCEIVED MAJOR OBSTACLES: BUSINESS TRANSPORTATION, CUSTOMS, AND TRADE REGULATIONS					
Share of Firms Identifying Customs and Trade Regulations as Major or Severe Constraints	50	n/a	50	5.00	Hummels, David, and Schaur (2013); Volpe Martincus et al. (2015)
Share of Firms Identifying Transportation as Major or Severe Constraints	50	n/a	50	5.00	Hummels, David, and Schaur (2013); Volpe Martincus et al. (2015)
Total Points for Category 3.4	100	n/a	100	10.00	
Total Points for Pillar III	100	n/a	100	100.00	

Note: n/a = not applicable – refers to the cases when the impact on firms or society is either ambiguous or nonexistent.

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ANNEX B. INTERNATIONAL TRADE–ANNOTATED QUESTIONNAIRE

Annex B consists of a Glossary and Annotated Questionnaires for International Trade in four areas: Trade Regulations–Goods; Trade Regulations–Services; Digital Trade; and Public Services. The Annotated Questionnaires provide the mapping between each indicator and the corresponding question(s). Due to the presence of multiple questionnaires, the numbering of categories in the Annotated Questionnaire does not match the numbering in the International Trade Methodology Note.

Glossary

Additional restriction: Restriction imposed on imported goods or foreign services, in addition to those applicable to the same goods produced domestically or provided by domestic service providers, respectively. Additional restrictions only apply once an imported product, service, or item of intellectual property has already entered the domestic market: for example, after import duties and taxes have been paid.

Advance notice: A notice of proposed rulemaking that tells the public that an area for rulemaking is being considered and may request written comments on the appropriate scope of the rulemaking or on specific topics. An advance notice of proposed rulemaking may or may not include the text of potential changes to a regulation.

Advance ruling: A written decision by the Customs authority to traders (upon request) prior to importation or exportation, which sets forth a transparent and formal process for treatment of goods with regards to the goods' tariff classification, origin, and customs valuation.

Anti-dumping measure: An anti-dumping measure (or duty) is a protectionist tariff that a domestic government imposes on imports that it believes are priced below fair market value. The country's imposition of an anti-dumping duty is determined by the dumping margin—the difference between the export price and the domestic selling price in the exporting country.

Automated profiling and targeting: Automated profiling uses machine learning to continuously automate risk profiles, which result in automated targeting of those consignments whose risks surpass the defined threshold.

Cabotage: The transport of goods or passengers between two places in the same country.

Contingent trade protective measures: Include safeguard, anti-dumping, and/or countervailing actions.

Countervailing measure: An action taken by the importing country, usually in the form of increased duties, to offset subsidies given to producers or exporters in the exporting country.

Customs bonded warehouse: A building or other secured area in which dutiable goods may be stored, manipulated, or undergo manufacturing operations without payment of duty. It may be managed by the state or by private enterprise. In the latter case a customs bond must be posted with the government.

Data purpose limitation: Personal data should only be collected for specified, explicit, and legitimate purposes and not further processed in a manner that is incompatible with those purposes.

De minimis: A valuation ceiling for goods, including documents and trade samples, below which no duty or tax is charged and clearance procedures, including data requirements, are minimal.

Destination inspection: An inspection process carried out when goods arrive at the port of entry of the importing country.

Digital trade: Encompasses digitally enabled transactions of trade in goods and services that can either be digitally or physically delivered, and that involve consumers, firms, and governments.

Economic needs tests (ENTs): A set of criteria the government applies to foreign worker applicants to assess their economic contribution to the sector of employment and the country. These criteria may include but are not limited to: the belief that the foreign worker will directly create domestic income or jobs for citizens, the assurance that the worker will transfer technology or knowledge to citizens, and other measures of the worker's economic impact.

Effectively applied tariff rate: The lowest available tariff. If a preferential tariff exists, it will be used as the effectively applied tariff. Otherwise, the Most Favored Nation (MFN) applied tariff will be used.

Electronic/electronically: Something that uses the internet or another electronic communication system to operate, broadcast, store, and transmit information or message using computers, e-mail, telephone, video calling, or other digital devices or processes.

Electronic signature: Includes symbols or other data in digital form attached to an electronically transmitted document as verification of the sender's intent to sign the document.

Enforceability: Means that any type of information that was sent, received, displayed, or stored by any means of electronic communications has the capacity to be enforced.

Environmental goods and services: Products manufactured or services rendered for the main purpose of: preventing or minimizing pollution; degradation or depletion of natural resources; repairing damage to air, water, waste, noise, biodiversity, and landscapes; reducing, eliminating, treating, and managing pollution, degradation, and natural resource depletion; carrying out other activities such as measurement and monitoring, control, research and development, education, training, information, and communication related to environmental protection or resource management.

Enquiry point: An official or office designated to deal with reasonable enquiries, including the provision of forms and documents to traders, and other interested parties on matters of importation, exportation, transit of goods, trade in services, and digital trade.

Export restrictions: Limitations on the quantity of goods exported to a specific economy or economies by the exporting economy.

Financial services: Economic services provided by the finance industry, which encompasses a broad range of businesses that manage money, including credit unions, banks, credit-card companies, insurance companies, accountancy companies, consumer-finance companies, stock brokerages, investment funds, individual asset managers, and some government-sponsored enterprises.

Gender equality: Commitments on tackling certain forms of discrimination against women, including addressing discrimination against women in employment, occupation, and wage (such as equal access to productive resources and equal opportunities, treatment, and rights between men and women).

Harmonized System (HS): A multipurpose international product nomenclature developed by the World Customs Organization (WCO), used by Customs authorities around the world to identify products when assessing duties and taxes and for gathering statistics.

Implementation: The action of putting in place or amending existing domestic laws and regulations in adherence to and compatible with international treaty obligations.

Integrated border checkpoint: One-stop border post consisting of a single, shared physical infrastructure in which the Customs and border authorities of two or more neighboring countries operate side by side.

Incumbent firms: Firms already holding operating licenses in the market.

Independent service providers: Individuals who enter the country to sell services directly to firms, people, or government agencies, including to fulfill contracts, and to be employed by service providers within the economy. The professional would already have a contract or offer from the employer in the host country when entering the economy.

Integrated customs management system: The entirety of information subsystems interconnected by logical connections and exchanging the data designed for the operation and management of the information processed using the tools of information technology, as well as infrastructure required to perform the functions of the Customs authority (for example, a Customs Declaration Processing System). The system can be part of the Single Window for international trade.

Integrated risk management system: The entirety of information subsystems interconnected by logical connections and exchanging the data designed for risk assessments. It includes interactive exchange of information involving the identification of hazards and the formulation of a qualitative and quantitative assessment of risks.

Interested parties/stakeholders: Include citizens, civil society organizations, government departments, subnational governments, parliament, academics, private sector, and so on.

Labor Market Tests (LMTs): A subfield of the economic needs tests (ENTs) specified in many economies. LMTs attempt to gauge whether the labor market requires the particular skills of the foreign worker. The criteria may include but are not limited to evidence that the employer made an attempt to recruit citizens before offering the job to the foreign worker, and the existence of a worker shortage in the area of the job offer.

Legal adoption: The formal act by which the form and content of a proposed treaty text are established. As a rule, the adoption of the text of a treaty takes place through the expression of the consent of the states participating in the treaty-making process.

Legal validity: Means that any type of information that was sent, received, displayed, or stored by any means of electronic communications shall not be denied validity solely on the ground that it is in the form of electronic means.

Maritime single window: A system that allows ship operators and agents fulfil in electronic format reporting obligations applied to ships arriving in and departing from their ports, eliminating the obligation of filling out the same documentation upon arriving at each port along the route.

National treatment principle: The principle of giving others the same treatment as one's own nationals: treating foreigners and locals equally. National treatment only applies once a product, service or item of intellectual property has entered the market. Therefore, charging customs duty on an import is not a violation of national treatment even if locally produced products are not charged an equivalent tax.

Negative list approach: All sectors or subsectors that are not listed are, by default, open to foreign service suppliers under the same conditions as for domestic service suppliers. Economies choosing to follow a negative list approach do not have to list the sectors for which they take commitments.

Non-Tariff Measures (NTMs): Policy measures other than ordinary customs tariffs that can potentially have an economic effect on international trade in goods, changing quantities traded, or prices or both.

Non-technical NTMs: Do not refer to product-specific properties but to trade requirements, such as shipping requirements, customs formalities, trade rules, taxation policies, etc.

Online Dispute Resolution (ODR): A public facing digital space in which parties can convene to resolve their dispute or case.

Pre-shipment inspection: Practice of employing private companies to check shipment details such as the quality, the quantity, the price, including currency exchange rate and financial terms, and/or the customs classification of goods to be exported.

Primary zone: The place of the national customs territory authorized by the Customs for the realization of the material operations of reception, storage and movement of merchandise entering or leaving the country, where the Customs authority exercises its control and surveillance power without restrictions.

Quantitative restrictions: Includes all prohibitions or restrictions other than tariffs or other taxes applied on the importation or exportation of goods, which can be made effective through quotas, import or export licensing procedures, or other measures.

Ratification: The action of signing or giving formal consent to a treaty, contract, or agreement, making it officially valid.

Risk management system: A system ensuring timely and appropriate risk identification, risk measurement, risk monitoring, risk mitigation, and adequate reporting of all significant risks.

Risk management system's level of integration—advanced: If there is high integration of the Customs agency into the risk management systems among other agencies, risk assessment is fully integrated and there is automatic and real-time data exchange among agencies. Control inspections are fully coordinated, and agencies have common protocols for inspections.

Risk management system's level of integration—basic: If there is some integration among the agencies' risk management systems. The coordination and exchange of data among systems allows simultaneous control inspections with relative efficiency.

Risk assessment based on selectivity criteria—advanced: If the risk assessment is based on information technology (IT) tools using a large range of supply-chain data. The Customs agency uses algorithms, predictive analytics, and automated tools to be effective in the risk management assessment.

Risk assessment based on selectivity criteria—basic: If the risk assessment is based on the use of simple levels of analysis using cross-reference information. The Customs agency uses IT tools to determine selectivity of documentary and physical inspections.

Safeguards measures: Restrict imports of a product temporarily to protect a specific domestic industry from an increase in imports of any product that is causing, or that is threatening to cause, serious injury to the industry. Safeguard measures were always available under the General Agreement on Tariffs and Trade

(GATT, article XIX). However, they were infrequently used, and some governments preferred to protect their industries through “grey area” measures (“voluntary” export restraint arrangements on products such as cars, steel, and semiconductors).

Selectivity criteria: May include, inter alia, the Harmonized System code, nature and description of the goods, country of origin, country from which the goods were shipped, value of the goods, compliance record of traders, and type of means of transport.

Single window for international trade: A facility that integrates processes among cross-border regulatory agencies, Customs and other government agencies and allows parties involved in trade and transport to lodge standardized information and documents with a single-entry point to fulfil all import, export, and transit-related regulatory requirements. If information is electronic, then individual data elements should only be submitted once.

Sustainable trade: Commercial exchange of goods and services generating social, economic, and environmental benefits.

Technology neutrality principle: Intends to provide for the coverage of all factual situations where information is generated, stored or transmitted in the form of electronic communications, irrespective of technology or medium used. Technological neutrality encompasses media neutrality to facilitate “paperless” means of communication with electronic methods rather than paper documents. It supports electronic communications as an alternative to paper-based documents.

Technical NTMs: Trade-restrictive effects arising from the application of technical regulations or standards such as testing requirements, labeling requirements, packaging requirements, marketing standards, certification requirements, origin marking requirements, health and safety regulations, and sanitary and phytosanitary regulations.

Trade in goods: Commercial exchange of all goods that add to, or subtract from, the stock of material resources of a country by entering its economic territory (imports) or leaving it (exports).

Trade in services: Commercial exchange and delivery of an intangible product, called a service, between a producer and consumer.

Unique Consignment Reference (UCR): A reference number for customs use. It may be required to be reported to Customs at any point during a customs procedure.

Weight-In-Motion (WIM) scales: Devices designed to capture and record the axle weights and gross vehicle weights as vehicles drive over a measurement site.

TRADE REGULATIONS–GOODS QUESTIONNAIRE

The tables that follow present all indicators (including their components, if applicable) under each pillar, with a reference to the corresponding question number in parenthesis. The questions are listed before each table for ease of reference.

For Y/N questions, the Y response accounts for the score and is considered as the good practice, unless otherwise indicated with the sign “Y/N; N – good practice”.

In the tables that follow, “AND” means all referenced questions must have a good practice response to obtain a score on the indicator.

In the tables that follow, “OR” means one or more referenced questions must have a good practice response to obtain a score on the indicator.

Due to the presence of multiple questionnaires, the numbering of categories in the annotated questionnaire does not match the topic methodology note.

PILLAR I–QUALITY OF REGULATIONS FOR INTERNATIONAL TRADE	
Parameters	
Geographic Nature	The geographic nature of the economy according to the means it has to conduct export and import without transiting through a third country (coastal, island, or landlocked).
Agricultural Product Chapters	Selection of HS2 Agriculture chapters that are more susceptible to non-tariff measures provides relevance and comparability to the indicators on regulatory restrictions on international trade.
Manufactured Product Chapters	Selection of HS2 Manufactured chapters that are more susceptible to non-tariff measures provides relevance and comparability to the indicators on regulatory restrictions on international trade.
Traded Product(s)	The most imported manufactured and agricultural products by total import value between 2015 and 2019 at Harmonized System (HS) subheading level (6-digit) within pre-selected HS chapters.
Traded Environmental Products	The top 5 imported environmental products by total trade value at the world-level between 2015 and 2019 within the Asia-Pacific Economic Cooperation (APEC) list of environmental goods at HS subheading level (6-digit).
Trading Partner(s)	In the cases of trade cooperation and sustainable trade, trading partner(s) refer to an economy’s top 3 trade partners in goods and services combined between 2015 and 2020.
WTO Membership	An economy’s status for WTO membership (Member, Observer, or none).

Note: HS = Harmonized System; WTO = World Trade Organization.

1.1 PRACTICES SUPPORTING INTERNATIONAL TRADE

1.1.1 International Trade in Goods and Services

1. Has the economy implemented in practice the following international conventions governing the use of international standards? (Y/N)

- 1a. Convention (2005) on Facilitation of International Maritime Traffic
- 1b. Convention (1990) on the Temporary Admission of Goods (Istanbul Convention)
- 1c. International Convention on the Carriage of Goods by Sea (Hamburg Rules-1978)

2. **Do direct exporters and importers or their authorized representatives have the right to administratively appeal regulatory decisions on the following policy areas affecting international trade in goods? (Y/N)**
 - 2a. Duties or taxes (of any kind), fees and charges
 - 2b. Customs classification and valuation procedures
 - 2c. Technical NTMs
 - 2d. Non-technical NTMs, contingent trade protection measures, and rules of origin
 - 2e. Export-related area
3. **Do direct exporters and importers or their authorized representatives have the right to judicially appeal regulatory decisions on the following policy areas affecting international trade in goods? (Y/N)**
 - 3a. Duties or taxes (of any kind), fees and charges
 - 3b. Customs classification and valuation procedures
 - 3c. Technical NTMs
 - 3d. Non-technical NTMs, contingent trade protection measures, and rules of origin
 - 3e. Export-related area
4. **What is de minimis value threshold in local currency (local currency units, LCU)?**
5. **Are there legal provisions that regulate the imposition of the following non-tariff measures affecting international trade in goods? (Y/N)**
 - 5a. Sanitary and phytosanitary measures
 - 5b. Technical barriers to trade
 - 5c. Pre-shipment inspections
 - 5d. Import quotas
 - 5e. Import licensing
 - 5f. Price controls
 - 5g. Local content requirements
 - 5h. Export restrictions
6. **Are there any legal provisions that regulate initiation, investigation, and subsequent duty imposition or other equivalent remedies for the following contingent trade-protective measures? (Y/N)**
 - 6a. Anti-dumping measures
 - 6b. Countervailing measures
 - 6c. Safeguards measures

1.1.2 Digital and Sustainable Trade (includes gender and environment)

7. **Has a cross-border carbon pricing instrument (for example, international/regional carbon emission trading scheme, border carbon adjustment mechanisms, etc.) been legally adopted? (Y/N)**
8. **What is the highest effectively applied tariff rate on any of [the top 5 most traded goods among the Asia-Pacific Economic Cooperation (APEC) list of environmental goods]? (% / Local currency units per unit of measure)**
9. **Have the following international conventions and their amendments been implemented? (Y/N)**
 - 9a. Convention on International Trade in Endangered Species of Wild Fauna and Flora
 - 9b. The International Convention for the Prevention of Pollution from Ships (MARPOL)

9c. Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade

10. Have any enforceable provisions listing minimum commitments on the following gender issues been *implemented* in any of the PTAs? (Y/N)

10a. Gender equality

10b. Women's participation in economic and development activities

11. Has the following fundamental principle of the International Labour Organization (ILO) been *ratified* as an enforceable provision listing minimum commitments in any of the preferential trade agreements (PTAs)? (Y/N)

1.1.3 International Trade Cooperation

12. If a member of the World Trade Organization (WTO), is the economy a party to preferential trade agreements (PTAs) not notified to the WTO? (Y/N; N – good practice)

13. Have commitments in the following policy areas been implemented in any of the PTAs? (Y/N)

13a. Tariff preferences and export taxes

13b. Sanitary and phytosanitary measures

13c. Technical barriers to trade

13d. Digital trade

13e. Investment and movement of capital

14. Is there an established competent authority to oversee implementation of any of the preferential trade agreements (PTAs)?

14a. Authority(ies) is(are) PTA-specific and exists(exist) for all agreements

14b. Authority(ies) is(are) PTA-specific but does(do) not exist for all the agreements

14c. Authority to oversee PTAs, but it is not PTA-specific

14d. No

1.1 PRACTICES SUPPORTING INTERNATIONAL TRADE			
1.1.1 International Trade in Goods and Services			
Indicators	FFP	SBP	Total Points
Establishment of Maritime Single Window (1a)*	1	1	2
Temporary Admission of Goods (1b)	1	1	2
Rules on Liability of Carriers (1c)*	1	1	2
Right to Appeal (Goods)–Administrative (2a AND 2b AND 2c AND 2d AND 2e)	1	1	2
Right to Appeal (Goods)–Judicial (3a AND 3b AND 3c AND 3d AND 3e)	1	1	2
De Minimis Value (4)	1	1	2
Legal Requirements for the Imposition of Non-Tariff Measures (5a AND 5b AND 5c AND 5d AND 5e AND 5f AND 5g AND 5h AND 6a AND 6b AND 6c)	1	1	2
Total Points	7	7	14

Coastal and island economies may score a total of 14 points across these indicators (7 points on firm flexibility and 7 points on social benefits). Landlocked economies may score a total of 10 points across these indicators (5 points on firm flexibility and 5 points on social benefits). The scores of landlocked economies will be rescaled at the subcategory level

1.1.2 Digital and Sustainable Trade (includes gender and environment)			
Indicators	FFP	SBP	Total Points
Cross-Border Carbon Pricing Instruments (7)	n/a	1	1
Tariffs on Environmental Goods (8)	1	1	2
Endangered Species (9a)	n/a	1	1
Oil, Chemical, Sewage and Air Pollution (9b)	n/a	1	1
Hazardous Chemicals or Pesticides (9c)	n/a	1	1
Gender Equality in Trade Agreements (10a)	n/a	1	2
Women's Participation in Economic and Development Activity (10b)	1	1	2
Freedom of Association and Right to Collective Bargaining (11)	n/a	1	1
Total Points	2	8	10
1.1.3 International Trade Cooperation			
Indicators	FFP	SBP	Total Points
Absence of Non-Notified PTAs (12)**	1	1	2
Duty Free Trade (13a)	1	1	2
Harmonization of Regulation on Non-Tariff Measures (13b AND 13c)	1	1	2
Digital Trade (13d)	1	1	2
Investment and Movement of Capital (13e)	1	1	2
Competent Authorities to Oversee the Implementation of PTAs (14a OR 14c)	1	1	2
Total Points	6	6	12
<i>WTO member economies may score a total of 12 points across these indicators (6 points on firm flexibility and 6 points on social benefits). Non-WTO member economies may score a total of 10 points across these indicators (5 points on firm flexibility and 5 points on social benefits). The scores of non-WTO member economies will be rescaled at the subcategory level</i>			

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent). FFP = Firm Flexibility Point; PTA = Preferential Trade Agreement; SBP = Social Benefits Point.

** See Section 5.1.1.*

*** See Section 5.2.7.*

1.2 REGULATORY RESTRICTIONS ON INTERNATIONAL TRADE

1.2.1 International Trade in Goods (includes gender)

15. When importing [FILL WITH AGRICULTURAL PRODUCT HS 6-DIGIT] from any trading partner, which of the following sanitary and phytosanitary measures are required by law? (Y/N)

- 15a. Health inspections and/or certifications
- 15b. Phytosanitary inspections and/or certifications
- 15c. Fumigation or disinfection and/or certifications
- 15d. Pest control inspection and/or certifications

- 16. Considering the above sanitary and phytosanitary measures required by law for the importation of [FILL WITH AGRICULTURAL PRODUCT HS 6-DIGIT] from any trading partner, do they breach the principle of national treatment? (Y/N; N – good practice)**
- 17. When importing [FILL WITH MANUFACTURED PRODUCT HS 6-DIGIT] from any trading partner, which of the following types of technical barriers to trade are required by law? (Y/N)**
- 17a. Product characteristics
 - 17b. Product-related processes and production methods
 - 17c. Terminology or symbols
 - 17d. Packaging
 - 17e. Labeling and marking
- 18. Considering the above technical barriers to trade measures required for the importation of [FILL WITH MANUFACTURED PRODUCT HS 6-DIGIT] from any trading partner, do they breach the principle of national treatment? (Y/N; N – good practice)**
- 19. When importing [FILL WITH MANUFACTURED PRODUCT HS 6-DIGIT] from any trading partner, what measures are required by law to complete the following pre-shipment inspections (PSI) and/or Destination Inspections (DI)? (Y/N; N – good practice)**
- 19a. Quality control
 - 19b. Conformity verification
 - 19c. Customs valuation
- 20. In the last three years, when importing any product under [FILL WITH AGRICULTURAL AND MANUFACTURED PRODUCT CHAPTER (HS 2-DIGIT)] from any trading partner, which contingent trade-protective measures were enforced in practice in the last three years? (Y/N; N – good practice)**
- 20a. Anti-dumping duties
 - 20b. Countervailing duties
 - 20c. Safeguards measures
- 21. When importing [FILL WITH AGRICULTURAL PRODUCT CHAPTER (HS 2-DIGIT)] from any trading partner, which of the following non-technical non-tariff measures imposed for economic purposes are required by law? (Y/N)**
- 21a. Non-automatic import licensing
 - 21b. Import quotas
 - 21c. Import prohibitions
 - 21d. Quantity-control measures
 - 21e. Price-control measures
 - 21f. Finance restrictions
- 22. When importing [FILL WITH MANUFACTURED PRODUCT CHAPTER (HS 2-DIGIT)] from any trading partner, which of the following non-technical non-tariff measures imposed for economic purposes are required by law? (Y/N; N – good practice)**
- 22a. Non-automatic import licensing
 - 22b. Import quotas
 - 22c. Import prohibitions
 - 22d. Quantity-control measures
 - 22e. Price-control measures
 - 22f. Finance restrictions

23. When exporting any product under [FILL WITH AGRICULTURAL PRODUCTS [AGRICULTURAL (HS 2-DIGIT)] to any trading partner, are any export restrictions required by law? (Y/N; N – good practice)

24. When exporting any product under [FILL WITH MANUFACTURED PRODUCT CHAPTER (HS 2-DIGIT)] to any trading partner, are any export restrictions required by law? (Y/N; N – good practice)

1.2 REGULATORY RESTRICTIONS ON INTERNATIONAL TRADE			
1.2.1 International Trade in Goods (includes gender)			
Indicators	FFP	SBP	Total Points
Sanitary and Phytosanitary Measures (15a OR 15b OR 15c OR 15d)	n/a	1	1
Sanitary and Phytosanitary Measures (National Treatment) (16)	1	1	2
Technical Barriers to Trade (17a OR 17b OR 17c OR 17d OR 17e)	n/a	1	1
Technical Barriers to Trade (National Treatment) (18)	1	1	2
Absence of Pre-Shipment Inspections (19a AND 19b AND 19c)	1	1	2
Absence of Contingent Trade-Protective Measures (20a AND 20b AND 20c)	1	1	2
Absence of Quantity Control Measures (21a AND 21b AND 21c AND 21d AND 22a AND 22b AND 22c AND 22d)	1	1	2
Absence of Price-Control Measures (21e AND 22e)	1	1	2
Absence of Finance Measures (21f AND 22f)	1	1	2
Absence of Export Restrictions (23 AND 24)	1	1	2
Total Points	8	10	18

Note: n/a = not applicable – refers to the cases when the impact on firms or society is either ambiguous or nonexistent. FFP = Firm Flexibility Point; SBP = Social Benefits Point.

PILLAR II—QUALITY OF PUBLIC SERVICES FOR THE FACILITATION OF INTERNATIONAL TRADE

2.1 DIGITAL AND PHYSICAL INFRASTRUCTURE

2.1.1 Transparency and Availability of information

25. In practice, are proposals of draft laws and regulations on importation, exportation, and transit of goods made publicly available through electronic means to explain their purpose? (Y/N)

26. In practice, are advance notices made publicly available through electronic means prior to enacting regulatory changes in the following policy areas affecting international trade in goods? (Y/N)

26a. Duties and taxes (of any kind), fees and charges imposed in connection with importation, exportation, or transit

26b. Customs valuation procedures

26c. Non-tariff measures (NTMs)—technical (sanitary and phytosanitary measures and technical barriers to trade) and nontechnical (quantitative restrictions, tariff quotas and/or government-

imposed surcharges, rules of origin, contingent trade protection measures, and other NTMs such as licensing and mixing requirements)

27. In practice, are interested parties/stakeholders consulted before introducing or changing laws and regulations affecting the importation, exportation, and transit of goods? (Y/N)

28. In practice, are interested parties/stakeholders given a reasonable opportunity of at least 30 calendar days to comment before introducing or changing laws and regulations affecting importation, exportation, and transit of goods? (Y/N)

29. In practice, is a justification provided in case comments received in the areas affecting the importation, exportation, and transit of goods are not incorporated? (Y/N)

2.1 DIGITAL AND PHYSICAL INFRASTRUCTURE			
2.1.1 Transparency and Availability of Information			
Indicators	FFP	SBP	Total Points
Publication–Proposals of Laws and Draft Regulations (25)	1	1	2
Publication–Advance Notices (26a AND 26b AND 26c)	1	1	2
Consultation–Practice (27)	1	1	2
Consultation–Reasonable Opportunity (28)	1	1	2
Consultation–Process to Consider Comments (29)	1	1	2
Total Points	5	5	10

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

TRADE REGULATIONS–SERVICES QUESTIONNAIRE

The tables that follow present all indicators (including their components, if applicable) under each pillar, with a reference to the corresponding question number in parenthesis. The questions are listed before each table for ease of reference.

For Y/N questions, the Y response accounts for the score and is considered as the good practice, unless otherwise indicated with the sign “Y/N; N – good practice”.

In the tables that follow, “AND” means all referenced questions must have a good practice response to obtain a score on the indicator.

In the tables that follow, “OR” means one or more referenced questions must have a good practice response to obtain a score on the indicator.

Due to the presence of multiple questionnaires, the numbering of categories in the annotated questionnaire does not match the topic methodology note.

PILLAR I–QUALITY OF REGULATIONS FOR INTERNATIONAL TRADE	
Parameters	
Geographic Nature	The geographic nature of the economy according to the means it has to conduct export and import without transiting through a third country (coastal, island, or landlocked).
Services Sectors and Subsectors	Service sectors and subsectors that play a crucial role as inputs and facilitators for international trade in goods (maritime freight, road freight, air freight, cargo handling, storage and warehousing, customs brokerage, freight forwarding, commercial banking, and insurance).
Traded Environmental Products	The top 5 imported environmental products by total trade value at the world-level between 2015 and 2019 within the Asia-Pacific Economic Cooperation (APEC) list of environmental goods at HS subheading level (6-digit).
Trading Partner(s)	In the cases of trade cooperation and sustainable trade, trading partner(s) refer to an economy’s top 3 trade partners in goods and services combined between 2015 and 2019.

1.1 PRACTICES SUPPORTING INTERNATIONAL TRADE

1.1.1 International Trade in Goods and Services

- 1. Must applicants be informed of the reasons for license rejection, suspension, and cancellation in the following service sectors? (Y/N)**
 - 1a. Freight transport services
 - 1b. Logistics services
- 2. Do service providers or professionals have the right to administratively appeal regulatory decisions in the following sectors affecting international trade in services? (Y/N)**
 - 2a. Freight transport services
 - 2b. Logistics services
- 3. Do service providers or professionals have the right to judicially appeal regulatory decisions in the following sectors affecting international trade in services? (Y/N)**

- 3a. Freight transport services
- 3b. Logistics services

4. According to the legal framework, are restrictions on visa processes (specifically, no visa exemption, no visa on arrival, or no crew member visa) for crew members and service providers applicable in the following service subsectors? (Y/N; N – good practice)
- 4a. Maritime freight
 - 4b. Road freight
 - 4c. Air freight

1.1.2 International Trade Cooperation

5. Have commitments on trade in services been implemented in any of the PTAs listed above? (Y/N)
6. Have commitments in the following service subsectors been implemented in any of the preferential trade agreements (PTAs)? (Y/N)
- 6a. Freight transport services (maritime; road; air)
 - 6b. Logistics services (cargo handling; storage and warehousing; customs brokers)

1.1 PRACTICES SUPPORTING INTERNATIONAL TRADE			
1.1.1 International Trade in Goods and Services			
Indicators	FFP	SBP	Total Points
Reasons for License Rejection, Suspension, and Cancellation (Freight Transport) (1a)	1	1	2
Reasons for License Rejection, Suspension, and Cancellation (Logistics Services) (1b)	1	1	2
Right to Appeal (Services) – Administrative (Freight Transport) (2a)	1	1	2
Right to Appeal (Services) – Administrative (Logistics Services) (2b)	1	1	2
Right to Appeal (Service–) - Judicial (Freight Transport) (3a)	1	1	2
Right to Appeal (Services) – Judicial (Logistics Services) (3b)	1	1	2
Simplified Visa Regime – Foreign Crew Members and Service Providers (4a AND 4b - Coastal; 4a AND 4c - Island; 4b AND 4c - Landlocked)* <i>The score is assigned if there are no restrictions on visa processes (specifically, no visa exemption, no visa on arrival, or no crew member visa) for crew members and service providers caps on licenses for freight transport services, according to the geographic location parameter. In coastal economies this question assesses maritime freight and road freight; in island economies this question assesses maritime freight and air freight; and in landlocked economies this question assesses road freight and air freight</i>	1	1	2
Total Points	7	7	14
1.1.2 International Trade Cooperation			
Indicators	FFP	SBP	Total Points
Trade in Services (5)	1	1	2
Freight Transport Services Sector (6a)	1	1	2

Logistics Services Sector (6b)	1	1	2
Total Points	3	3	6

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent).
FFP = Firm Flexibility Point; SBP = Social Benefits Point.

* See Sections 5.1.1 and 5.2.7.

1.2 REGULATORY RESTRICTIONS ON INTERNATIONAL TRADE

1.2.1 International Trade in Goods (includes gender)

7. According to the legal framework, are there any caps on the number of operating licenses applicable to the following service subsectors? (Y/N; N – good practice)

- 7a. Maritime freight
- 7b. Road freight
- 7c. Air freight
- 7d. Cargo handling
- 7e. Storage and warehousing
- 7f. Customs brokerage

8. According to the legal framework, are there any price floors and/or pricing guidelines, set by the government or other entities, in the following service subsectors? (Y/N; N – good practice)

- 8a. Maritime freight
- 8b. Road freight
- 8c. Air freight
- 8d. Cargo handling
- 8e. Storage and warehousing
- 8f. Customs brokerage

9. According to the legal framework, is there a mandatory requirement to use certified operators in the following service subsectors? (Y/N; N – good practice)

- 9a. Maritime freight
- 9b. Road freight
- 9c. Air freight
- 9d. Cargo handling
- 9e. Storage and warehousing
- 9f. Customs brokerage

10. According to the legal framework, are there any statutory certification and training requirements for operators in the following service subsectors? (Y/N)

- 10a. Maritime freight
- 10b. Road freight
- 10c. Air freight
- 10d. Cargo handling
- 10e. Storage and warehousing

11. According to the legal framework, are there any statutory requirements on inspection intervals and recertification of equipment in the following service subsectors? (Y/N)

- 11a. Maritime freight
- 11b. Road freight
- 11c. Air freight
- 11d. Cargo handling

11e. Storage and warehousing

12. According to the legal framework, are there any statutory requirements on the maximum number of working hours before mandatory rest in the following service subsectors? (Y/N)

12a. Maritime freight

12b. Road freight

12c. Air freight

12d. Cargo handling

12e. Storage and warehousing

13. According to the legal framework, are there any additional restriction(s) applicable to women service providers in any of the above measures (as selected in questions 11 to 19) in the following service subsectors (for example, ineligibility to apply for operating licenses or additional statutory certification and training requirements)? (Y/N; N – good practice)

13a. Maritime freight

13b. Road freight

13c. Air freight

13d. Cargo handling

13e. Storage and warehousing

13f. Customs brokerage

1.2.2 International Trade in Services

14. According to the legal framework, are there any restrictions on foreign registration of vessels under national flags (maritime freight)? (Y/N; N – good practice)

15. According to the legal framework, are foreign-flagged ships excluded from cabotage/access rights, including partial exclusion (maritime freight)? (Y/N; N – good practice)

16. According to the legal framework, is there an obligation to use local maritime and port services, such as local port agent, tug, and tow services (maritime freight)? (Y/N; N – good practice)

17. According to the legal framework, are quantitative restrictions (quotas) applicable in the following service subsectors? (Y/N; N – good practice)

17a. Maritime freight

17b. Road freight

17c. Air freight

17d. Cargo handling

17e. Storage and warehousing

17f. Customs brokerage

17g. Commercial banking

17h. Insurance

18. According to the legal framework, are restrictions subject to an economic needs test applicable in the following service subsectors? (Y/N; N – good practice)

18a. Maritime freight

18b. Road freight

18c. Air freight

18d. Cargo handling

18e. Storage and warehousing

18f. Customs brokerage

- 18g. Commercial banking
- 18h. Insurance

19. According to the legal framework, are restrictions on acquisition and use of land and real estate applicable to the following service subsectors? (Y/N; N – good practice)

- 19a. Maritime freight
- 19b. Road freight
- 19c. Air freight
- 19d. Cargo handling
- 19e. Storage and warehousing
- 19f. Customs brokerage
- 19g. Commercial banking
- 19h. Insurance

20. According to the legal framework, are additional restrictions on licensing and/or authorization requirements applicable to the following service subsectors? (Y/N; N – good practice)

- 20a. Maritime freight
- 20b. Road freight
- 20c. Air freight
- 20d. Cargo handling
- 20e. Storage and warehousing
- 20f. Customs brokerage
- 20g. Commercial banking
- 20h. Insurance

21. According to the legal framework, are there any quotas for contractual or independent service providers that discourage local service providers from using foreign workers/consultants applicable to the following service subsectors? (Y/N; N – good practice)

- 21a. Maritime freight
- 21b. Road freight
- 21c. Air freight
- 21d. Cargo handling
- 21e. Storage and warehousing
- 21f. Customs brokerage
- 21g. Commercial banking
- 21h. Insurance

22. According to the legal framework, are needs tests (that discourage local service providers from using foreign workers/consultants) for contractual or independent service providers applicable in the following service subsectors? (Y/N; N – good practice)

- 22a. Maritime freight
- 22b. Road freight
- 22c. Air freight
- 22d. Cargo handling
- 22e. Storage and warehousing
- 22f. Customs brokerage
- 22g. Commercial banking
- 22h. Insurance

23. According to the legal framework, are restrictions on visa processes are procedural hurdles (specifically, cost above US\$50 and time above 15 days) related to business visas or crew member

visas for crew and service providers applicable in the following service subsectors? (Y/N; N – good practice)

23a. Maritime freight

23b. Road freight

23c. Air freight

1.2 REGULATORY RESTRICTIONS ON INTERNATIONAL TRADE			
1.2.1 International Trade in Goods (includes gender)			
Indicators	FFP	SBP	Total Points
Absence of Caps on the Number of Operating Licenses (Freight Transport) (7a AND 7b - Coastal; 7a AND 7c - Island; 7b AND 7c - Landlocked)* <i>In coastal economies this question assesses maritime freight and road freight; in island economies this question assesses maritime freight and air freight; and in landlocked economies this question assesses road freight and air freight</i>	1	1	2
Absence of Price Floors and Price Guidelines (Freight Transport) (8a AND 8b - Coastal; 8a AND 8c - Island; 8b AND 8c - Landlocked)* <i>In coastal economies this question assesses maritime freight and road freight; in island economies this question assesses maritime freight and air freight; and in landlocked economies this question assesses road freight and air freight</i>	1	1	2
Absence of Mandatory Use of Certified Operators (Freight Transport) (9a AND 9b - Coastal; 9a AND 9c - Island; 9b AND 9c - Landlocked)* <i>In coastal economies this question assesses maritime freight and road freight; in island economies this question assesses maritime freight and air freight; and in landlocked economies this question assesses road freight and air freight</i>	1	1	2
Absence of Caps on the Number of Operating Licenses (Logistics) (7d AND 7e AND 7f)	1	1	2
Absence of Price Floors and Price Guidelines (Logistics) (8d AND 8e AND 8f)	1	1	2
Absence of Mandatory Use of Certified Operators (Logistics) (9d AND 9e AND 9f)	1	1	2
Safety Regulations-Certification for Operators (Freight Transport) (10a AND 10b – Coastal; 10a AND 10c – Island; 10b AND 10c - Landlocked)* <i>In coastal economies this question assesses maritime freight and road freight; in island economies this question assesses maritime freight and air freight; and in landlocked economies this question assesses road freight and air freight</i>	n/a	1	1
Safety Regulations-Equipment (Freight Transport) (11a AND 11b – Coastal; 11a AND 11c – Island; 11b AND 11c - Landlocked)* <i>In coastal economies this question assesses maritime freight and road freight; in island economies this question assesses maritime freight and air freight; and in landlocked economies this question assesses road freight and air freight</i>	n/a	1	1
Safety Regulations-Maximum Hours (Freight Transport) (12a AND 12b – Coastal; 12a AND 12c – Island; 12b AND 12c - Landlocked)* <i>In coastal economies this question assesses maritime freight and road freight; in island economies this question assesses maritime freight and air freight; and in landlocked economies this question assesses road freight and air freight</i>	n/a	1	1
Safety Regulations-Certification for Operators (Logistics) (10d AND 10e)	n/a	1	1
Safety Regulations-Equipment (Logistics) (11d AND 11e)	n/a	1	1
Safety Regulations-Maximum Hours (Logistics) (12d AND 12e)	n/a	1	1

Absence of Additional Restrictions for Female Service Providers (13a AND 13b – Coastal; 13a AND 13c – Island; 13b AND 13c – Landlocked; AND 13d AND 13e AND 13f) <i>Regarding freight transport services, in coastal economies this question assesses maritime freight and road freight; in island economies this question assesses maritime freight and air freight; and in landlocked economies this question assesses road freight and air freight</i>	1	1	2
Total Points	7	13	20
1.2.2 International Trade in Services			
Indicators	FFP	SBP	Total Points
Absence of Restrictions on Foreign Registration of Vessels Under National Flags (Maritime Freight Only) (14)* <i>This question measures only coastal and island economies</i>	1	1	2
Absence of Restrictions on Cabotage/Access Rights (Maritime Freight Only) (15)* <i>This question measures only coastal and island economies</i>	1	1	2
Absence of Restrictions on the Use of Local Port Services (Maritime Freight Only) (16)* <i>This question measures only coastal and island economies</i>	1	1	2
Absence of Restrictions on Quotas (Freight Transport) (17a AND 17b - Coastal; 17a AND 17c - Island; 17b AND 17c - Landlocked)* <i>In coastal economies this question assesses maritime freight and road freight; in island economies this question assesses maritime freight and air freight; and in landlocked economies this question assesses road freight and air freight</i>	1	1	2
Absence of Restrictions Subject to an Economic Needs Test (Freight Transport) (18a AND 18b - Coastal; 18a AND 18c - Island; 18b AND 18c - Landlocked)* <i>In coastal economies this question assesses maritime freight and road freight; in island economies this question assesses maritime freight and air freight; and in landlocked economies this question assesses road freight and air freight</i>	1	1	2
Absence of Restrictions on Acquisition and Use of Land and Real Estate (Freight Transport) (19a AND 19b - Coastal; 19a AND 19c – Island; 19b AND 19c - Landlocked)* <i>In coastal economies this question assesses maritime freight and road freight; in island economies this question assesses maritime freight and air freight; and in landlocked economies this question assesses road freight and air freight</i>	1	1	2
Absence of Restrictions on Quotas (Logistics) (17d AND 17e AND 17f)	1	1	2
Absence of Restrictions Subject to an Economic Needs Test (Logistics) (18d AND 18e AND 18f)	1	1	2
Absence of Restrictions on Acquisition and Use of Land and Real Estate (Logistics) (19d AND 19e AND 19f)	1	1	2
Absence of Restrictions on Quotas (Financial Services) (17g AND 17h)	1	1	2
Absence of Restrictions Subject to an Economic Needs Test (Financial Services) (18g AND 18h)	1	1	2
Absence of Restrictions on Acquisition and Use of Land and Real Estate (Financial Services) (19g AND 19h)	1	1	2
Absence of Additional Restrictions on Licensing or Authorization Requirements (Freight Transport) (20a AND 20b - Coastal; 20a AND 20c - Island; 20b AND 20c - Landlocked)* <i>In coastal economies this question assesses maritime freight and road freight; in island economies this question assesses maritime freight and air freight; and in landlocked economies this question assesses road freight and air freight</i>	1	1	2

Absence of Additional Quotas for Foreign Contractual and Independent Service Providers (Freight Transport) (21a AND 21b - Coastal; 21a AND 21c - Island; 21b AND 21c - Landlocked)* <i>In coastal economies this question assesses maritime freight and road freight; in island economies this question assesses maritime freight and air freight; and in landlocked economies this question assesses road freight and air freight</i>	1	1	2
Absence of Labor Market Tests for Foreign Contractual and Independent Service Providers (Freight Transport) (22a AND 22b - Coastal; 22a AND 22c - Island; 22b AND 22c - Landlocked)* <i>In coastal economies this question assesses maritime freight and road freight; in island economies this question assesses maritime freight and air freight; and in landlocked economies this question assesses road freight and air freight</i>	1	1	2
Absence of Additional Restrictions on Licensing or Authorization Requirements (Logistics) (20d AND 20e AND 20f)	1	1	2
Absence of Additional Quotas for Foreign Contractual and Independent Service Providers (Logistics) (21d AND 21e AND 21f)	1	1	2
Absence of Labor Market Tests for Foreign Contractual and Independent Service Providers (Logistics) (22d AND 22e AND 22f)	1	1	2
Absence of Additional Restrictions on Licensing or Authorization Requirements (Financial Services) (20g AND 20h)	1	1	2
Absence of Additional Quotas for Foreign Contractual and Independent Service Providers (Financial Services) (21g AND 21h)	1	1	2
Absence of Labor Market Tests for Foreign Contractual and Independent Service Providers (Financial Services) (22g AND 22h)	1	1	2
Absence of Procedural Hurdles for Visa for Business Purposes (Freight Transport) (23a AND 23b - Coastal; 23a AND 23c - Island; 23b AND 23c - Landlocked)* <i>In coastal economies this question assesses maritime freight and road freight; in island economies this question assesses maritime freight and air freight; and in landlocked economies this question assesses road freight and air freight</i>	1	1	2
Total Points	22	22	44
<i>Coastal and Island economies may score a maximum score of 44 points (22 points on firm flexibility and 22 points on social benefits). Landlocked economies may score a total of 38 points (19 points on firm flexibility and 19 points on social benefits). The score for landlocked economies will be rescaled</i>			

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point; n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent).

*See Sections 5.1.1 and 5.2.7.

PILLAR II-QUALITY OF PUBLIC SERVICES FOR THE FACILITATION OF INTERNATIONAL TRADE	
Parameters	
Geographic Nature	The geographic nature of the economy according to the means it has to conduct export and import without transiting through a third country (coastal, island, or landlocked).
Services Sectors and Subsectors	Service sectors and subsectors that play a crucial role as inputs and facilitators for international trade in goods (maritime freight, road freight, air freight, cargo handling, storage and warehousing, customs brokerage, freight forwarding, commercial banking, and insurance).

2.1 DIGITAL AND PHYSICAL INFRASTRUCTURE

2.1.1 Transparency and Availability of Information

24. In practice, are licensing criteria made publicly available through electronic means in the area of transport services (maritime freight and road freight)? (Y/N)

Note: please consider “available” only if licensing criteria are available for all service subsectors mentioned in parenthesis.

25. In practice, are licensing criteria made publicly available through electronic means in the area of logistics services (cargo handling, storage and warehouse, customs brokerage and freight forwarding services)? (Y/N)

Note: please consider “available” only if licensing criteria are available for all service subsectors mentioned in parenthesis.

2.1 DIGITAL AND PHYSICAL INFRASTRUCTURE			
2.1.1 Transparency and Availability of Information			
Indicators	FFP	SBP	Total Points
Publication–Licensing Criteria (Freight Transport) (24)	1	1	2
Publication–Licensing Criteria (Logistics Services) (25)	1	1	2
Total Points	2	2	4

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

DIGITAL TRADE QUESTIONNAIRE

The tables that follow present all indicators (including their components, if applicable) under each pillar, with a reference to the corresponding question number in parenthesis. The questions are listed before each table for ease of reference.

For Y/N questions, the Y response accounts for the score and is considered as the good practice, unless otherwise indicated with the sign “Y/N; N – good practice”.

In the tables that follow, “AND” means all referenced questions must have a good practice response to obtain a score on the indicator.

In the tables that follow, “OR” means one or more referenced questions must have a good practice response to obtain a score on the indicator.

Due to the presence of multiple questionnaires, the numbering of categories in the annotated questionnaire does not match the topic methodology note.

The data on these indicators are collected through the Utility Services (Internet), Financial Services (Electronic Payments), and Taxation questionnaires. All subcategories are marked as *.

PILLAR I– QUALITY OF REGULATIONS FOR INTERNATIONAL TRADE

1.1 PRACTICES SUPPORTING INTERNATIONAL TRADE

1.1.1 Digital and Sustainable Trade* (includes gender and environment)

- 1. Does the regulatory framework provide foreign issued electronic contracts with legal validity and enforceability? (Y/N)**
- 2. Does the regulatory framework provide foreign electronic signatures with legal validity and enforceability? (Y/N)**
- 3. Does the regulatory framework establish the principle of technology neutrality in the context of digital trade? (Y/N)**
- 4. Is there a regulatory framework on personal data protection that regulates cross-border data flows? (Y/N)**

1.1 PRACTICES SUPPORTING INTERNATIONAL TRADE			
1.1.1 Digital and Sustainable Trade* (includes gender and environment)			
Indicators	FFP	SBP	Total Points
Electronic Contracts (1)	1	1	2
Electronic Signatures (2)	1	1	2
Technology Neutrality (3)	1	1	2
Cross-Border Data Flows (4)	1	1	2

Total Points	4	4	8
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Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

* The data on these indicators are collected through the Utility Services (Internet) and Financial Services (Electronic Payments) questionnaires.

1.2 REGULATORY RESTRICTIONS ON INTERNATIONAL TRADE

1.2.1 Digital Trade*

5. Does the regulatory framework require companies to obtain an additional (that is, beyond general business license) government license to digitally offered goods or services? (Y/N; N – good practice)
6. Are there any restrictions imposed on online sales of digitally ordered goods or services? (Y/N; N – good practice)
7. According to the regulatory framework, is there a specific tax regime that imposes an additional burden to cross-border digitally ordered goods and services vis-à-vis domestic digitally ordered goods and services (breaching the tax neutrality principle)? (Y/N; N – good practice)
8. According to the regulatory framework, are incoming cross-border electronic payments subject to taxes and fees (direct or indirect taxes, regulatory border fees, or foreign exchange fees imposed by the central bank or the monetary authority)? (Y/N; N – good practice)
9. According to the regulatory framework, are outgoing cross-border electronic payments subject to taxes and fees (direct or indirect taxes, regulatory border fees, or foreign exchange fees imposed by the central bank or the monetary authority)? (Y/N; N – good practice)
10. According to the regulatory framework, are there any limits to the value of the transactions on cross-border e-payments? (Y/N; N – good practice)
11. Are there any legal provisions requiring specific data transfer agreements or a formal consent from data subjects for cross-border transfers of personal data? (Y/N)
12. According to the legal framework, must the providers of goods and services that can be ordered digitally make the following information publicly available to cross-border consumers? (Y/N)
 - 12a. Merchant information such as address, business registration number and contact details
 - 12b. Product/services specifications
 - 12c. Delivery options
 - 12d. Payment process
 - 12e. Out of court complaints process
 - 12f. Refunds and cancellations policy
13. Does the existing regulatory framework provide the following protections to cross-border consumers? (Y/N)
 - 13a. Limits on advertising (that is, spam, unsolicited communications, and others)
 - 13b. Option to cancel online purchases during a specific period of time without any justification or penalty
 - 13c. Option to receive refunds/replacements/returns for damaged goods

14. Does the regulatory framework impose penalties for not complying with the online consumer protection provisions with regards to cross-border consumers? (Y/N)
15. According to the regulatory framework, is there a public online dispute resolution (ODR) mechanism with a competency to handle and resolve digital trade complaints, including cross-border transactions? (Y/N)
16. Does the regulatory framework allow consumers to file enforceable ODR cases related to cross-border digital trade free of charge? (Y/N)

1.2 REGULATORY RESTRICTIONS ON INTERNATIONAL TRADE			
1.2.1 Digital Trade*			
Indicators	FFP	SBP	Total Points
Absence of Additional Government Licenses (5)	1	1	2
Absence of Online Selling Bans (6)	1	1	2
No Breach of Tax Neutrality Principle (7)	1	1	2
Absence of Charges on Incoming Cross-Border E-Payments (8)	1	1	2
Absence of Charges on Outgoing Cross-Border E-Payments (9)	1	1	2
Absence of Limits on Cross-Border E-Payments (10)	1	1	2
Limitations to Cross-Border Data Flows (11)	n/a	1	1
Disclosure of Relevant Information (12a AND 12b AND 12c AND 12d AND 12e AND 12f)	n/a	1	1
Consumer Rights—Limits on Advertising (13a)	n/a	1	1
Consumer Rights to Cancel Online Purchases (13b)	n/a	1	1
Consumer Rights to Receive Refunds (13c)	n/a	1	1
Penalties for Non-Compliance with Online Consumer Protection Provisions (14)	n/a	1	1
Online Dispute Resolution Mechanism (15)	n/a	1	1
Online Dispute Resolution Mechanism (Free of Charge Filing) (16)	n/a	1	1
Total Points	6	14	20

Note: n/a = not applicable – refers to the cases when the impact on firms or society is either ambiguous or nonexistent. FFP = Firm Flexibility Point; SBP = Social Benefits Point.

* The data on these indicators are collected through the Utility Services (Internet), Financial Services (Electronic Payments), and Taxation questionnaires.

PUBLIC SERVICES QUESTIONNAIRE

The tables that follow present all indicators (including their components, if applicable) under each pillar, with a reference to the corresponding question number in parenthesis. The questions are listed before each table for ease of reference.

For Y/N questions, the Y response accounts for the score and is considered as the good practice, unless otherwise indicated with the sign “Y/N; N – good practice”.

In the tables that follow, “AND” means all referenced questions must have a good practice response to obtain a score on the indicator.

In the tables that follow, “OR” means one or more referenced questions must have a good practice response to obtain a score on the indicator.

Certain questions are marked as “not scored,” which indicates that they do not affect the score in any way. The purpose of these questions is to further inform and refine the questions design for subsequent years of the rollout, as needed, as well as to substantiate and provide further information for the scored questions.

Due to the presence of multiple questionnaires, the numbering of categories in the annotated questionnaire does not match the topic methodology note.

PILLAR II–QUALITY OF PUBLIC SERVICES FOR THE FACILITATION OF INTERNATIONAL TRADE	
Parameters	
Geographic Nature	The geographic nature of the economy according to the means it has to conduct export and import without transiting through a third country (coastal, island, or landlocked).
Main Trading Partner(s)	The trading partner(s) refer to an economy’s top 3 trade partners in goods and services combined between 2015 and 2029.
Main Neighboring Trading Partner	The main neighboring trading partner refers to the main trading partner with which the economy shares a land border.
Main Border	Main border by transportation mode: air, sea, and/or land.
Transportation Freight	Type of transportation freight subsector by geographic nature (air freight, sea freight, and/or road freight).

2.1 DIGITAL AND PHYSICAL INFRASTRUCTURE

2.1.1 Electronic Systems and Interoperability of Services

- 1. In practice, is there an Electronic Single Window (ESW) for trade connecting different government agencies through a transactional electronic platform? (Y/N)**
 - 1a. Y – Proceed to the remaining questions.
 - 1b. N – 0 points on questions 2 to 6.
- 2. Does the Electronic Single Window for Trade have the following characteristics? (Y/N)**
 - 2a. Single point of access (Information is presented in a single place)
 - 2b. Single sign-on (only one point of access to the platform/system)
 - 2c. Single submission of data (information is presented only once)
 - 2d. Single point of decision making (communication of results through a single point)

- 2e. Single point of payment (all payments are made in only one place)
3. **Are the following agencies, besides the Customs agency, integrated into the Electronic Single Window for trade? (Y/N)**
- 3a. Tax administration
 - 3b. Sanitary and phytosanitary agencies
 - 3c. Standardization agencies
 - 3d. Environmental agencies
 - 3e. Transport agencies
 - 3f. Ministry of Trade (or equivalent domestic ministry)
4. **Are the following stakeholders integrated into the Electronic Single Window for trade? (Y/N)**
- 4a. Exporters and importers
 - 4b. Customs brokers
 - 4c. Carriers and transport operators
 - 4d. Container handlers and terminal operators
 - 4e. Trade and transport associations (that is, chambers of commerce or other product certification boards)
 - 4f. Financial institutions (that is, banks, insurance companies)
5. **In practice, are the following features available and fully electronic through the Electronic Single Window for trade? (Y/N)**
- 5a. Submission of commercial and transport documents
 - 5b. Lodging of customs declarations and releases
 - 5c. Processing of licenses, permits and authorizations
 - 5d. Processing of veterinary, sanitary, and phytosanitary certificates
 - 5e. Processing of technical standards certificates
 - 5f. Processing of certificates of origin
6. **Does the ESW exchange information on commercial and transport documents, and customs declaration with any trading partner's ESW or Integrated Customs Management System? (Y/N)**
7. **In practice, is there an Integrated Customs Management System for international trade with transactional features (for example, Automated System for Customs Data (ASYCUDA) or another system that may be interoperable with a Single Window)? (Y/N)**
- 7a. Y – proceed to the remaining questions.
 - 7b. N – 0 points on questions 8 to 11.
8. **Are the following agencies, besides the Customs agency, integrated into this system? (Y/N)**
- 8a. Tax administration
 - 8b. Sanitary and phytosanitary agencies
 - 8c. Standardization agencies
 - 8d. Environmental agencies
 - 8e. Transport agencies
 - 8f. Ministry of Trade (or equivalent domestic ministry)
9. **Are the following stakeholders integrated into this system? (Y/N)**
- 9a. Exporters and importers
 - 9b. Customs brokers
 - 9c. Carriers and transport operators
 - 9d. Container handlers and terminal operators

- 9e. Trade and transport associations (that is, chambers of commerce or other product certification boards)
- 9f. Financial institutions (that is, banks, insurance companies)

10. In practice, are the following features available and fully electronic through this system? (Y/N)

- 10a. Submission of commercial and transport documents
- 10b. Lodging of customs declarations and releases
- 10c. Processing of licenses, permits and authorizations
- 10d. Processing of veterinary, sanitary, and phytosanitary certificates
- 10e. Processing of technical standards certificates
- 10f. Processing of certificates of origin

11. Does this system exchange information on commercial and transport documents and customs declaration with any trading partner's Electronic Single Window for trade or Integrated Customs Management System? (Y/N)

2.1.2 Transparency and Availability of Information

12. In practice, are the following types of information available online on any information portal(s) or website(s)? (Y/N)

Note: where multiple aspects are covered under one type of information, please consider "available" only if all aspects under that type of information are covered.

- 12a. Applied rates of duties and taxes (of any kind), fees and charges imposed on or in connection with importation or exportation
- 12b. Procedures for importation, exportation, and transit (including all entry-point procedures) and required forms and documents (including step-by-step guides)
- 12c. Laws, regulations, and administrative rulings on non-tariff measures, including technical and non-technical
- 12d. Issued advance rulings
- 12e. Penalty provisions for breaching import, export, or transit formalities
- 12f. Procedures for appeal or review, including formal complaints on disputed customs' rulings (for duties/tariffs, valuation decisions)

13. In practice, are the following types of information centralized on a single government website (trade information portal) dedicated to providing regulatory information pertaining to international trade: (Y/N)

- 13a. Laws, decrees, regulations, instructions, notifications, guidance notes and any other legal instruments related to international trade and compliance
- 13b. Commodity classification and associated tariffs
- 13c. Agreements with any country or countries, as well as unilateral agreements, including status and updates
- 13d. Special measures applicable to specific commodities or products (for example, sanitary and phytosanitary measures or technical barriers to trade required for specific categories of products)
- 13e. Penalty provisions for breach of formalities and procedures for appeal or review
- 13f. Instructions and forms used to apply for permits, licenses and customs clearance, and lists of codes required in such documents (for example, country codes, units of measurement, currency codes, etc.)

14. In practice, has a trade facilitation enquiry point been established to provide information regarding trade-related queries and documents? (Y/N)

2.1.3 Trade infrastructure

Border 1

15. Do you agree that the land border crossing (port) through which [ECONOMY] conducts most of its trade (in trade value terms) with [FILL WITH ECONOMY X] is [FILL WITH MEASURED BORDER POST(AIRPORT)]? (Y/N) *(not scored)*
16. Are the following facilities and equipment available at [FILL WITH MEASURED BORDER POST(AIRPORT)] to allow border control agencies to exercise their control functions? (Y/N)
- 16a. Intrusive and non-intrusive examination areas
 - 16b. Deconsolidation and unbundling areas for cargo
 - 16c. Fixed or mobile scanners
 - 16d. Weight-in-Motion (WIM) scales
 - 16e. Seizure warehouse
 - 16f. Testing laboratory for samples
17. Are the following services and amenities available for traders at [FILL WITH MEASURED BORDER POST (AIRPORT)]? (Y/N)
- 17a. Parking areas for trucks
 - 17b. Covered storage facilities
 - 17c. Cold storage facilities
 - 17d. Customs bonded warehouses

Border 2

18. Do you agree that the port (airport) through which [ECONOMY] conducts most of its trade (in trade value terms) is [FILL WITH MEASURED PORT (AIRPORT)]? (Y/N) *(not scored)*
19. Are the following facilities and equipment available at [FILL WITH MEASURED PORT (AIRPORT)] to allow border control agencies to exercise their control functions? (Y/N)
- 19a. Intrusive and non-intrusive examination areas
 - 19b. Deconsolidation and unbundling areas for cargo
 - 19c. Fixed or mobile scanners
 - 19d. Weight-in-Motion (WIM) scales
 - 19e. Seizure warehouse
 - 19f. Testing laboratory for samples
20. Are the following services and amenities available for traders at [FILL WITH MEASURED PORT (AIRPORT)]? (Y/N)
- 20a. Parking areas for trucks
 - 20b. Covered storage facilities
 - 20c. Cold storage facilities
 - 20d. Customs bonded warehouses
21. Are the following information systems in use at [FILL WITH MEASURED PORT (AIRPORT)]? (Y/N)
- 21a. Electronic Single Window (ESW) for trade
 - 21b. Maritime Single Window
 - 21c. Port community system
 - 21d. Terminal operating system

21e. Truck booking system

22. Is there a Port (Airport) Consultative Committee that represents the main stakeholders, including the private sector, and has meetings at least twice a year? (Y/N)

2.1 DIGITAL AND PHYSICAL INFRASTRUCTURE			
2.1.1 Electronic Systems and Interoperability of Services			
Indicators	FFP	SBP	Total Points
Availability of an Advanced Electronic System for International Trade (1a OR 7a)	1	1	2
Agency Integration into the Advanced Electronic System for International Trade ([3a AND 3b AND 3c AND 3d AND 3e AND 3f] OR [8a AND 8b AND 8c AND 8d AND 8e AND 8f])	1	1	2
Stakeholder Integration into the Advanced Electronic System for International Trade ([4a AND 4b AND 4c AND 4d AND 4e AND 4f] OR [9a AND 9b AND 9c AND 9d AND 9e AND 9f])	1	1	2
Features of the Advanced Electronic System for International Trade ([5a AND 5b AND 5c AND 5d AND 5e AND 5f] OR [10a AND 10b AND 10c AND 10d AND 10e AND 10f])	1	1	2
Exchange of Information with Trading Partners' Electronic Systems for International Trade (6 OR 11)	1	1	2
Single Point of Access of the Advanced Electronic System for International Trade (2a)	1	1	2
Single Sign-On of the Advanced Electronic System for International Trade (2b)	1	1	2
Single Submission of Data of the Advanced Electronic System for International Trade (2c)	1	1	2
Single Point of Decision Making of the Advanced Electronic System for International Trade (2d)	1	1	2
Single Point of Payment of the Advanced Electronic System for International Trade (2e)	1	1	2
Total Points	10	10	20
2.1.2 Transparency and Availability of Information			
Indicators	FFP	SBP	Total Points
Trade Information Portal (TIP) (13a AND 13b AND 13c AND 13d AND 13e AND 13f)	1	1	2
Publication– Duties, Taxes, Fees, and Non-Tariff Measures (12a AND 12c)	1	1	2
Publication–Procedures and Advance Rulings (12b AND 12d)	1	1	2
Publication–Penalties and Procedures for Appeal (12e AND 12f)	1	1	2
Enquiry Points (14)	1	1	2
Total Points	5	5	10

2.1.3 Trade Infrastructure			
Indicators	FFP	SBP	Total Points
Equipment and Facilities (Border 1 – Land Border or Airport) (16a AND 16b AND 16c AND 16d AND 16e AND 16f) <i>This question measures land border on coastal and landlocked economies, and airport in island economies</i>	1	1	2
Services and Amenities (Border 1 – Land Border or Airport) (17a AND 17b AND 17c AND 17d) <i>This question measures land border on coastal and landlocked economies, and airport in island economies</i>	1	1	2
Equipment and Facilities (Border 2 – Port or Airport) (19a AND 19b AND 19c AND 19d AND 19e AND 19f) <i>This question measures port on coastal and island economies, and airport in landlocked economies</i>	1	1	2
Services and Amenities (Border 2 – Port or Airport) (20a AND 20b AND 20c AND 20d) <i>This question measures port on coastal and island economies, and airport in landlocked economies</i>	1	1	2
Connection to the Electronic Single Window (Port or Airport) (21a) <i>This question measures port on coastal and island economies, and airport in landlocked economies</i>	1	1	2
Information Systems (Port or Airport) (21b AND 21c AND 21d AND 21e – Coastal and Island; 21d AND 21e – Landlocked)* <i>This question measures port on coastal and island economies, and airport in landlocked economies. This question for landlocked economies does not assess the existence of a Maritime Single Window or a Port Community System</i>	1	1	2
Consultative Committee (Port or Airport) (22)* <i>This question measures port on coastal and island economies, and airport in landlocked economies</i>	1	1	2
Total Points	7	7	14
<i>Coastal and island economies with no land border posts with any neighboring trading partner, have 4 components within the Information systems indicator, while landlocked economies have 2 components within the same indicator. Despite that, all economies will score the same points in this subcategory. In cases where only one border can be measured for an economy, the score for the economy will be rescaled</i>			

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

*See Section 5.1.1.

2.2 BORDER MANAGEMENT

2.2.1 Risk Management

23. Is the Customs agency supported by a risk management system? (Y/N)

24. What is the level of integration of the sanitary and phytosanitary agencies into an integrated risk management system? (basic/advanced/no integration) (Y/N)

24a. Advanced

24b. Basic

24c. No integration

25. What is the level of integration of the standardization agencies into an integrated risk management system? (basic/advanced/no integration) (Y/N)

25a. Advanced

- 25b. Basic
- 25c. No integration

26. What is the level of integration of the environmental agencies into an integrated risk management system? (basic/advanced/no integration) (Y/N)

- 26a. Advanced
- 26b. Basic
- 26c. No integration

27. What is the level of integration of the security agencies into an integrated risk management system? (basic/advanced/no integration) (Y/N)

- 27a. Advanced
- 27b. Basic
- 27c. No integration

28. Does the Customs agency's risk management system work at all borders with offices or physical presence of customs with the same levels of effectiveness and efficiency? (Y/N)

29. Does the Customs agency use automated profiling and targeting as part of its risk management system to minimize the incidence of physical examinations for both exports and imports? (Y/N)

30. Are there risk-based post-clearance audits for imports using selectivity criteria? (Y/N)

2.2.2 Coordinated Border Management

31. Is a unique consignment reference (UCR) used by the Customs agency and other agencies? (Y/N)

32. Do local border control authorities conduct joint inspections with or delegate inspections to other national agencies? (Y/N)

33. Is there an integrated border checkpoint with [FILL WITH ECONOMY X]? (Y/N)

Note: if there are no border controls between the two economies (for example, they are members of the same customs union), please mark "Yes."

34. Does the Customs agency exchange information on commercial and transport documents and customs declaration with [FILL WITH ECONOMY X]'s Customs agency at the border? (Y/N)

Note: if there are no border controls between the two economies (for example, they are members of the same customs union), please mark "Yes."

35. Do border control agencies recognize inspections by [FILL WITH ECONOMY X]'s border control agencies or conduct joint inspections? (Y/N)

Note: if there are no border controls between the two economies (for example, they are members of the same customs union), please mark "Yes."

36. In practice, do Customs operating hours coincide with those of [FILL WITH ECONOMY X]'s customs? (Y/N)

Note: if there are no border controls between the two economies (for example, they are members of the same customs union), please mark "Yes."

37. Is there a unified document or set of documents that is presented to the border control agencies of [FILL WITH MEASURED ECONOMY & ECONOMY X]? (Y/N)

Note: if there are no border controls between the two economies (for example, they are members of the same customs union), please mark “Yes.”

2.2.3 Trusted Trader Programs

38. Has the Customs agency implemented an Authorized Economic Operator certification program for the following operators? (Y/N)

- 38a. Exporters
- 38b. Importers
- 38c. Warehouse operators
- 38d. Customs brokers
- 38e. Logistics operators
- 38f. Carriers/transport operators
- 38g. Manufacturers

39. In practice, does the Authorized Economic Operator program have the following benefits? (Y/N)

- 39a. Pre-arrival release of goods
- 39b. Priority clearance and release of shipments
- 39c. Use of periodic declarations
- 39d. Lower rate of documentary reviews and physical inspections by Customs and other agencies

40. Besides the Customs agency, is the Authorized Economic Operator status recognized by the following domestic border control agencies? (Y/N)

- 40a. Sanitary and phytosanitary agencies
- 40b. Standardization agencies
- 40c. Security border agencies

41. Have any Authorized Economic Operator’s Mutual Recognition Agreements (MRAs) been signed with any of the three main trading partners ([THREE MAIN TRADING PARTNERS])? (Y/N)

42. Can the AEO certification or renewal process be carried out through the Electronic Single Window for trade, Integrated Customs Management System, or dedicated trade portal? (Y/N)

2.2 BORDER MANAGEMENT			
2.2.1 Risk Management			
Indicators	FFP	SBP	Total Points
Customs Risk Management Availability (23) <i>If 23 is not selected, no scores are granted in this subcategory</i>	1	1	2
Customs Risk Management Coverage (23 AND 28)	1	1	2
Sanitary and Phytosanitary Agency Integration (23 AND 24a)	1	1	2
Standardization Agency Integration (23 AND 25a)	1	1	2
Environmental Agency Integration (23 AND 26a)	1	1	2
Security Border Agency Integration (23 AND 27a)	1	1	2
Automated Profiling and Targeting (23 AND 29)	1	1	2
Post-Clearance Audits (23 AND 30)	1	1	2

Total Points	8	8	16
2.2.2 Coordinated Border Management			
Indicators	FFP	SBP	Total Points
Unique Consignment Reference (31)	1	1	2
Joint Controls (Internal) (32)	1	1	2
Integrated Border Checkpoint (33)*	1	1	2
Exchange of Information (34)	1	1	2
Joint Controls (External) (35)	1	1	2
Alignment of Operating Hours (36)*	1	1	2
Unified Document or Set of Documents (37)*	1	1	2
Total Points	7	7	14
<i>Coastal and landlocked economies may score a total of 14 points (7 points on firm flexibility and 7 points on social benefits), while island economies may score a total of 8 points ((4 points on firm flexibility and 4 points on social benefits). The score for island economies will be rescaled</i>			
2.2.3 Trusted Trader Programs			
Indicators	FFP	SBP	Total Points
Availability of a Trusted Trader Program for Exporters and Importers (38a AND 38b)	1	1	2
<i>If either 38a or 38b are not selected, no scores are granted in this subcategory</i>			
Availability of a Trusted Trader Program for Other Operators (38a AND 38b AND 38c AND 38d AND 38e AND 38f AND 38g)	1	1	2
Benefits of the Trusted Trader Program (38a AND 38b AND 39a AND 39b AND 39c AND 39d)	1	1	2
Inter-Agency Recognition of the Trusted Trader Program (38a AND 38b AND 40a AND 40b AND 40c)	1	1	2
Mutual Recognition Agreements of the Trusted Trader Program (38a AND 38b AND 41)	1	1	2
Electronic Certification and Renewal Process of the Trusted Trader Program (38a AND 38b AND 42)	1	1	2
Total Points	6	6	12

Note: FFP = Firm Flexibility Point; NGOs = Non-Governmental Organizations; SBP = Social Benefits Point.

* See Section 5.1.1

PILLAR III—OPERATIONAL EFFICIENCY OF EXPORTING GOODS, IMPORTING GOODS, AND ENGAGING IN DIGITAL TRADE

The scores for Pillar III indicators will be calculated using the Normal Cumulative Density Function (CDF) transformation method on a scale of 0 to 100, where 0 and 100 represent the lowest and highest possible scores, respectively. The best and worst performers will be identified based on the 5th and 95th percentiles of the collected data.

Questions asked for screening purposes (that is, determining whether the measured practice applies to a firm) are not used in scoring. The questions on the characteristics of the transaction (that is, mode of transportation determined by main points of exit and entry) are not scored either. Those questions account for 6 out of the 13 questions listed below. The remaining 7 questions (Qs 4, 5, 9, 10, 11, 12, and 13) are used to score each of the seven indicators indicated below.

Data for Pillar III on the Operational Efficiency of Exporting Goods, Importing Goods, and Engaging in Digital Trade is collected through firm-level surveys, using the questions that follow. The following sequence follows the order in Enterprise Surveys.

3.1 COMPLIANCE WITH EXPORT REQUIREMENTS

- 1. Coming back to fiscal year [Insert last complete fiscal year], what percentage of this establishment's sales were:**
 - 1a. National Sales
 - 1b. Indirect exports (sold domestically to third party that exports products)
 - 1c. Direct exports
 - 2. In fiscal year [Insert last complete fiscal year], what was the main country (or economy) of destination for this establishment's direct exports?**
 - 3. In fiscal year [Insert last complete fiscal year], when this establishment exported goods directly, was the main point of exit an airport, a land border crossing, port, or waterway?**
 - 4. Total time to comply with export requirements: In fiscal year [Insert last complete fiscal year], how many days did it take on average for these directly exported goods to be released by all border control agencies, including clearance procedures prior to arrival at the point of exit until the release of all goods?**
- Note: please include all clearance procedure times until the final release, including those times prior to arrival at the point of exit, not including transport time.*
- 5. Total cost to comply with export requirements: In fiscal year [Insert last complete fiscal year], as a percentage of the value of the products exported directly, what was the average cost of complying with all export requirements, including customs fees, other required payments, and payments made to customs brokers or freight forwarders, transportation freight, trade finance and insurance services?**

Note: please use the incoterm FCA (Free carrier).

3.2 COMPLIANCE WITH IMPORT REQUIREMENTS

- 6. In fiscal year [Insert last complete fiscal year], what percentage of this establishment's purchases of material inputs or supplies were:**
 - 6a. Of domestic origin
 - 6b. Of foreign origin
- 7. In fiscal year [Insert last complete fiscal year], what was the main country (or economy) of origin for this establishment's direct imports of material inputs or supplies [or finished goods and materials purchased to resell]?**
- 8. In fiscal year [Insert last complete fiscal year], when this establishment imported material inputs or supplies [or finished goods and materials purchased to resell], was the main point of entry an airport, a land border crossing, or a port or waterway?**
- 9. Total time to comply with import requirements: In fiscal year [Insert last complete fiscal year], how many days did it take on average for these directly imported material inputs and supplies [or finished goods and materials purchased to resell] to be released by all border control agencies,**

including clearance procedures prior to arrival at the point of entry until all material inputs and supplies were released?

Note: please include all clearance procedure times until the release, including those times prior to arrival at the point of entry.

10. Total cost to comply with import requirements: In fiscal year [Insert last complete fiscal year], as a percentage of the value of the products directly imported, what was the average cost to comply with all import requirements, including customs fees, other required payments, and payments made to customs brokers or freight forwarders?

Note: please use the incoterm DAP.

3.3 PARTICIPATION IN CROSS-BORDER DIGITAL TRADE

11. Were any of the goods directly exported ordered through electronic means and shipped by mail parcel or courier service? (Y/N)

Note: please consider only consignments valued below the de minimis threshold of the destination country.

Note: please exclude any domestic or international taxes. Please use the incoterm DAP (Delivered at place).

3.4 PERCEIVED MAJOR OBSTACLES: BUSINESS TRANSPORTATION, CUSTOMS AND TRADE REGULATIONS

12. Using the response options on the card; To what degree is transport an obstacle to the current operations of this establishment?

12a. No obstacle

12b. Minor obstacle

12c. Moderate obstacle

12d. Major obstacle

12e. Very severe obstacle

13. Using the response options on the card; To what degree are customs and trade regulations an obstacle to the current operations of this establishment?

13a. No obstacle

13b. Minor obstacle

13c. Moderate obstacle

13d. Major obstacle

13e. Very severe obstacle

3.1 COMPLIANCE WITH EXPORT REQUIREMENTS			
Indicators	FFP	SBP	Total Points
Total Time to Comply with Export Requirements (4)	100 (50%)	n/a	100 (50%)
Total Cost to Comply with Export Requirements (5)	100 (50%)	n/a	100 (50%)
Total Points	100	n/a	100
3.2 COMPLIANCE WITH IMPORT REQUIREMENTS			
Total Time to Comply with Import Requirements (9)	100 (50%)	n/a	100 (50%)
Total Cost to Comply with Import Requirements (10)	100 (50%)	n/a	100 (50%)
Total Points	100	n/a	100

3.3 PARTICIPATION IN CROSS-BORDER DIGITAL TRADE			
Share of Trading Firms Exporting Digitally Ordered Goods (11)	100 (100%)	n/a	100 (100%)
Total Points	100	n/a	100
3.4 PERCEIVED MAJOR OBSTACLES: BUSINESS TRANSPORTATION, CUSTOMS AND TRADE REGULATIONS			
Share of Firms Identifying Customs and Trade Regulations as a Major or Severe Constraints (13)	100 (50%)	n/a	100 (50%)
Share of Firms Identifying Transportation as a Major or Severe Constraints (12)	100 (50%)	n/a	100 (50%)
Total Points	100	n/a	100

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent). FFP = Firm Flexibility Point; SBP = Social Benefits Point.

CHAPTER 8. TAXATION–METHODOLOGY NOTE

I. MOTIVATION

Taxation is a powerful policy tool that governments use to generate revenues to finance their operations and provide public goods and services. Taxation affects the development of the private sector through a variety of interrelated channels. On the one hand, it creates enabling conditions for the growth and development of the private sector by financing physical infrastructure, human capital investments, law enforcement, and other public services. On the other hand, excessive taxation can distort markets, alter investment decisions, and foster tax evasion.¹ Likewise, cumbersome regulations, complex tax reporting requirements, and inefficient and unevenly applied tax procedures pose additional compliance costs on firms, thereby discouraging formalization.² Identifying key issues faced by taxpayers and critical features of tax systems can help inform reforms that support private sector development while pursuing domestic resource mobilization objectives.

Academic research highlights the following tax system deficiencies that affect private sector development: tax regulation complexity, tax administration system inefficiency, and the high cost of compliance with tax regulations.³ The Taxation indicators include measures to incorporate these issues as well as measures on environmental sustainability and gender equality to further assess the effect of these two important topics on economic development.

Digitalization of tax administration services has a positive impact on tax collection.⁴ At the cornerstone of digital services in tax administrations, electronic filing services contribute to reducing compliance costs and foster a more transparent tax regime through reducing corruption and bribe solicitation.⁵ Digitalization of the tax administration's procedures also helps reduce tax evasion.⁶

The efficiency of tax administration systems is another aspect that affects the burden of administrative compliance. Research shows that economies with tax administration procedures that provide easy access to information, build e-tax systems, employ effective risk management strategies, and ensure transparency of operations benefit from increased firm productivity and economic growth.⁷ Reducing the likelihood of audits of low-risk taxpayers also encourages greater taxpayer compliance. The presence of impartial, accessible, and efficient tax dispute resolution mechanisms is essential for protecting a taxpayer's right to challenge a tax assessment and get a fair hearing in a timely manner.⁸ Finally, improving internal efficiency enables tax administrations to unlock additional revenues.⁹

It is well recognized that global warming caused by greenhouse gas emissions will have a negative impact on all types of economic activity. Environmental taxes have been proven effective in directly addressing market failures in accounting for environmental impacts. Environmental pricing through taxation gives consumers and businesses the flexibility to determine how to reduce their environmental "footprint," enabling the lowest-cost solutions and providing incentives for innovation and investment in low-carbon emission technologies.¹⁰

Finally, various studies emphasize the positive effects of gender equality on development. Gender equality is an integral component of fiscal reform and plays a key role in achieving more inclusive and sustainable economic growth.¹¹ Helping women fully participate in the economy is not only growth-promoting, but it also diversifies the economies, reduces income inequality, mitigates demographic shifts, and contributes to stability.¹² Thus, the Taxation topic explores aspects of gender equality in the corporate taxation system.

II. INDICATORS

The Taxation topic measures the quality of taxation regulation, administration, and implementation from a firm's perspective across the three different dimensions, here referred to as pillars. The first pillar assesses the quality of regulation pertaining to taxation, covering de jure and de facto information on the legal requirements. The second pillar measures the quality of tax administration, thus assessing the de facto and de jure public services provided pertaining to taxes. The third pillar measures how efficiently tax regulation and public services are implemented in practice from the perspective of a firm. Each pillar is divided into categories—defined by common features that inform the grouping into a particular category—and each category is further divided into subcategories. Each subcategory consists of several indicators, each of which may, in turn, have several components. Relevant points are assigned to each indicator and subsequently aggregated to obtain the number of points for each subcategory, category, and pillar. Table 1 summarizes all three pillars and their respective categories.

Table 1. Summary Table of all Three Pillars for the Taxation Topic

Pillar I—Quality of Regulations on Taxation (11 indicators)	
1.1	Clarity and Transparency (4 indicators)
1.1.1	Clarity of Tax Regulations (2 indicators)
1.1.2	Transparency of Changes in Tax Regulations (2 indicators)
1.2	Administrative Procedures (4 indicators)
1.2.1	Simplified Tax Record Keeping and Reporting (1 indicator)
1.2.2	General Tax Registration (1 indicator)
1.2.3	VAT Registration (1 indicator)
1.2.4	VAT Refund (1 indicator)
1.3	Environmental Taxes (3 indicators)
1.3.1	Existence of Environmental Fiscal Instruments (1 indicator)
1.3.2	Availability of Public Consultations (1 indicator)
1.3.3	Transition Periods (1 indicator)
Pillar II—Public Services Provided by the Tax Administration (18 indicators)	
2.1	Digital Services for Taxpayers (4 indicators)
2.1.1	Online Service Taxpayer Portal (1 indicator)
2.1.2	Electronic Filing of Taxes (1 indicator)
2.1.3	Pre-Filled Tax Declarations (1 indicator)
2.1.4	Electronic Payment of Taxes (1 indicator)
2.2	Data Management and System Integration in Tax Administration (6 indicators)
2.2.1	Tax Registration (1 indicator)
2.2.2	Taxpayer Database and Tax Identification Number (TIN) (1 indicator)
2.2.3	Tax Deregistration (1 indicator)
2.2.4	Data Exchange and Usage (includes gender) (3 indicators)
2.3	Transparency (3 indicators)
2.3.1	Annual Performance and Gender Diversity in Tax Administration (2 indicators)
2.3.2	Public Accountability (1 indicator)
2.4	Tax Audits and Related Disputes (5 indicators)
2.4.1	Tax Audits (3 indicators)
2.4.2	Dispute of Tax Audit Results (2 indicators)
Pillar III—Operational Efficiency of Tax Systems in Practice (7 indicators)	
3.1	Time and Functionality of Processes (5 indicators)
3.1.1	Time to File and Pay Taxes (1 indicator)
3.1.2	Use of Electronic Systems to File and Pay Taxes (1 indicator)
3.1.3	Duration of a Generic Tax Audit (1 indicator)
3.1.4	Duration of a Tax Dispute (1 indicator)
3.1.5	Use of a VAT Refund (1 indicator)
3.2	Financial Burden on Firms (2 indicators)

3.2.1	Effective Tax Rate (ETR) for Profit Taxes (1 indicator)
3.2.2	Effective Tax Rate (ETR) for Employment Taxes and Social Contributions (1 indicator)

Note: VAT = Value Added Tax; TIN = Taxpayer's Identification Number.

1. PILLAR I. QUALITY OF REGULATIONS ON TAXATION

Table 2 shows the structure for Pillar I, Quality of Regulations on Taxation. Each of this pillar's categories and subcategories will be discussed in more detail in the order shown in the table.

Table 2. Pillar I—Quality of Regulations on Taxation

1.1	Clarity and Transparency
1.1.1	Clarity of Tax Regulations
1.1.2	Transparency of Changes in Tax Regulations
1.2	Administrative Procedures
1.2.1	Simplified Tax Record Keeping and Reporting
1.2.2	General Tax Registration
1.2.3	VAT Registration
1.2.4	VAT Refund
1.3	Environmental Taxes
1.3.1	Existence of Environmental Fiscal Instruments
1.3.2	Availability of Public Consultations
1.3.3	Transition Periods

Note: VAT = Value Added Tax.

1.1 Clarity and Transparency

Category 1.1 is divided into two subcategories consisting of several indicators, each of which may, in turn, have several components.

1.1.1 Clarity of Tax Regulations

Issuance of rulings and interpretations of the law in a timely, transparent, and consistent manner is important for promoting predictability and fairness in tax administration, providing certainty for taxpayers, improving the tax environment for businesses, and addressing tax uncertainty.¹³ Therefore, Subcategory 1.1.1—Clarity of Tax Regulations comprises two indicators (table 3).

Table 3. Subcategory 1.1.1—Clarity of Tax Regulations

	Indicators	Components
1	Tax Guides and Their Delivery Channels	i) Means to obtain general tax guides ii) Availability of internal tax guides iii) Means to obtain internal tax guides
2	Binding Rulings and Post-Compliance Procedures	i) Availability and publishing of private binding rulings ii) Availability of public binding rulings iii) Dispute resolution process codified in a single legislative act iv) Tax audit procedures codified in a single legislative act

1.1.2 Transparency of Changes in Tax Regulations

Having a transparent and predictable tax regulation enactment process enhances tax certainty, various studies find.¹⁴ According to businesses, one of the most effective tools are announcing important changes in advance and engaging key participants of the private sector and society in the consultation.¹⁵ Therefore, Subcategory 1.1.2—Transparency of Changes in Tax Regulations comprises two indicators (table 4).

Table 4. Subcategory 1.1.2—Transparency of Changes in Tax Regulations

	Indicators	Components
1	Obtaining Feedback and Broad Public Consultation	i) Tax administration requests feedback from taxpayers ii) Feedback is requested regularly

		iii) Results are disclosed to the public iv) Results are published online v) Public consultations are held
2	Practice on Preparing and Publishing Future Tax Plans	i) Preparation of future tax plan ii) Online publication on future tax plan iii) Full publication of future tax plan iv) Publication of future tax plan in advance of implementation

1.2 Administrative Procedures

Category 1.2 is divided into four subcategories consisting of several indicators, each of which may, in turn, have several components.

1.2.1 Simplified Tax Record Keeping and Reporting

Research shows that manual tax record-keeping can lead to errors and fraud.¹⁶ Therefore, a tax administration should make efficient use of digital records. Furthermore, simplified record-keeping for small businesses can reduce compliance costs, increase compliance, and improve accuracy and consistency of tax reporting, as well as reduce the burden on tax authorities.¹⁷ Therefore, Subcategory 1.2.1–Simplified Tax Recording Keeping comprises one indicator (table 5).

Table 5. Subcategory 1.2.1–Simplified Tax Record Keeping and Reporting

	Indicators	Components
1	Simplified Tax Record Keeping and Reporting	i) Availability of digital record keeping for large businesses ii) Availability of digital record keeping for medium businesses iii) Availability of digital record keeping for small businesses iv) Availability of simplified record keeping for small businesses v) Availability of simplified filing for small businesses

1.2.2 General Tax Registration

Availability of information about general tax registration is fundamental component of an effective tax administration, as reducing uncertainties through agency-based information about tax liabilities enhances reporting and tax compliance.¹⁸ Provision of information through user-friendly channels boosts transparency and trust in the tax administration.¹⁹ Information on fees and time to register for tax purposes in the tax law also provides more clarity to taxpayers and simplifies procedures for start-ups. To maintain the register, one of the simplest and most effective methods is through legislation and/or regulation, where taxpayers are obligated to notify the administration of changes to registration particulars.²⁰ Therefore, Subcategory 1.2.2–General Tax Registration comprises one indicator (table 6).

Table 6. Subcategory 1.2.2–General Tax Registration

	Indicators	Components
1	Transparency in the Tax Registration Process	i) Availability of information on general tax registration ii) Clarity of fees iii) Clarity of timeline iv) Mandatory notification of changes to registration details and penalty for failure to comply

1.2.3 VAT Registration

The value added tax (VAT) registration threshold exempts firms from registering for VAT if their sales are below the threshold. Therefore, it simplifies compliance procedures. The voluntary VAT registration for businesses that are below the threshold allows them to participate and benefit from VAT refunds.²¹ The VAT registration threshold allows the tax authority to concentrate its resources on bigger taxpayers, thus saving budget expenditures. Subcategory 1.2.3–VAT Registration comprises one indicator (table 7).

Table 7. Subcategory 1.2.3–VAT Registration

	Indicators	Components
1	VAT Registration Threshold	i) Existence of a VAT registration threshold ii) Availability of voluntary VAT registration

Note: VAT = Value Added Tax.

1.2.4 VAT Refund

For firms, fast and efficient VAT refund systems reduce the opportunity costs of the capital frozen in the form of pending VAT refunds. VAT returns are necessary to administer the payment and refund of VAT, but at the same time can be of use for risk assessment purposes.²² Limiting the ability to request a VAT refund comes at significant cost, including compromised VAT design and lower revenue productivity.²³ Therefore, Subcategory 1.2.4–VAT Refund comprises one indicator (table 8).

Table 8. Subcategory 1.2.4–VAT Refund

	Indicators	Components
1	VAT Refund	i) Availability of VAT cash refund ii) Restriction on VAT cash refund

Note: VAT = Value Added Tax.

1.3 Environmental taxes

Category 1.3 is divided into three subcategories consisting of several indicators, each of which may, in turn, have several components.

1.3.1 Existence of Environmental Fiscal Instruments

Environmental taxes serve to reduce "carbon output," curb consumption of fuel, facilitate innovation and move to environment-friendly technologies, and finally raise revenues.²⁴ Therefore, Subcategory 1.3.1–Existence of Environmental Fiscal Instruments comprises one indicator (table 9).

Table 9. Subcategory 1.3.1–Existence of Environmental Fiscal Instruments

	Indicators	Components
1	Presence of Environmental Fiscal Instruments	Availability of one of the four types of environmental fiscal instruments, such as carbon taxes, energy taxes, emission trading systems, and feebates

1.3.2 Availability of Public Consultations

The key to a simple administrative system is to consult widely with the different actors within society and get their input before introducing the tax. Given the nature of carbon taxation, public consultations should engage a broad group of stakeholders. These should range from potential agencies given the task of administering the tax, to tax authorities and other relevant agencies, as well as business organizations, trade and consumer organizations representing their members who are likely to face the tax burden, and tax advisors or accountants.²⁵ Risk-based environmental tax audits can be an effective tool for detecting noncompliance among high-risk taxpayers, which can help ensure the effectiveness of the tax system while minimizing the burden on compliant taxpayers.²⁶ Therefore, Subcategory 1.3.2–Availability of Public Consultations comprises one indicator (table 10).

Table 10. Subcategory 1.3.2–Availability of Public Consultations

	Indicators	Components
1	Availability of Public Consultations	i) Public consultation before the introduction of environmental taxes ii) Publication of the results of public consultations iii) Online publication of the public consultations results iv) Risk-based system for environmental inspections

1.3.3 Transition Periods

To ensure the continued reduction of emissions, policy makers should review the environmental tax rate(s) periodically and check whether it is still suitable to achieve the desired emissions' target. However, revision of the environmental tax rate(s) might provide uncertainty. A way to lower uncertainty is to contemplate an explicit adjustment mechanism in the tax legislation and inform businesses that the rate(s) might be increased over time. Policy makers must also allow a reasonable period between the enactment of a new carbon tax and the date when the legislation will come into force.³⁸ Therefore, Subcategory 1.3.3–Transition Periods comprises one indicator (table 11).

Table 11. Subcategory 1.3.3–Transition Periods

	Indicators	Components
1	Transition Periods	i) Adjustment mechanisms ii) Communication of the transition period iii) Online publication of the information on the transition periods

2. PILLAR II. PUBLIC SERVICES PROVIDED BY THE TAX ADMINISTRATION

Table 12 shows the structure for Pillar II, Public Services Provided by the Tax Administration. Each of this pillar's categories and subcategories will be discussed in more detail in the order shown in the table (table 12).

Table 12. Pillar II–Public Services Provided by Tax Administration

2.1	Digital Services for Taxpayers
2.1.1	Online Service Taxpayer Portal
2.1.2	Electronic Filing of Taxes
2.1.3	Pre-Filled Tax Declarations
2.1.4	Electronic Payment of Taxes
2.2	Data Management and System Integration in Tax Administration
2.2.1	Tax Registration
2.2.2	Taxpayer Database and Tax Identification Number (TIN)
2.2.3	Tax Deregistration
2.2.4	Data Exchange and Usage (includes gender)
2.3	Transparency
2.3.1	Annual Performance and Gender Diversity in Tax Administration
2.3.2	Public Accountability
2.4	Tax Audits and Related Disputes
2.4.1	Tax Audits
2.4.2	Dispute of Tax Audit Results

Note: TIN = Taxpayer's Identification Number.

2.1 Digital Services for Taxpayers

Category 2.1 is divided into four subcategories consisting of several indicators, each of which may, in turn, have several components.

2.1.1 Online Service Taxpayer Portal

Online taxpayer portals offer a modern, streamlined, and transparent way of interacting with the tax authority. These portals ensure security of access, offer services based on user's particulars, and simplify user journeys. Additionally, they may utilize big data and other technologies to deliver responsive and personalized services, enhancing the overall efficiency of tax administration.²⁷ Subcategory 2.1.1–Online Service Taxpayer Portal comprises one indicator (table 13).

Table 13. Subcategory 2.1.1–Online Service Taxpayer Portal

	Indicators	Components
1	Online Service Taxpayer Portal	i) Availability of a taxpayer online service portal ii) The use of a taxpayer online service portal iii) Self-service tools available to taxpayers on the portal

2.1.2 Electronic Filing of Taxes

Research shows that investments in e-filing and e-payment tax systems are effective in reducing compliance costs, corruption, and tax evasion, and they have also inspired organizational changes and the uptake of information technology within firms.²⁸ Therefore, Subcategory 2.1.2–Electronic Filing of Taxes comprises one indicator (table 14).

Table 14. Subcategory 2.1.2–Electronic Filing of Taxes

	Indicators	Components
1	Electronic Filing	i) Large companies can file corporate income-based taxes online ii) Medium companies can file corporate income-based taxes online iii) Small companies can file corporate income-based taxes online iv) Large companies can file VAT or other consumption taxes online v) Medium companies can file VAT or other consumption taxes online vi) Small companies can file VAT or other consumption taxes online vii) Large companies can file employment-based taxes and social contributions online viii) Medium companies can file employment-based taxes and social contributions online ix) Small companies can file employment-based taxes and social contributions online

Note: VAT = Value Added Taxes.

2.1.3 Pre-Filled Tax Declarations

Simplifying the tax filing process through offering pre-filled tax declarations can boost tax compliance.²⁹ This method includes the practice of authorities pre-populating taxpayers' returns or online accounts with accurate data obtained from reliable sources (banks, employers, customs, etc.).³⁰ Therefore, Subcategory 2.1.3–Pre-Filled Tax Declarations comprises one indicator (table 15).

Table 15. Subcategory 2.1.3–Pre-Filled Tax Declarations

	Indicators	Components
1	Pre-Filled Declarations	i) Pre-filled corporate income-based taxes declarations for large companies ii) Pre-filled corporate income-based taxes declarations for medium companies iii) Pre-filled corporate income-based taxes declarations for small companies iv) Pre-filled VAT or other consumption taxes declarations for large companies v) Pre-filled VAT or other consumption taxes declarations for medium companies vi) Pre-filled VAT or other consumption taxes declarations for small companies vii) Pre-filled employment-based taxes and social contributions declarations for large companies viii) Pre-filled employment-based taxes and social contributions declarations for medium companies ix) Pre-filled employment-based taxes and social contributions declarations for small companies

Note: VAT = Value Added Taxes.

2.1.4 Electronic Payment of Taxes

Electronic tax payments offer several benefits, including an increase in timeliness of payments and a reduction in compliance cost.³¹ Allowing payments to be made electronically also increase tax compliance while allowing better monitoring and enforcement by the tax authorities.³² Therefore, Subcategory 2.1.4–Electronic Payment of Taxes comprises one indicator (table 16).

Table 16. Subcategory 2.1.4—Electronic Payment of Taxes

	Indicators	Components
1	Electronic Payment	i) Large companies can pay corporate income-based taxes online ii) Medium companies can pay corporate income-based taxes online iii) Small companies can pay corporate income-based taxes online iv) Large companies can pay VAT or other consumption taxes online v) Medium companies can pay VAT or other consumption taxes online vi) Small companies can pay VAT or other consumption taxes online vii) Large companies can pay employment-based taxes and social contributions online viii) Medium companies can pay employment-based taxes and social contributions online ix) Small companies can pay employment-based taxes and social contributions online

Note: VAT = Value Added Taxes.

2.2 Data Management and System Integration in Tax Administration

Category 2.2 is divided into four subcategories consisting of several indicators, each of which may, in turn, have several components.

2.2.1 Tax Registration

A straightforward process of tax registration, either automated upon incorporation or one that is conducted fully online, reduces the bureaucratic burden on firms and frees up the resources at the tax administration.³³ Furthermore, a simple tax registration removes obstacles for companies that want to operate formally. The use of a multichannel system, allowing taxpayers to register for multiple taxes is also gaining significant prominence for tax administrations compliance.³⁴ Therefore, Subcategory 2.2.1—Tax Registration comprises one indicator (table 17).

Table 17. Subcategory 2.2.1—Tax Registration

	Indicators	Components
1	Tax Registration Process	Automated tax registration upon incorporation

2.2.2 Taxpayer Database and Tax Identification Number (TIN)

The existence of a taxpayer registration database and unique tax identification number (TIN) allows firms to verify the accuracy of their own information and benefit from a more transparent tax system.³⁵ The integration between unique identification systems and tax administration can help improve taxpayer identification, potentially broadening the tax base and improving compliance.³⁶ Furthermore, a modern tax administration system is based on the establishment of a unique TIN which is the foundation of its management information system, and which monitors the status and movement of taxpayer cases through all core business processes.³⁷ Therefore, Subcategory 2.2.2—Taxpayer Database and Tax Identification Number (TIN) comprises one indicator (table 18).

Table 18. Subcategory 2.2.2—Taxpayer Database and Tax Identification Number (TIN)

	Indicators	Components
1	Taxpayer Database and TIN	i) Unified taxpayer database ii) Computerized taxpayer database iii) Database with full national coverage iv) Single tax identification number for all company's taxes

Note: TIN = Taxpayer's Identification Number.

2.2.3 Tax Deregistration

Same as the tax registration process, cumbersome tax deregistration may deter firms from formalizing in the first place. While companies cease to exist for various reasons, the deregistration process—including tax deregistration—should account for all stakeholders' interests. Automated solutions can facilitate this process.³⁸ Therefore, Subcategory 2.2.3—Tax Deregistration comprises one indicator (table 19).

Table 19. Subcategory 2.2.3–Tax Deregistration

	Indicators	Components
1	Tax Deregistration	Automated tax deregistration

2.2.4 Data Exchange and Usage (includes gender)

Enhancing the cross-checking of taxpayer-reported information helps reduce the need for firms to provide additional data, thereby lowering compliance costs. By cross-checking information with third parties, tax authorities can improve accuracy and efficiency in tax reporting and compliance, thereby increasing tax collection. Furthermore, collecting and analyzing sex-disaggregated tax data is important for policy analysis and formulation and contributes to promoting gender equality because it facilitates the assessment and development of appropriate evidence-based responses and corrective actions. Therefore, Subcategory 2.2.4–Data Exchange and Usage (includes gender) comprises three indicators (table 20).

Table 20. Subcategory 2.2.4–Data Exchange and Usage (includes gender)

	Indicators	Components
1	Information Cross-Checking on Tax Portal	Information cross-checked on tax portal
2	Data Cross-Checking to Verify Tax Declarations	<p>Sources from which the information is collected:</p> <ul style="list-style-type: none"> i) Tax declarations ii) Banks/financial institutions iii) Employers (for purposes of crosschecking reported employment income) iv) Three and more government agencies (e.g., the national tax administration; customs; agencies responsible for government procurement of goods and services; registrar of companies; anti-money laundering regulator responsible for tracking cash transactions; and registrars of immovable property and other assets such as motor vehicles or land) v) Stock exchanges and/or shareholder registries of listed companies vi) Social security agency or agencies (for purposes of crosschecking reported employment income) vii) Online (internet-based) vendors viii) Other jurisdictions exchanging information including other subnational governments, such as in the framework of the automatic exchange of information, foreign account tax compliance act, or double taxation agreements (exchange of information component)
3	Availability of Sex-Disaggregated Data and Their Analysis	<ul style="list-style-type: none"> i) Availability of sex-disaggregated data ii) Tax authority conducts analysis of sex-disaggregated data iii) Publication of findings of the analysis

2.3 Transparency

Category 2.3 is divided into two subcategories consisting of several indicators, each of which may, in turn, have several components.

2.3.1 Annual Performance and Gender Diversity in Tax Administration

Transparent tax administrations promote trust in tax systems and strengthen the social contract between citizens and governments. In turn, trust in the system promotes tax compliance. The external oversight of the tax administrations' periodical audits and publishing of audit reports increase transparency and promote accountability of tax administrations.

Furthermore, the tax administration can act as a role model in promoting a gender-balanced and inclusive workforce.³⁹ More women in senior management positions at tax authorities positively correlate with the implementation of policies and practices to promote gender equality. Also, having more women employed in the tax authority leads to more women using tax services. Gender equality within an entity leads to better business outcomes through increased profitability and effectiveness.⁴⁰ Therefore, Subcategory 2.3.1–Annual Performance and Gender Diversity in Tax Administration comprises two indicators (table 21).

Table 21. Subcategory 2.3.1–Annual Performance and Gender Diversity in Tax Administration

	Indicators	Components
1	Annual Performance	i) Public disclosure of the annual report ii) Online access to the annual report iii) Scope of the annual report iv) Audits on the performance of a tax administration v) Public disclosure of findings of an external review body vi) Online access to findings of an external review body
2	Gender Composition of the Staff in Tax Administration	i) Public availability of gender composition of the staff ii) Public availability of gender composition of the senior executives

2.3.2 Public Accountability

Engagement with citizens through taxpayer perception surveys and stakeholder consultations supports transparency and public confidence in tax administrations. Trust in the tax administration is further strengthened by the code of ethics and professional conduct. Unethical behavior by tax officials contributes to corruption and abuse of power. Strict adherence to the codes of ethics embraces ethical standards, fosters staff integrity, and reduces tension between administrators and taxpayers.⁴¹ Firms can benefit from the independent and impartial investigation of taxpayer complaints concerning wrongdoing and maladministration by the tax administration. Therefore, Subcategory 2.3.2–Public Accountability assesses all of these aspects and comprises one indicator (table 22).

Table 22. Subcategory 2.3.2–Public Accountability

	Indicators	Components
1	Public Accountability	i) Taxpayer's perceptions surveys ii) Regular performance of taxpayer's perception surveys iii) Publication of the results of the feedback iv) Online publication of the results of the feedback v) Availability of the code of ethics vi) Presence of independent and impartial investigative bodies

2.4 Tax Audits and Related Disputes

Category 2.4 is divided into two subcategories consisting of several indicators, each of which may, in turn, have several components.

2.4.1 Tax Audits

A well-managed audit program plays a major role in managing tax compliance.⁴² Annual tax audit plans bring certainty about the audits and maximizes efficiency of the tax administration.⁴³ Uniform tax audit methods and procedures laid out in specific guidelines and manuals improve transparency, clarity, and trust within taxpayers. Tax audits that use a range of audit types reduce firms' costs of dealing with tax authorities. Tax audit programs help detect and deter inaccurate reporting.⁴⁴ Therefore, Subcategory 2.4.1–Tax Audits comprises three indicators (table 23).

Table 23. Subcategory 2.4.1–Tax Audits

	Indicators	Components
1	Existence of Annual National Tax Audit Plan	i) The tax administration produces annual national tax audit plan ii) The audit plan covers all of the following taxes: CIT, consumption taxes, and social taxes and contributions
2	Existence of Different Types of Audits	i) Tax audit types ii) Publication of tax audit manuals and guidelines
3	The Monitoring of Taxpayer Audits	i) Publication of information on the quality of the tax administration's audits ii) Publication of the information is accessible online

Note: CIT = Corporate Income-based Tax.

2.4.2 Dispute of Tax Audit Results

Having one single mechanism that could review all types of disputes promotes efficiency and can save taxpayers cost and time. The presence of impartial, accessible, and efficient tax dispute resolution mechanisms is essential for protecting a taxpayer's right to challenge a tax assessment and get a fair hearing in a timely manner.⁴⁵ Moreover, the flexibility of taxpayers to move to the next level of dispute resolution in case of a long review time of the first-level review body could save taxpayers' costs of compliance and time. It also contributes to the fairness of the systems and access to justice.⁴⁶ Therefore, Subcategory 2.4.2–Dispute of Tax Audit Results comprises two indicators (table 24).

Table 24. Subcategory 2.4.2–Dispute of Tax Audit Results

	Indicators	Components
1	First-Level Review Mechanism	i) Tax Disputes Review Body ii) Types of disputes that can be reviewed
2	Second-Level Review Mechanism	i) Escalation of disputes to the next level ii) Graduate complaint mechanism

3. PILLAR III. OPERATIONAL EFFICIENCY OF TAX SYSTEMS IN PRACTICE

Table 25 shows the structure for Pillar III, the Operational Efficiency of Tax Systems in Practice. Each of this pillar's categories and subcategories will be discussed in more detail in the order shown in the table.

Table 25. Pillar III–Operational Efficiency of Tax Systems in Practice

3.1	Time and Functionality of Processes
3.1.1	Time to File and Pay Taxes
3.1.2	Use of Electronic Systems to File and Pay Taxes
3.1.3	Duration of a Generic Tax Audit
3.1.4	Duration of a Tax Dispute
3.1.5	Use of a VAT Cash Refund
3.2	Financial Burden on Firms
3.2.1	Effective Tax Rate (ETR) for Profit Taxes
3.2.2	Effective Tax Rate (ETR) for Employment Taxes and Social Contributions

Note: VAT = Value Added Tax.

3.1 Time and Functionality of Processes

Category 3.1 is divided into five subcategories consisting of several indicators, each of which may, in turn, have several components.

3.1.1 Time to File and Pay Taxes

Efficient tax administration can improve tax compliance, thereby expanding the tax base and increasing tax revenues.⁴⁷ Complex regulatory frameworks, and redundant and complicated procedures, can lead to unnecessary delays and increase the compliance time for the firms.⁴⁸ Therefore, Subcategory 3.1.1–Time to File and Pay Taxes comprises one indicator (table 26).

Table 26. Subcategory 3.1.1–Time to File and Pay Taxes

	Indicators	Components
1	Total Time for Preparation, Filing, Payment	Recorded in hours and measures the time to prepare, file, and pay three major types of taxes and contributions: corporate income tax, VAT/sales taxes, and labor taxes and social contributions. Preparation time includes the time to collect all information necessary to compute the tax payable and to calculate the amount payable. Filing time includes the time to complete all necessary tax return forms and file the relevant returns. Payment time considers the hours needed to make the payment online or in person. Where taxes and contributions are paid in person, the time includes delays while waiting

Note: VAT = Value Added Tax.

3.1.2 Use of Electronic Systems to File and Pay Taxes

Research suggests investments in e-filing and e-payment tax systems not only reduce compliance costs, corruption, and tax evasion, but also inspire organizational changes and the uptake of information technology within firms.⁴⁹ Such systems can also improve tax compliance and revenue collection in developing countries.⁵⁰ To serve its purpose, the electronic systems to file and pay taxes should be fully operational and implementable in practice. Therefore, Subcategory 3.1.2–Use of Electronic Systems to File and Pay Taxes comprises one indicator (table 27).

Table 27. Subcategory 3.1.2–Use of Electronic Systems to File and Pay Taxes

	Indicators	Components
1	Use of Electronic Systems to File and Pay Taxes	i) The percentage of respondent firms that used electronic systems to file taxes in the previous calendar year ii) The percentage of respondent firms that used electronic systems to pay taxes in the previous calendar year

3.1.3 Duration of a Generic Tax Audit

Audits are a critical and significant component of compliance activities. Delays in tax audits can lead to an increase in time and cost of compliance and distortions in economic activities resulting from them.⁵¹ Therefore, Subcategory 3.1.3–Duration of a Generic Tax Audit comprises one indicator (table 28).

Table 28. Subcategory 3.1.3–Duration of a Generic Tax Audit

	Indicators	Components
1	Total Time Needed to Complete the Audit	The period in weeks between the first interaction with the auditors and the receipt of the final audit report

3.1.4 Duration of a Tax Dispute

A long tax litigation process can lead to a delay in tax collection. In addition, protracted tax litigation can be costly for the private sector, both by way of litigation costs and uncertainty created.⁵² Therefore, Subcategory 3.1.4–Duration of a Tax Dispute comprises one indicator (table 29).

Table 29. Subcategory 3.1.4–Duration of a Tax Dispute

	Indicators	Components
1	Time to Review a Tax Dispute	The period in calendar days between the moment a taxpayer files a claim until the moment the decision is issued

3.1.5 Use of a VAT Refund

Recovering excess input VAT credits is crucial to a well-functioning tax system. Inadequate legal frameworks or burdensome and complex administration procedures often discourage taxpayers from claiming legitimate VAT refunds.⁵³ Therefore, Subcategory 3.1.5–Use of a VAT Refund comprises one indicator (table 30).

Table 30. Subcategory 3.1.5–Use of a VAT Refund

	Indicators	Components
1	Obtaining a VAT Refund in Practice	i) The percentage of firms who did not apply for a VAT refund due to the process being too burdensome, even when they were eligible for such a refund ii) The time to receive a VAT refund adjusted by the number of firms reporting issues with VAT refunds

Note: VAT = Value Added Tax.

3.2 Financial Burden on Firms

Category 3.2 is divided into two subcategories consisting of several indicators, each of which may, in turn, have several components.

The effective tax rate (ETR) affects firms' after-tax profitability, ability to compete in the market, and overall financial health, as well as decisions related to investments, financing, and other business activities. Therefore, Category 3.2–Financial Burden on Firms comprises two indicators (table 31).

Table 31. Category 3.2– Financial Burden on Firms

	Indicators	Components
1	Effective Tax Rate (ETR) for Profit Taxes	Financial cost of profit-based taxes for companies measured through the ETR estimate
2	Effective Tax Rate (ETR) for Employment Taxes and Social Contributions	Financial cost of employment-based taxes and social contributions for companies measured through the ETR estimate

Note: ETR = Effective Tax Rate.

III. DATA SOURCES

4.1 Data Collection Sources

The data for Pillar I and Pillar II are collected through consultations with private sector experts. Private sector experts include tax advisors, tax consultants, tax accountants, tax lawyers, tax specialists, and tax auditors. Most data for Pillar III are collected through Enterprise Surveys. These surveys provide representative data on time to file and pay taxes, time go through a generic tax audit, use of VAT refund, and percentage of firms filing and paying taxes electronically, as well as the effective tax rates for corporate profit-based taxes, employment taxes and social contributions (only the financial cost for firms). A representative sample of companies captures variation of user experience within each economy. Businesses with different characteristics, such as size, region, and sector participate in the surveys. For more details on the collection of data by the Enterprise Surveys, please refer to the Overview chapter of this Methodology Handbook.

The data on the time to review a tax dispute are collected through consultations with private sector experts, as described in the previous paragraph. The reason for this approach is the limited experience that firms surveyed by Enterprise Surveys are expected to have with processes that do not occur on a regular basis for most companies (such as submitting a tax complaint).

4.2 Screening and Selection of Experts

The Taxation topic has one topic questionnaire. In order to select potential experts to participate in the questionnaire, a screener questionnaire for taxation has been developed (table 32).

Table 32. Screener Questionnaire and Respondent Criteria

Relevant Expert's Professions
Tax advisors, consultants, accountants, lawyers, specialists, auditors, etc.
Relevant Areas of Specialization
Accounting, tax reporting and compliance; corporate tax law; environmental tax law; indirect taxation; tax administration law; tax dispute resolution; tax registration and deregistration procedures; tax review and enforcement; labor taxes and social contributions; etc.
Assessment of the Experts' Knowledge and Experience Related to Regulations, Services, and Processes in Taxation
Years of experience in the selected areas of specialization

Thus, the information provided in the screener questionnaire allows the team to better understand the experts' professions and areas of specializations, and experts' knowledge or experience related to taxation. Ultimately, this will allow the team to select the final experts to respond to the questionnaire on taxation.

IV. PARAMETERS

To ensure comparability of the data from expert consultations across economies, the Taxation topic uses general parameters. A parameter refers to an assumption that is made about the characteristics of location, tax residency, and the sector and activity. Questionnaire respondents are presented with these parameters and assumptions and asked to evaluate a standardized scenario that permits comparability across locations, jurisdictions, and economies.

5.1 General Parameters

In many economies, there are subnational jurisdictions, which require a specific business location to be specified in order for experts to identify the relevant regulatory framework to be assessed.

5.1.1 Business Location

Justification:

Geographic location determines the applicable local corporate income-based, consumption, environmental, and labor taxes and contributions when taxes are administered at multiple levels or at a local level. These factors may affect the availability of online services, the process of tax registration and deregistration, the parties involved in the review of tax complaints, and so on. Thus, business location is an essential parameter for assessing the regulatory framework and public services in taxation. The largest city is chosen based on the population size as detailed in the Overview of this Methodology Handbook.

Application:

For Pillar I, the parameter is used in cases where local regulations are applicable in addition to the national ones, varying across states and/or regions. For the economies where regulations differ across states, regulations for the largest city are measured. For Pillar II, the parameter is used to determine the applicable taxes and procedures. For Pillar III, this parameter applies only in cases when the data are collected through expert consultations rather than through Enterprise Surveys.

5.1.2 Tax Residency–Tax Resident of the Assessed Economy

Justification:

It is common that a jurisdiction's tax residents and nonresidents (that is, tax residents of another jurisdiction) are subjected to different rules, requirements, and regulations. The regulatory framework that applies to tax residents of other jurisdictions is often complemented by the double tax treaties. When a double tax treaty applies, its details are defined by the agreement between two jurisdictions and may substantially vary across various parties. The inclusion of nonresidents taxation may, therefore, become overly complicated and result in data that are hardly comparable. As a result, the Taxation topic focuses only on companies that are tax residents of the jurisdiction that is being analyzed.

Application:

The parameter of the tax residency is relevant to all measures of the Taxation topic. In Pillar I, it defines the applicable rules and regulations, while in Pillar II the tax residency determines the specific processes, procedures, and services that the companies undergo. In Pillar III, this parameter is integral in setting the compliance requirements that in turn define the time and cost to complete the specific processes.

5.1.3 Sector and Activity–Excluding Mineral, Extractive, and Financial Sectors

Justification:

Taxation of mineral, extractive, and financial sectors can differ from regular taxation in a number of ways. Mineral and extractive industries often involve complex contractual arrangements, such as production sharing agreements or joint venture arrangements, that can make taxation more complex. Companies in these sectors often operate across borders, which can rise complex international tax issues, such as transfer pricing and double tax treaty provisions. These issues may not be relevant for regular companies that operate only within a single jurisdiction. Additionally, the valuation of mineral and extractive resources can be difficult, requiring specialized knowledge and techniques. In the financial sector, the complexity of taxation arises from the fact that financial institutions engage in a wide variety of activities—including provision of loans, trading activities, investment banking, and wealth management—often across multiple jurisdictions. Furthermore, financial institutions are subject to extensive regulation, which can create additional complexity in the tax system. For example, some jurisdictions may offer tax incentives for certain types of financial activity, while others may impose additional taxes or reporting requirements. To allow comparability of the data, the Taxation topic therefore excludes matters that relate to taxation of mineral, extractive, and financial sectors.

Application:

The parameter of the sector is relevant to all three pillars. The regulatory framework and public services for the mineral, extractive, and financial sectors are often different from those applicable to regular companies, and therefore including them would skew the data and make them less comparable. When it comes to efficiency, companies in mineral, extractive, and financial sectors often require specialized knowledge and resources to comply with taxation, which can be time-consuming and expensive. By excluding them, the Taxation topic can provide a more standardized approach to the efficiency of taxation, allowing for better comparability of data.

V. TOPIC SCORING

The Taxation topic has three pillars: Pillar I—Quality of Regulations on Taxation; Pillar II—Public Services Provided by the Tax Administration; and Pillar III—Operational Efficiency of Tax Systems in Practice. The total points for each pillar are further rescaled to values from 0 to 100, and subsequently aggregated into the total topic score. Each pillar contributes one-third to the total topic score. Table 33 shows the scoring for the Taxation topic. The scores distinguish between benefits to the firm (captured as firm flexibility points) and benefits to society’s broader interests (captured as social benefits points). For further scoring details, please see Annex A, which complements this category.

Table 33. Aggregate Scoring Overview

Pillar Number	Pillar	Number of Indicators	Score			Rescaled Points (0–100)	Weight
			Firm Flexibility Points	Social Benefits Points	Total Points		
I	Quality of Regulations on Taxation	11	10	11	21	100.00	0.33
II	Public Services Provided by the Tax Administration	18	16	18	34	100.00	0.33
III	Operational Efficiency of Tax Systems in Practice	7	100	n/a	100	100.00	0.33

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent).

6.1 Pillar I—Quality of Regulations on Taxation

Pillar I covers 11 indicators with a total score of 21 points (10 points on firm flexibility and 11 points on social benefits) (table 34). The scoring for each category under this pillar is as follows:

- 6.1.1** *Clarity and Transparency* has 4 indicators with a total maximum score of 8 points (4 points on firm flexibility and 4 points on social benefits). Specifically, each of the two subcategories—*Clarity of Tax Regulations* and *Transparency of Changes in Tax Regulations*—has 2 indicators. A regulatory framework that ensures transparency and clarity of tax regulations benefits both firms (firm flexibility) and society (social benefits). Hence, equal points are assigned to both categories.
- 6.1.2** *Administrative Procedures* has 4 indicators with a total maximum score of 8 points (4 points on firm flexibility and 4 points on social benefits). Specifically, each of the four subcategories—*Simplified Tax Record Keeping and Reporting*, *General Tax Registration*, *VAT Registration*, and *VAT Refund*—has 1 indicator. A regulatory framework that ensures solid legal framework on administrative procedures benefits both firms (firm flexibility) and society (social benefits). Hence, equal points are assigned to both categories.
- 6.1.3** *Environmental Taxes* has 3 indicators with a total maximum score of 5 points (2 points on firm flexibility and 3 on social benefits). Specifically, the *Existence of Environmental Fiscal Instruments* Subcategory, *Availability of Public Consultations* Subcategory, and *Transition Periods* Subcategory have 1 indicator each. A regulatory framework that promotes the public consultations and the transition policies for environmental taxes benefits both the firm (firm flexibility) and the society (social benefits). Hence, equal points are assigned to both categories. The existence of environmental fiscal instruments, however, has an ambiguous effect on firms, and is therefore only assigned points on the social benefits aspect.

Table 34. Aggregate Scoring Pillar I

Pillar I—Quality of Regulations on Taxation		No. of Indicators	FFP	SBP	Total Points	Rescaled Points
1.1	Clarity and Transparency	4	4	4	8	40.00
1.1.1	Clarity of Tax Regulations	2	2	2	4	20.00
1.1.2	Transparency of Changes in Tax Regulations	2	2	2	4	20.00
1.2	Administrative Procedures	4	4	4	8	40.00
1.2.1	Simplified Tax Record Keeping and Reporting	1	1	1	2	10.00
1.2.2	General Tax Registration	1	1	1	2	10.00
1.2.3	VAT Registration	1	1	1	2	10.00
1.2.4	VAT Refund	1	1	1	2	10.00
1.3	Environmental Taxes	3	2	3	5	20.00
1.3.1	Existence of Environmental Fiscal Instruments	1	n/a	1	1	4.00
1.3.2	Availability of Public Consultations	1	1	1	2	8.00
1.3.3	Transition Periods	1	1	1	2	8.00
Total		11	10	11	21	100.00

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent). FFP = Firm Flexibility Point; SBP = Social Benefits Point; VAT = Value Added Tax.

6.2 Pillar II—Public Services Provided by the Tax Administration

Pillar II covers 18 indicators with a total score of 34 points (16 points on firm flexibility and 18 points on social benefits) (table 35). The scoring for each category under the pillar is as follows:

- 6.2.1** *Digital Services for Taxpayers* has 4 indicators with a total maximum score of 8 points (4 points on firm flexibility and 4 points on social benefits). Specifically, each of the four subcategories has 1 indicator: the *Online Service Taxpayer Portal*; the *Electronic Filing of Taxes*; the *Pre-Filled Tax Declarations*; and the *Electronic Payment of Taxes*. The digitization of services provided by the

tax administration benefits both firms (firm flexibility) and society (social benefits). Hence, equal points are assigned to both categories.

- 6.2.2** *Data Management and System Integration in Tax Administration* has 6 indicators with a total maximum score of 12 points (6 points on firm flexibility and 6 points on social benefits). Specifically, the *Tax Registration* Subcategory has 1 indicator, the *Taxpayer Database and Taxpayer Identification Number (TIN)* has 1 indicator, the *Tax Deregistration* has 1 indicator, and the *Data Exchange and Usage* has 3 indicators. Under the *Data Management and System Integration* category, the points are allocated equally between firm flexibility and social benefits.
- 6.2.3** *Transparency* has 3 indicators with a total maximum score of 5 points (2 points on firm flexibility and 3 on social benefits). Specifically, the *Annual Performance and Gender Diversity in Tax Administration* Subcategory has 2 indicators; and the *Public Accountability* Subcategory has 1 indicator. Transparency in tax administration benefits both firms (firm flexibility) and society (social benefits), except for the indicator of Annual Performance. Such performance does not directly affect firms and, thus points are assigned for social benefits only.
- 6.2.4** *Tax Audits and Related Disputes* has 5 indicators with a total maximum score of 9 points (4 points on firm flexibility and 5 points on social benefits). Specifically, the *Tax Audits* Subcategory has 3 indicators, and the *Dispute of Tax Audit Results* Subcategory has 2 indicators. Under the *Tax Audits and Related Disputes* category, the score for the most part is allocated equally between firm flexibility and social benefits, except for the indicator on the Monitoring of Taxpayer Audits where there is no direct impact on firms. It is therefore assigned points on social benefits only.

Table 35. Aggregate Scoring Pillar II

Pillar II—Public Services Provided by the Tax Administration		No. of Indicators	FFP	SBP	Total Points	Rescaled Points
2.1	Digital Services for Taxpayers	4	4	4	8	25.00
2.1.1	Online Service Taxpayer Portal	1	1	1	2	6.25
2.1.2	Electronic Filing of Taxes	1	1	1	2	6.25
2.1.3	Pre-Filled Tax Declarations	1	1	1	2	6.25
2.1.4	Electronic Payment of Taxes	1	1	1	2	6.25
2.2	Data Management and System Integration in Tax Administration	6	6	6	12	25.00
2.2.1	Tax Registration	1	1	1	2	6.25
2.2.2	Taxpayer Database and Tax Identification Number (TIN)	1	1	1	2	6.25
2.2.3	Tax Deregistration	1	1	1	2	6.25
2.2.4	Data Exchange and Usage (includes gender)	3	3	3	6	6.25
2.3	Transparency	3	2	3	5	25.00
2.3.1	Annual Performance and Gender Diversity in Tax Administration	2	1	2	3	12.50
2.3.2	Public Accountability	1	1	1	2	12.50
2.4	Tax Audits and Related Disputes	5	4	5	9	25.00
2.4.1	Tax Audits	3	2	3	5	12.50
2.4.2	Dispute of Tax Audit Results	2	2	2	4	12.50
Total		18	16	18	34	100.00

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point; TIN = Taxpayer's Identification Number.

6.3 Pillar III—Operational Efficiency of Tax Systems in Practice

Pillar III covers 7 indicators with scores ranging from 0 to 100 (table 36). The points under this pillar are assigned to firm flexibility only, as the indicators measure the outcomes of firms' compliance with taxation

requirements. For example, spending significant amount of time to prepare, file, and pay corporate income tax, VAT/sales taxes, and social taxes and contributions have adverse impacts on firms, thus hampering firm flexibility. The scoring for each category under this pillar is as follows:

6.3.1 *Time to Comply with Tax Regulations* has 5 indicators with a total maximum score of 50 points. Specifically, the *Time to File and Pay Taxes* Subcategory has 1 indicator, the *Use of Electronic Systems to File and Pay Taxes* Subcategory has 1 indicator, the *Duration of Generic Tax Audit* Subcategory has 1 indicator, the *Duration of a Tax Dispute* Subcategory has 1 indicator, and the *Use of VAT Refund* Subcategory has 1 indicator.

6.3.2 *Financial Burden on Firms* has 2 indicators with a total maximum score of 50 points. Specifically, the *Effective Tax Rate (ETR) for Profit Taxes* Subcategory has 1 indicator and the *Effective Tax Rate (ETR) for Employment Taxes and Social Contributions* Subcategory has 1 indicator.

Table 36. Aggregate Scoring Pillar III

Pillar III—Operational Efficiency of Tax Systems in Practice		No. of Indicators	Rescaled Points
3.1	Time to Comply with Tax Regulations	5	50.00
3.1.1	Time to File and Pay Taxes	1	10.00
3.1.2	Use of Electronic Systems to File and Pay Taxes	1	10.00
3.1.3	Duration of Generic Tax Audit	1	10.00
3.1.4	Duration of a Tax Dispute	1	10.00
3.1.5	Use of VAT Refund	1	10.00
3.2	Financial Burden on Firms	2	50.00
3.2.1	Effective Tax Rate (ETR) for Profit Taxes	1	25.00
3.2.2	Effective Tax Rate (ETR) for Employment Taxes and Social Contributions	1	25.00
Total		7	100.00

Note: VAT = Value Added Tax; ETR= Effective Tax Rate.

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ANNEX A. TAXATION–SCORING SHEET

This document outlines the scoring approach for the Taxation topic. For every indicator, a Firm Flexibility Point (FFP) and/or a Social Benefits Point (SBP) are assigned, along with a clarification on the detailed scoring for each such indicator and a note on the relevant background literature.

PILLAR I–QUALITY OF REGULATIONS ON TAXATION					
1.1 CLARITY AND TRANSPARENCY					
1.1.1 Clarity of Tax Regulations					
Indicators	FFP	SBP	Total Points	Rescaled Points	Background Literature
Tax Guides and Their Delivery Channels	1	1	2	10.00	TADAT Secretariat (2019)
Binding Rulings and Post-Compliance Procedures	1	1	2	10.00	Waezeggers and Hiller (2016)
Total Points for Subcategory 1.1.1	2	2	4	20.00	
1.1.2 Transparency of Changes in Tax Regulations					
Obtaining Feedback and Broad Public Consultation	1	1	2	10.00	TADAT Secretariat (2019)
Practice on Preparing and Publishing Future Tax Plans	1	1	2	10.00	TADAT Secretariat (2019)
Total Points for Subcategory 1.1.2	2	2	4	20.00	
Total Points for Category 1.1	4	4	8	40.00	
1.2 ADMINISTRATIVE PROCEDURES					
1.2.1 Simplified Tax Record Keeping and Reporting					
Simplified Tax Record Keeping and Reporting	1	1	2	10.00	Kenny (2002)
Total Points for Subcategory 1.2.1	1	1	2	10.00	
1.2.2 General Tax Registration					
Transparency in the Tax Registration Process	1	1	2	10.00	USAID (2013)
Total Points for Subcategory 1.2.2	1	1	2	10.00	
1.2.3 VAT Registration					

VAT Registration Threshold	1	1	2	10.00	World Bank (2007)
Total Points for Subcategory 1.2.3	1	1	2	10.00	
1.2.4 VAT Refund					
VAT Refund	1	1	2	10.00	USAID (2013); Tadros (2009)
Total Points for Subcategory 1.2.4	1	1	2	10.00	
Total Points for Category 1.2	4	4	8	40.00	
1.3 ENVIRONMENTAL TAXES					
1.3.1 Existence of Environmental Fiscal Instruments					
Presence of Environmental Fiscal Instruments	n/a	1	1	4.00	EC (2021); OECD (2010)
Total Points for Subcategory 1.3.1	0	1	1	4.00	
1.3.2 Availability of Public Consultations					
Availability of Public Consultations	1	1	2	8.00	Deffains, Langlais, and Masclet (2019); EC (2019)
Total Points for Subcategory 1.3.2	1	1	2	8.00	
1.3.3 Transition Periods					
Transition Periods	1	1	2	8.00	EC (2021)
Total Points for Subcategory 1.3.3	1	1	2	8.00	
Total Points for Category 1.3	2	3	5	20.00	
Total Points for Pillar I	10	11	21	100.00	

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent). FFP = Firm Flexibility Point; SBP = Social Benefits Point; VAT= Value Added Tax.

PILLAR II–PUBLIC SERVICES PROVIDED BY THE TAX ADMINISTRATION					
2.1 DIGITAL SERVICES FOR TAXPAYERS					
2.1.1 Online Service Taxpayer Portal					
Indicators	FFP	SBP	Total Points	Rescaled Points	Background Literature
Online Service Taxpayer Portal	1	1	2	6.25	TADAT Secretariat (2019)
Total Points for Subcategory 2.1.1	1	1	2	6.25	
2.1.2 Electronic Filing of Taxes					
Electronic Filing	1	1	2	6.25	TADAT Secretariat (2019)
Total Points for Subcategory 2.1.2	1	1	2	6.25	
2.1.3 Pre-Filled Tax Declarations					
Pre-Filled Declarations	1	1	2	6.25	TADAT Secretariat (2019)
Total Points for Subcategory 2.1.3	1	1	2	6.25	
2.1.4 Electronic Payment of Taxes					
Electronic Payment	1	1	2	6.25	TADAT Secretariat (2019)
Total Points for Subcategory 2.1.4	1	1	2	6.25	
Total Points for Category 2.1	4	4	8	25.00	
2.2 DATA MANAGEMENT AND SYSTEM INTEGRATION IN TAX ADMINISTRATION					
2.2.1 Tax Registration					
Tax Registration Process	1	1	2	6.25	UNCITRAL (2019)
Total Points for Subcategory 2.2.1	1	1	2	6.25	
2.2.2 Taxpayer Database and Tax Identification Number (TIN)					
Taxpayer Database and TIN	1	1	2	6.25	TADAT Secretariat (2019); UNCITRAL (2019)
Total Points for Subcategory 2.2.2	1	1	2	6.25	
2.2.3 Tax Deregistration					
Tax Deregistration	1	1	2	6.25	Moore (2022)

Total Points for Subcategory 2.2.3	1	1	2	6.25	
2.2.4 Data Exchange and Usage (includes gender)					
Information Cross-Checking on Tax Portal	1	1	2	2.08	TADAT Secretariat (2019)
Data Cross-Checking to Verify Tax Declarations	1	1	2	2.08	TADAT Secretariat (2019)
Availability of Sex-Disaggregated Data and Their Analysis	1	1	2	2.08	OECD (2022)
Total Points for Subcategory 2.2.4	3	3	6	6.25	
Total Points for Category 2.2	6	6	12	25.00	
2.3 TRANSPARENCY					
2.3.1 Annual Performance and Gender Diversity in Tax Administration					
Annual Performance	n/a	1	1	4.17	TADAT Secretariat (2019); OECD (2022)
Gender Composition of the Staff in Tax Administration	1	1	2	8.33	OECD (2022)
Total Points for Subcategory 2.3.1	1	2	3	12.50	
2.3.2 Public Accountability					
Public Accountability	1	1	2	12.50	TADAT Secretariat (2019)
Total Points for Subcategory 2.3.2	1	1	2	12.50	
Total Points for Category 2.3	2	3	5	25.00	
2.4 TAX AUDITS AND RELATED DISPUTES					
2.4.1 Tax Audits					
Existence of Annual National Tax Audit Plan	1	1	2	5.00	TADAT Secretariat (2019)
Existence of Different Types of Audits	1	1	2	5.00	TADAT Secretariat (2019)
The Monitoring of Taxpayer Audits	n/a	1	1	2.50	TADAT Secretariat (2019)
Total Points for Subcategory 2.4.1	2	3	5	12.50	
2.4.2 Dispute of Tax Audits Results					
First-Level Review Mechanism	1	1	2	6.25	IMF (2013); TADAT Secretariat (2019)
Second-Level Review Mechanism	1	1	2	6.25	TADAT Secretariat (2019)
Total Points for Subcategory 2.4.2	2	2	4	12.50	
Total Points for Category 2.4	4	5	9	25.00	
Total Points for Pillar II	16	18	34	100.00	

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent). FFP = Firm Flexibility Point; SBP = Social Benefits Point; TIN= Tax Identification Number.

PILLAR III—OPERATIONAL EFFICIENCY OF TAX SYSTEMS IN PRACTICE					
3.1 TIME AND FUNCTIONALITY OF PROCESSES					
3.1.1 Time to File and Pay Taxes					
Indicators	FFP	SBP	Total Points	Rescaled Points	Background Literature
Total Time for Preparation, Filing, Payment	20	n/a	20	10.00	Braunerhjelm and Johan (2014)
3.1.2 Use of Electronic Systems to File and Pay Taxes					
The percentage of Firms Filing and Paying Taxes Electronically	20	n/a	20	10.00	Yilmaz and Coolidge (2013)
3.1.3 Duration of a Generic Tax Audit					
Total Time Needed to Complete the Audit	20	n/a	20	10.00	Eberhartinger et al. (2021); Kasper and Alm (2022); OECD (2004)
3.1.4 Duration of a Tax Dispute					
Time to Review a Tax Dispute	20	n/a	20	10.00	Fabbri (2010); Sanguinetti (2021)
3.1.5 Use of a VAT Refund					
The Percentage of Firms who did not Apply for a VAT Refund due to the Process being too Burdensome, even when they were Eligible for such a Refund. Total Time to Receive a VAT Refund Adjusted by the Number of Firms Reporting Issues with VAT Refunds	20	n/a	20	10.00	Okello et al. (2021)
Total Points for Category 3.1	100	n/a	100	50.00	
3.2 FINANCIAL BURDEN ON FIRMS					
Effective Tax Rate (ETR) for Profit Taxes	50	n/a	50	25.00	
Effective Tax Rate (ETR) for Employment Taxes and Social Contributions	50	n/a	50	25.00	
Total Points for Category 3.2	100	n/a	100	50.00	
Total Points for Pillar III	100	n/a	100	100.00	

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent). VAT= Value Added Tax; ETR = Effective Tax Rate; FFP = Firm Flexibility Point; SBP = Social Benefits Point.

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ANNEX B. TAXATION–ANNOTATED QUESTIONNAIRE

Annex B consists of a Glossary and Annotated Questionnaire for Taxation. The Annotated Questionnaire provides the mapping between each indicator and the corresponding question(s).

Glossary

Automatic tax deregistration: This process implies that the company registrar collects all relevant corporate information and sends it to the tax authority for deregistration. The tax authority deregisters the company based on that information and no additional interaction of the company is required.

Automatic tax registration: This process implies that the company registrar collects all relevant corporate information and communicates it to the tax authority. The tax authority registers the company based on that information and no additional interaction of the company is required.

Appeal level: The process of having a higher authority review a decision that has been made in a dispute. Appeal level review is typically used when one party in a dispute is dissatisfied with the outcome of the initial decision. The higher authority will review the case and make a new decision. This higher authority can be a higher court, an administrative agency, or an independent body.

Carbon taxes: Taxes levied on the carbon emissions to produce goods and services.

Complaint on a tax audit assessment: An objection raised by a taxpayer or their representative regarding the outcome of a tax audit conducted by a tax authority. The assessment may have resulted in the taxpayer being assessed additional tax or penalties, which they may believe is incorrect or unfair. The taxpayer may choose to make a formal complaint to challenge the assessment and seek a review of the decision.

Consumption-based taxes: Taxes typically levied on the purchase of goods or services and paid directly or indirectly by the consumer. For the purposes of this questionnaire, it does not include excise taxes and import duties. The most common consumption taxes are the value added tax (VAT)/goods and services tax (GST) and sales tax.

Corporate income-based taxes: Taxes levied on the company's profit or turnover. The most common type is the corporate income tax (CIT).

Electronic filing: The process of submitting tax returns via the internet through a computer or mobile devices that does not require any additional physical interactions (with a bank, tax authority, or any other party) to complete.

Electronic payment: A payment request submitted electronically through a computer or mobile devices that does not require any additional physical interactions (with a bank, tax authority, or any other party) to complete.

Emission Trading (ETS): Form of carbon pricing; a mechanism to limit climate change by creating a market with limited allowances for emissions.

Employment-based taxes: Taxes (other than social contributions) paid by the employer and levied on the employee's salaries, wages, and all annual benefits including food, transport, and other nonmandatory contributions (such as medical insurance). This does not include any personal income taxes, or any taxes and contributions withheld from employees' salaries.

Energy taxes: Taxes that increase the price of energy. They can be applicable on fuels, energy generation, transmission, or consumption.

External stakeholders: Private sector, business organizations, trade and consumer organizations, tax advisors, environmental experts, and technical experts; and others, if applicable. It also includes consultation through the parliament's legislative council or a tax advisory body.

Factsheets: A short document that contains the most relevant information related to tax matters.

Feebates: Fees that are applicable on inefficient technology and rebates that are applicable on efficient technology. Feebates are used mainly on vehicle industry.

Feedback from taxpayer: Usually takes the form of periodic taxpayer perception surveys and is performed by independent third parties or by the tax administration itself.

First-level reviewing body: A public body with authority to review disputes or complaints between a taxpayer and a tax administration and render binding decisions upon them. This could be an internal department within a tax authority (for example, an independent complaint review mechanism), external body, court, or tribunal. The purpose of the first-level reviewing body is to provide a mechanism for taxpayers to challenge decisions that they believe are unfair, unjust, or in violation of their rights.

Fiscal instruments (carbon pricing): They include various types of taxes or charges that put a price on carbon or other greenhouse gases.

Fossil fuel subsidy: Subsidy on fossil fuel (for example, tax breaks on consumption, lower sales tax on natural gas for residential heating, tax breaks on exploration for oil).

General tax guidance: Advice provided by tax authorities regarding broad tax-related issues. It does not include any instructions on special assessment levied against a specific taxpayer. General tax guidance must be kept up to date, meaning that it is constantly reviewed and revised to reflect recent changes in tax laws and regulations.

Independent complaint review mechanism: A separate unit within a tax administration that is physically and organizationally independent of the audit department (that is, the unit located outside the tax audit department with a separate reporting line to senior management). If auditors who conducted the audit of the taxpayer or those from the same department undertake the administrative review, it cannot be considered an independent complaint review mechanism.

Internal Revenue Manuals (IRM): Guidelines produced for tax administration staff that contain detailed information on the policies and procedures that tax administration employees should follow when carrying out their duties related to tax administration and enforcement.

Internal tax guidance: Technical advice issued internally for tax administration staff to help them understand and apply tax laws and regulations. Internal tax guidance is used to ensure consistency in the interpretation and application of tax laws across different tax offices or units.

Legislative act: Legal instruments that have been passed by a legislative body and have a general binding force in your jurisdiction, irrespective of whether they have a federal, state, or municipal character. These can take various forms, such as codes, laws, statutes, regulations, ordinances, and decrees.

Pre-filled income tax declaration: Preparation or pre-filling of an income tax declaration by the tax administration using information gathered from third parties such as employers and financial institutions. In their most advanced form, pre-filled declarations (also referred to as pre-populated declarations) eliminate nearly all of the effort required of taxpayers, mainly employees and investors, to prepare their annual income tax declaration.

Private binding rulings: Binding statements written by the tax authority in response to specific requests from taxpayers seeking clarification of how tax law would apply in relation to a proposed or completed transaction.

Public binding rulings: Published statements describing how a tax authority will apply the tax code in particular situations. These public rulings are binding on the tax authority.

Quality of tax audits: Degree to which tax authority's documented review and evaluation of taxpayer's financial records and tax returns is thorough, accurate, and effective in identifying any noncompliance with tax laws and regulations.

Regulatory instruments (carbon pricing): Various measures introduced by governments to restrict or limit the production of greenhouse gases or consumption of goods that lead to the emission of greenhouse gases.

Revenue Procedure: Official statements that provide internal guidance on complying with procedural matters within a tax administration.

Sex-disaggregated data on taxpayers: Taxpayer information disaggregated by sex of the owner(s).

Short-term tax policy help: Provisions enacted for a short period of time (less than 2 years) and resulting from reasoned tax policy: that is, provisions that are tailored to remedy pressing and immediate concerns.

Social contributions: Mandatory contributions paid by the employer to the general government that entitles employees to receive a (contingent) future social benefit. Such contributions include unemployment insurance benefits and supplements, accident, injury, and sickness benefits, old-age, disability, and survivors' pensions, family allowances, reimbursements for medical and hospital expenses, or provision of the hospital or medical services. This does not include contributions withheld from employees' salaries.

Tax audit plan: Detailed outline of the tax administrations' plans and procedures used in conducting an audit. It usually includes information on the audit coverage of taxes and taxpayer segments, selection of audit cases, audit types, and methodology.

Taxpayer online service portal: Electronic gateway, using secure authentication, through which taxpayers and their authorized agents gain online access to information, services, and functions. Typically, taxpayer portals allow taxpayers and their agents to (a) update bank account and contact details (such as address and telephone number); (b) view, prepare, and file tax declarations; (c) view statements of account and payment options, request refunds, and transfer money between tax accounts; and (d) communicate with the tax administration via a secure mailbox.

Taxpayer types: As defined by domestic legislation.

Technical Advice Memorandums (TAM): Written statements issued for tax administration staff in relation to the specific circumstances of a specific taxpayer.

Temporary tax cuts: Legislative changes that are terminated automatically after a fixed period unless explicitly extended by law. These changes reduce the tax payable amount such as tax rate reduction, tax credit, additional tax deductions, additional tax depreciation, temporary exemption from taxes, penalties, and interest, and so on.

Unified Identification Number (UIN): A unique identifier assigned by a government agency or regulatory body to a taxpayer to facilitate tracking and management of their affairs. The UIN may be used as part of a Unified Business Identifier (UBI) that goes beyond taxation, such as incorporating business registration, licensing, and other regulatory requirements. The UIN/UBI system streamlines administrative processes and eliminates the need for multiple identification numbers across different regulatory regimes.

Unified taxpayer database: A centralized system that stores and manages taxpayer information and records in an organized and standardized manner. Such a database consolidates information from different tax agencies, such as income tax, sales tax, and property tax, into a single platform.

VAT or other consumption-based tax registration threshold: Typically takes the form of minimum accumulated turnover and is used to determine mandatory VAT registration.

VAT refund: Reimbursement made to a taxpayer for any excess amount paid in VAT to the tax authority. It does not include the carry-forward of VAT.

TAXATION QUESTIONNAIRE

The tables that follow present all indicators (including their components, if applicable) under each pillar, with a reference to the corresponding question number in parenthesis. The questions are listed before each table for ease of reference.

For Y/N questions, the Y response accounts for the score and is considered as the good practice, unless otherwise indicated with the sign “Y/N; N – good practice”.

In the tables that follow, “AND” means all referenced questions must have a good practice response to obtain a score on the indicator.

In the tables that follow, “OR” means one or more referenced questions must have a good practice response to obtain a score on the indicator.

Certain questions are marked as “not scored,” which indicates that they do not affect the score in any way. The purpose of these questions is to further inform and refine the questions design for subsequent years of the rollout, as needed, as well as to substantiate and provide further information for the scored questions.

Most indicators of the Taxation topic questionnaire are composite, wherein a score of 1 point is divided between several questions. For example, an indicator ‘Tax Guides and Their Delivery Channels’ has a score of 1 on both firm flexibility (FFP) and social benefits (SBP) and has three components: (1) “means to obtain general tax guides” 0.5 points; (2) “availability of internal tax guides” 0.25 points; (3) “means to obtain internal tax guides” 0.25 points.

PILLAR I–QUALITY OF REGULATIONS ON TAXATION	
Parameters	
Business Location	The largest (most populous) city in the economy. Geographical location determines the tax regulatory framework applicable to firms. For Pillar I, if tax regulations differ across locations within an economy, the experts will be asked to provide information regarding regulations of the largest city.
Tax Residency	Tax residency determines whether firms are resident/registered for tax purposes under the domestic laws of the economy. Experts will be asked to provide information on the regulations that affect firms with tax residency in the assessed economy.
Sector and Activity	No specific industry is determined. Firms can be of any sector and/or industry excluding mineral, extractive and financial sector.

1.1 CLARITY AND TRANSPARENCY

1.1.1 Clarity of Tax Regulations

- 1. Please indicate in what format is the information on general tax guidance made publicly available. Please select all applicable options: (Y/N)**
 - 1a. Website
 - 1b. Telephone
 - 1c. Email
 - 1d. Mobile communications
 - 1e. In-person requests

- 1f. Public education seminars
- 1g. Other (if Yes, please clarify)
- 2. Please select all types of internal tax guidance that are publicly available to taxpayers. Please select all applicable options: (Y/N)**
 - 2a. Revenue Procedure
 - 2b. Internal Revenue Manuals
 - 2c. Technical Advice memorandums
 - 2d. Other (if Yes, please clarify)
- 3. Please indicate in what format the information on internal tax guidance is made publicly available. Please select all applicable options: (Y/N)**
 - 3a. Website
 - 3b. Telephone
 - 3c. Email
 - 3d. Mobile communications
 - 3e. Face-to-face requests
 - 3f. Public education seminars
 - 3g. Other (if Yes, please clarify)
- 4. Does the tax administration in [Economy] issue private binding rulings? (Y/N)**
- 5. If Yes to question 4, are private binding rulings published online? This includes publication of the edited version of the rulings, without any personal or identifying private information to protect the privacy of the applicant. (Y/N)**
- 6. Does the tax administration in [Economy] issue public binding rulings? (Y/N)**
- 7. Is the tax dispute resolution process codified in the single legislative act that has uniform application across all core taxes? (Y/N)**
- 8. Is the tax audit procedure codified in the single legislative act that has uniform application across all core taxes? (Y/N)**

1.1.2 Transparency of Changes in Tax Regulations

- 9. Does the tax administration in [Economy] obtain feedback from taxpayers in order to design new administrative procedures for the preparation, filing, and payment of taxes? (Y/N)**
- 10. If Yes to question 9, how frequently is the feedback requested?**
 - 10a. Regularly (routine and systematic use of taxpayer focus groups)
 - 10b. On an ad hoc basis (unplanned, infrequent use of taxpayer focus groups)
- 11. If Yes to question 9, are the feedback results publicly available? (Y/N)**
- 12. If Yes to question 11, in what form are the feedback results publicly available?**
 - 12a. Online
 - 12b. In hard copies
 - 12c. Both

13. Does the tax administration in [Economy] undertake broad public consultations with external stakeholders prior to the introduction of the new tax reforms?

13a. Yes, always

13b. No

13c. Yes, but not always

14. Does the tax administration in [Economy] prepare and make publicly available future plans including, for example, a multi-year strategic (or reform) plan and annual operational plans? (Y/N)

15. If Yes, please indicate in what form the future plans are made publicly available:

15a. Online

15b. In hard copies

15c. Both

16. If Yes to question 14, are the future plans published fully or partially?

16a. Fully

16b. Partially

17. If Yes to question 14, when are the future plans published?

17a. In advance of the period covered by the plans

17b. In up to 3 months after the commencement of the period covered by the plans

17c. In more than 3 months after the commencement of the period covered by the plans

1.1 CLARITY AND TRANSPARENCY			
1.1.1 Clarity of Tax Regulations			
Indicators	FFP	SBP	Total Points
Tax Guides and Their Delivery Channels	1	1	2
- Means to obtain general tax guides (1)	0.5	0.5	1
- Availability of internal tax guides (2)	0.25	0.25	0.5
- Means to obtain internal tax guides (3)	0.25	0.25	0.5
<i>For question 1, a score is assigned if 3 or more options are selected, not including "Other"</i>			
<i>For questions 2 and 3, a full score is assigned if at least three options are selected, not including "Other." If only two options are selected, excluding "Other," half the score is assigned. Otherwise, the score is zero</i>			
Binding Rulings and Post-Compliance Procedures	1	1	2
- Availability and publishing of private binding rulings (4 AND 5)	0.4	0.4	0.8
- Availability of public binding rulings (6)	0.2	0.2	0.4
- Dispute resolution process codified in a single legislative act (7)	0.2	0.2	0.4
- Tax audit procedures codified in a single legislative act (8)	0.2	0.2	0.4
Total Points	2	2	4
1.1.2 Transparency of Changes in Tax Regulations			
Indicators	FFP	SBP	Total Points
Obtaining Feedback and Broad Public Consultations	1	1	2
- Tax administration requests feedback from taxpayers (9)	0.2	0.2	0.4
- Feedback is requested regularly (10a)	0.1	0.1	0.2
- Results are disclosed to the public (11)	0.1	0.1	0.2

- Results are published online (12a OR 12c)	0.1	0.1	0.2
- Public consultations are held (13a)	0.5	0.5	1
Practice on Preparing and Publishing Future Tax Plans	1	1	2
- Preparation of future tax plan (14)	0.25	0.25	0.5
- Online publication on future tax plan (15a OR 15c)	0.25	0.25	0.5
- Full publication of future tax plan (16a)	0.25	0.25	0.5
- Publication of future tax plan in advance of implementation (17a) OR	0.25 OR	0.25 OR	0.5 OR
- Publication in up to 3 months after the commencement (17b)	0.125	0.125	0.25
Total Points	2	2	4

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

1.2 ADMINISTRATIVE PROCEDURES

1.2.1 Simplified Tax Record Keeping and Reporting

18. Please select the types of taxpayers that are required by law to keep their records for tax purposes other than the financial accounts that businesses normally maintain (i.e., other than balance sheets, profit and loss accounts, cash flow statements, invoices receipts, asset records, etc.). Please select all applicable options: (Y/N) (not scored)

18a. Large companies

18b. Medium companies

18c. Small companies

19. [For each item selected in question 18] Does the law allow [19.1: large companies / 19.2: medium companies / 19.3: small businesses] to keep tax records online?

19a. Yes

19b. Partially

19c. No

20. Can small companies make use of simplified record-keeping methods, such as single-entry bookkeeping? (Y/N)

21. If Yes to question 20, please clarify what types of simplified tax record-keeping options are available. (not scored)

22. Can small companies make use of simplified reporting, such as reduced filing frequency, elimination of filing requirements, and pre-filled income tax declarations? (Y/N)

23. If Yes to question 22, please clarify what types of simplified reporting options are available. Please select all applicable options: (not scored)

23a. Reduced filing frequency

23b. Elimination of filing requirements

23c. Pre-filled income tax declarations

23d. Simplified tax return

23e. Other (if Yes, please clarify)

1.2.2 General Tax Registration

24. Please indicate if the information on general tax registration is accessible through the below-listed means of communication. Please select all applicable options: (Y/N)

24a. Website

- 24b. Telephone
- 24c. At the information board in the tax authority
- 24d. Email
- 24e. Mobile communication
- 24f. Public education seminars
- 24g. Social media
- 24h. Other (if Yes, please clarify)

25. Does the legislation define all registration fees for all types of taxes that exist in <Economy>? (Y/N)
26. Does the legislation define the timeline for all types of tax registration? (Y/N)
27. Is it mandatory by law for taxpayers to notify the tax administration of changes to registration details? (Y/N)
28. If Yes to question 27, is there a fixed penalty regime for failure to comply with the requirements to notify the tax administration of changes to registration details? (Y/N)

1.2.3 VAT Registration

29. [If consumption-based taxes exist] Does the legal framework provide VAT or other consumption-based tax registration thresholds? (Y/N)
30. If Yes to question 29, does the legal framework allow voluntary VAT or other consumption-based tax registration for businesses that are below the threshold? (Y/N)

1.2.4 VAT Refund

31. [If consumption-based taxes exist] Is the VAT refund mechanism available? (Y/N)
32. If Yes to question 31, what VAT refund restrictions apply? Please select all applicable options. (Y/N; N – good practice)
- 32a. Specific types of taxpayers
 - 32b. Specific conditions (e.g., only exporters, the company must be less than 2 years old, etc.)
 - 32c. Specific goods or services provided
 - 32d. Requirement to carry forward for a set period before being able to claim the refund
 - 32e. Other (if Yes, please clarify)

1.2 ADMINISTRATIVE PROCEDURES			
1.2.1 Simplified Tax Record Keeping and Reporting			
Indicators	FFP	SBP	Total Points
Simplified Tax Record Keeping and Reporting	1	1	2
- Availability of digital record keeping for large businesses (19.1a)	0.2	0.2	0.4
- Availability of digital record keeping for medium businesses (19.2a)	0.2	0.2	0.4
- Availability of digital record keeping for small businesses (19.3a)	0.2	0.2	0.4
- Availability of simplified record keeping for small businesses (20)	0.2	0.2	0.4
- Availability of simplified filing for small businesses (22)	0.2	0.2	0.4
Total Points	1	1	2

1.2.2 General Tax Registration			
Indicators	FFP	SBP	Total Points
Transparency in the Tax Registration Process	1	1	2
- Availability of information on general tax registration (24)	0.25	0.25	0.5
- Clarity of fees (25)	0.25	0.25	0.5
- Clarity of timeline (26)	0.25	0.25	0.5
- Mandatory notification of changes to registration details and penalty for failure to comply (27 AND 28)	0.25	0.25	0.5
<i>A score is assigned if 3 or more options are selected in question 24, not including "Other"</i>			
Total Points	1	1	2
1.2.3 VAT Registration			
Indicators	FFP	SBP	Total Points
VAT Registration Threshold	1	1	2
- Existence of a VAT registration threshold (29)	0.5	0.5	1
- Availability of voluntary VAT registration (30)	0.5	0.5	1
Total Points	1	1	2
1.2.4 VAT Refund			
Indicators	FFP	SBP	Total Points
VAT Refund and Registration	1	1	2
- Availability of VAT cash refund (31)	0.5	0.5	1
- Restriction on VAT cash refund (32a AND 32b AND 32c AND 32d)	0.5	0.5	1
Total Points	1	1	2

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point; VAT = Value Added Tax.

1.3 ENVIRONMENTAL TAXES

1.3.1 Existence of Environmental Fiscal Instruments

33. Has a fiscal and/or regulatory instrument that puts a price on carbon/other greenhouse gas at a national or state level (excluding municipal levels), been adopted in [Economy]? (Y/N) (not scored)

34. If Yes to question 33, please specify the type of fiscal or regulatory instrument which is in place: (Y/N)

34a. Carbon taxes

34b. Energy taxes

34c. Emission Trading Systems (ETS)

34d. Feebates (fees + rebates)

34e. Fossil fuel subsidy

34f. Other (if Yes, please clarify)

35. [For each item selected in question 34] Please provide the name of the government unit which is responsible for administering the fiscal instruments that apply in [Economy] (if several agencies are involved, please specify): (not scored)

1.3.2 Availability of Public Consultations

36. If Yes to any instrument selected in question 34, In general, does the government conduct extensive public consultations with external stakeholders before introducing environmental fiscal instruments?

36a. Yes, always

36b. Yes, but not always

36c. No

37. If Yes to question 36, are the process and the results of the consultations publicly available?

37a. Yes, both the process and results

37b. Only the process

37c. Only the results

37d. No

38. If Yes to question 37, please indicate in what form the results of the consultations are made publicly available:

38a. Online

38b. In hard copies

38c. Both

39. If Yes to question 33, is there a risk-based system that directs audit coverage towards areas of emission levels? (Y/N)

1.3.3 Transition Periods

40. [For each item selected in question 34] Does the law establish a mechanism to inform businesses that the tax rate/price for environmental instrument may change over time?

40a. Yes, predetermined trajectory with pre-established changes in the tax rate or automatic adjustment mechanisms (e.g., based on emissions triggers) are included in the law

40b. Yes, rates automatically increase only to match inflation, alongside ad hoc mechanisms (e.g., periodic reviews)

40c. Yes, other mechanisms

40d. No

41. Does the government in [Economy] communicate the transition periods for implementing new carbon taxes/energy taxes to the public? (Y/N)

42. If Yes to question 40, please indicate in what form the information on the transition periods for implementing new carbon taxes/energy taxes are communicated to the public:

42a. Online

42b. In hard copies

42c. Both

1.3 ENVIRONMENTAL TAXES			
1.3.1 Existence of Environmental Fiscal Instruments			
Indicators	FFP	SBP	Total Points
Presence of Environmental Fiscal Instruments (34a OR 34b OR 34c OR 34d)	n/a	1	1

Total Points	n/a	1	1
1.3.2 Availability of Public Consultations			
Indicators	FFP	SBP	Total Points
Availability of Public Consultations	1	1	2
- Public consultation prior to the introduction of environmental taxes (36a)	0.2	0.2	0.4
- Publication of the results of public consultations (37a)	0.2	0.2	0.4
- Online publication of the public consultations results (38a OR 38c)	0.1	0.1	0.2
- Risk-based system for environmental inspections (39)	0.5	0.5	1
Total Points	1	1	2
1.3.3 Transition Periods			
Indicators	FFP	SBP	Total Points
Transition Periods	1	1	2
- Adjustment mechanisms (40a)	0.5	0.5	1
- Communication of the transition period (41)	0.4	0.4	0.8
- Online publication of the information on the transition periods (42a AND 42c)	0.1	0.1	0.2
Total Points	1	1	2

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

PILLAR II—PUBLIC SERVICES PROVIDED BY TAX ADMINISTRATION	
Parameters	
Business Location	The largest (most populous city) in the economy. Geographical location determines the tax regulatory framework applicable to firms. For Pillar II, if public services provided by the tax administration differ across locations within an economy, the experts will be asked to provide information regarding public services of the largest city.
Tax Residency	Tax residency determines whether firms are resident/registered for tax purposes under the domestic laws of the economy. Experts will be asked to provide information on public services for firms with tax residency in the assessed economy.
Sector and Activity	No specific industry is determined. Firms can be of any sector and/or industry excluding mineral, extractive and financial sector.

2.1 DIGITAL SERVICES FOR TAXPAYERS

2.1.1 Online Service Taxpayer Portal

43. Does a taxpayer online service portal exist? (Y/N)

44. If Yes to question 43, do taxpayers use the online service portal in practice? (Y/N)

45. If Yes to question 44, in practice, what percentage of taxpayers use the online service portal? (*not scored*)

45a. More than 50%

45b. Less than 50%

46. If Yes to question 43, please select the electronic self-service tools available to taxpayers on the portal. Please select all applicable options: (Y/N)

- 46a. Chatbot
- 46b. E-forum
- 46c. E-learning
- 46d. Other (if Yes, please clarify)

2.1.2 Electronic Filing of Taxes

47. [If CIT exist] Is an electronic filing arrangement on a tax portal available for corporate income-based taxes (CIT or other profit-based taxes)? Please select all applicable options. (Y/N)

- 47a. Large companies
- 47b. Medium companies
- 47c. Small companies

48. [If consumption-based taxes exist] Is an electronic filing arrangement on a tax portal available for VAT or other consumption taxes? Please select all applicable options. (Y/N)

- 48a. Large companies
- 48b. Medium companies
- 48c. Small companies

49. [If social security contributions and employment-based taxes exist] Is an electronic filing arrangement on a tax portal available for social security contributions and employment-based taxes? Please select all applicable options. (Y/N)

- 49a. Large companies
- 49b. Medium companies
- 49c. Small companies

2.1.3 Pre-Filled Tax Declarations

50. [If CIT exists] Are pre-filled electronic declarations available for the corporate income-based taxes? Please select all applicable options. (Y/N)

- 50a. Large companies
- 50b. Medium companies
- 50c. Small companies

51. [If consumption-based taxes exist] Are pre-filled electronic declarations available for VAT or other consumption-based taxes? Please select all applicable options. (Y/N)

- 51a. Large companies
- 51b. Medium companies
- 51c. Small companies

52. [If social security contributions and employment-based taxes exist] Are pre-filled electronic declarations available for social security contributions and employment-based taxes? Please select all applicable options. (Y/N)

- 52a. Large companies
- 52b. Medium companies
- 52c. Small companies

2.1.4 Electronic Payment of Taxes

53. [If CIT exists] Is an electronic payment arrangement on a tax portal available for corporate income-based taxes? Please select all applicable options. (Y/N)

- 53a. Large companies
- 53b. Medium companies
- 53c. Small companies

54. [If consumption-based taxes exist] Is an electronic payment arrangement on a tax portal available for VAT or other consumption-based taxes? Please select all applicable options. (Y/N)

- 54a. Large companies
- 54b. Medium companies
- 54c. Small companies

55. [If social security contributions and employment-based taxes exist] Is an electronic payment arrangement on a tax portal available for social security contributions and employment-based taxes? Please select all applicable options. (Y/N)

- 55a. Large companies
- 55b. Medium companies
- 55c. Small companies

2.1 DIGITAL SERVICES FOR TAXPAYERS			
2.1.1 Online Service Taxpayer Portal			
Indicators	FFP	SBP	Total Points
Online Service Taxpayer Portal	1	1	2
- Availability of a taxpayer online service portal (43)	0.33	0.33	0.66
- The use of a taxpayer online service portal (44)	0.33	0.33	0.66
- Self-service tools available to taxpayers on the portal: chatbot (46a)	0.11	0.11	0.22
- Self-service tools available to taxpayers on the portal: e-forum (46b)	0.11	0.11	0.22
- Self-service tools available to taxpayers on the portal: e-learning (46c)	0.11	0.11	0.22
Total Points	1	1	2
2.1.2 Electronic Filing of Taxes			
Indicators	FFP	SBP	Total Points
Electronic Filing	1	1	2
- Large companies can file corporate income-based taxes online (47a)	0.11	0.11	0.22
- Medium companies can file corporate income-based taxes online (47b)	0.11	0.11	0.22
- Small companies can file corporate income-based taxes online (47c)	0.11	0.11	0.22
- Large companies can file VAT or other consumption taxes online (48a)	0.11	0.11	0.22
- Medium companies can file VAT or other consumption taxes online (48b)	0.11	0.11	0.22
- Small companies can file VAT or other consumption taxes online (48c)	0.11	0.11	0.22
- Large companies can file employment-based taxes and social contributions online (49a)	0.11	0.11	0.22
- Medium companies can file employment-based taxes and social contributions online (49b)	0.11	0.11	0.22
- Small companies can file employment-based taxes and social contributions online (49c)	0.11	0.11	0.22
Total Points	1	1	2

2.1.3 Pre-Filled Tax Declarations			
Indicators	FFP	SBP	Total Points
Pre-Filled Declarations	1	1	2
- Pre-filled corporate income-based taxes declarations for large companies (50a)	0.11	0.11	0.22
- Pre-filled corporate income-based taxes declarations for medium companies (50b)	0.11	0.11	0.22
- Pre-filled corporate income-based taxes declarations for small companies (50c)	0.11	0.11	0.22
- Pre-filled VAT or other consumption taxes declarations for large companies (51a)	0.11	0.11	0.22
- Pre-filled VAT or other consumption taxes declarations for medium companies (51b)	0.11	0.11	0.22
- Pre-filled VAT or other consumption taxes declarations for small companies (51c)	0.11	0.11	0.22
- Pre-filled employment-based taxes and social contributions declarations for large companies (52a)	0.11	0.11	0.22
- Pre-filled employment-based taxes and social contributions declarations for medium companies (52b)	0.11	0.11	0.22
- Pre-filled employment-based taxes and social contributions declarations for small companies (52c)	0.11	0.11	0.22
Total Points	1	1	2
2.1.4 Electronic Payment of Taxes			
Indicators	FFP	SBP	Total Points
Electronic Payment	1	1	2
- Large companies can pay corporate income-based taxes online (53a)	0.11	0.11	0.22
- Medium companies can pay corporate income-based taxes online (53b)	0.11	0.11	0.22
- Small companies can pay corporate income-based taxes online (53c)	0.11	0.11	0.22
- Large companies can pay VAT or other consumption taxes online (54a)	0.11	0.11	0.22
- Medium companies can pay VAT or other consumption taxes online (54b)	0.11	0.11	0.22
- Small companies can pay VAT or other consumption taxes online (54c)	0.11	0.11	0.22
- Large companies can pay employment-based taxes and social contributions online (55a)	0.11	0.11	0.22
- Medium companies can pay employment-based taxes and social contributions online (55b)	0.11	0.11	0.22
- Small companies can pay employment-based taxes and social contributions online (55c)	0.11	0.11	0.22
Total Points	1	1	2

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point; VAT = Value Added Tax.

2.2 DATA MANAGEMENT AND SYSTEM INTEGRATION IN TAX ADMINISTRATION

2.2.1 Tax Registration

56. In practice, are newly incorporated companies registered for tax purposes automatically/without additional interaction of the company?

56a. Yes

56b. No

56c. Other

57. If No to question 56, in practice, can tax registration be done fully online?

- 57a. Yes
- 57b. No
- 57c. Other

58. [If CIT are administered on several levels] If No to question 57, in practice, is registration with all levels of administration done jointly/in a single process? (Y/N)

2.2.2 Taxpayer Database and Tax Identification Number (TIN)

59. [If CIT are administered on one level] Is there a unified taxpayer database? (Y/N)

60. [If CIT are administered on several levels] Is there a unified taxpayer database on each level of tax administration? (Y/N)

61. [If CIT are administered on one level] Is the taxpayer database computerized or paper-based?

- 61a. Computerized
- 61b. Paper-based

62. [If CIT are administered on several levels] Is the taxpayer database computerized or paper-based?

- 62a. Computerized
- 62b. Paper-based
- 62c. Mixed, depending on the level of administration

63. Does the taxpayer database have full national coverage? (Y/N)

64. Does the tax authority use the unified identification number for all of a company's taxes? (Y/N)

65. If No to question 64, what tax identification numbers do the registered companies have? (Y/N)

- 65a. [If CIT exist] Separate identification numbers for corporate income-based taxes
- 65b. [If consumption-based taxes exist] Separate identification number for VAT or other consumption-based taxes
- 65c. Separate identification numbers for other taxes

2.2.3 Tax Deregistration

66. In practice, is tax deregistration performed automatically/without additional interaction of the company when the company is removed from the business registry?

- 66a. Yes
- 66b. No
- 66c. Other

67. If No to question 66, in practice, can tax deregistration be done fully online?

- 67a. Yes
- 67b. No
- 67c. Other

68. [If CIT are administered on several levels] In practice, is deregistration with all levels of tax administration done jointly/in a single process? (Y/N)

2.2.4 Data Exchange and Usage (includes gender)

69. In practice, is information reported by taxpayers crosschecked against third-party information sources (for example, databases of other agencies, publicly available information, etc.) (Y/N)

70. If Yes to question 69, please indicate whether or not the information is cross-checked from each of the following sources. Please select all applicable options: (Y/N)

70a. Tax declarations

70b. Banks/financial institutions

70c. Employers (for purposes of crosschecking reported employment income)

70d. Government agencies (e.g., the national tax administration; customs; public procurement agencies; registrar of companies; anti-money laundering regulator; immovable property registrars)

70e. Stock exchanges and/or shareholder registries of listed companies

70f. Social security agency or agencies (for purposes of crosschecking reported employment income)

70g. Online (internet-based) vendors

70h. Other jurisdictions exchanging information including other subnational governments (e.g., foreign account tax compliance act, double taxation agreements)

70i. Other (if Yes, please clarify)

71. Are the sex-disaggregated data on taxpayers available to the tax authority? (Y/N)

72. If Yes to question 71, does the tax authority conduct sex-disaggregated analysis of taxpayer information? (Y/N)

73. If Yes to question 72, are the findings of sex-disaggregated analysis made publicly available? (Y/N)

2.2 DATA MANAGEMENT AND SYSTEM INTEGRATION IN TAX ADMINISTRATION			
2.2.1 Tax Registration			
Indicators	FFP	SBP	Total Points
Tax Registration Process	1	1	2
- Fully automated (56a) OR	1 OR	1 OR	2 OR
- Fully online (57a) OR	0.5 OR	0.5 OR	1 OR
- Done jointly for all levels of tax administration (58) <i>(this only applies for economies with multiple levels of tax administration)</i>	0.25	0.25	0.5
Total Points	1	1	2
2.2.2 Taxpayer Database and Tax Identification Number (TIN)			
Indicators	FFP	SBP	Total Points
Taxpayer Database and TIN	1	1	2
- Unified taxpayer database (59 OR 60)	0.25	0.25	0.5
- Computerized taxpayer database (61a OR 62a)	0.25	0.25	0.5
- Database with full national coverage (63)	0.25	0.25	0.5
- Single tax identification number for all company's taxes (64) OR	0.25 OR	0.25 OR	0.5 OR
- Separate tax identification number for company's taxes other than corporate income-based taxes and VAT/other consumption-based taxes (65c)	0.125	0.125	0.25
<i>Note: If 65a or 65b is selected, then the score is 0</i>			

Total Points	1	1	2
2.2.3 Tax Deregistration			
Indicators	FFP	SBP	Total Points
Tax Deregistration	1	1	2
- Fully automated (66a) OR	1 OR	1 OR	2 OR
- Fully online (67a) OR	0.5 OR	0.5 OR	1 OR
- Done jointly for all levels of tax administration (68) <i>(this only applies for economies with multiple levels of tax administration)</i>	0.25	0.25	0.5
Total Points	1	1	2
2.2.4 Data Exchange and Usage (includes gender)			
Indicators	FFP	SBP	Total Points
Information Cross-Checking on Tax Portal (69)	1	1	2
Data Cross-Checking to Verify Tax Declarations (70)	1	1	2
- Information is cross-checked with all sources (70a AND 70b AND 70c AND 70d AND 70e AND 70f AND 70g AND 70h) OR	1 OR	1 OR	2 OR
- Information is cross-checked with tax declarations, banks/financial institutions, employers, and 3+ government agencies (70a AND 70b AND 70c AND 70d) OR	0.75 OR	0.75 OR	1.5 OR
- Information is cross-checked with tax declarations, employers, and two government institutions (70a AND 70c AND at least two of 70d, 70e, 70f, 70h)	0.5	0.5	1
Availability of Sex-Disaggregated Data and Their Analysis	1	1	2
- Availability of sex-disaggregated data (71)	0.33	0.33	0.66
- Tax authority conduct sex-disaggregated analysis (72)	0.33	0.33	0.66
- Publication of findings of the analysis (73)	0.33	0.33	0.66
Total Points	3	3	6

Note: TIN = Tax Identification Number; FFP = Firm Flexibility Point; SBP = Social Benefits Point; VAT = Value Added Tax.

2.3 TRANSPARENCY

2.3.1 Annual Performance and Gender Diversity in Tax Administration

74. Are there publicly available annual performance reports outlining the financial and operational performance of the tax administration for the last fiscal year? (Y/N)

75. Please indicate in what form the annual performance reports are made publicly available:

75a. Online

75b. In hard copies

75c. Both

76. If Yes to question 74, please select if any of the following information is included in the annual report(s):

76a. Annual performance statement

76b. Revenue performance

76c. Management and accountability

76d. Financial statements

- 77. Does an independent external review body (e.g., a government auditor or independent entity appointed in line with the economy's laws and regulations) perform periodical audits of the tax administration's financial statements and operational performance?**
 77a. Yes, for financial statements
 77b. Yes, for the operational statement
 77c. Yes, for both
 77d. No
- 78. If Yes to question 77, are the findings and recommendations of the external review body publicly reported? (Y/N)**
- 79. If Yes to question 78, please indicate in what form the findings and recommendations of the external review body are made publicly available:**
 79a. Online
 79b. In hard copies
 79c. Both
- 80. Is the information on the gender composition of the staff within the tax authority made publicly available? (Y/N)**
- 81. If Yes to question 80, what percentage of the total staff positions are held by women within the tax authority? (*not scored*)**
- 82. Is the information on the gender composition of the senior executives within the tax authority made publicly available? (Y/N)**
- 83. If Yes to question 82, what percentage of the senior executive positions are held by women within the tax authority? (*not scored*)**

2.3.2 Public Accountability

- 84. Does the tax administration in [Economy] obtain feedback from taxpayers to monitor trends in taxpayers' perceptions of tax administration services and products? (Y/N)**
- 85. If Yes to question 84, in practice, how frequently is feedback requested?**
 85a. At least once every 3 years (routine and systematic request of feedback)
 85b. At least once every 5 years (routine and systematic request of feedback)
 85c. On an ad hoc basis (unplanned and infrequent request of feedback)
- 86. If Yes to question 84, are the results of the feedback on the taxpayers' perceptions of tax administration services and products publicly available? (Y/N)**
- 87. If Yes to question 86, please indicate in what form the results of the feedback are made publicly available:**
 87a. Online
 87b. In hard copies
 87c. Both
- 88. Does the tax administration have a code of ethics and professional conduct, where its values, principles, and requirements are guided by or closely aligned to national or international ethics and integrity legislation/regulations of equivalent? (Y/N)**

89. Do independent and impartial investigative bodies exist to safeguard the community in their dealings with the tax administration? Please select all applicable options. (Y/N)

89a. A tax ombudsman or equivalent authority (e.g., taxpayer advocate) investigates unresolved complaints from taxpayers about the service and treatment they have received from the tax administration

89b. An anti-corruption agency oversees tax administration anti-corruption policies and investigates alleged corrupt conduct of tax officials

89c. Other (if Yes, please clarify)

2.3 TRANSPARENCY			
2.3.1 Annual Performance and Gender Diversity in Tax Administration			
Indicators	FFP	SBP	Total Points
Annual Performance	n/a	1	1
- Public disclosure of the annual report (74)	n/a	0.1	0.1
- Online access to the annual report (75a OR 75c)	n/a	0.1	0.1
- Scope of the annual report (76a AND 76b AND 76c AND 76d)	n/a	0.1	0.1
- Audits on the performance of a tax administration (77c)	n/a	0.4	0.4
- Public disclosure of findings of an external review body (78)	n/a	0.2	0.2
- Online access to findings of an external review body (79a OR 79c)	n/a	0.1	0.1
Gender Composition of the Staff in Tax Administration	1	1	2
- Public availability of gender composition of the staff (80)	0.5	0.5	1
- Public availability of gender composition of the senior executives (82)	0.5	0.5	1
Total Points	1	2	3
2.3.2 Public Accountability			
Indicators	FFP	SBP	Total Points
Public Accountability	1	1	2
- Taxpayer's perceptions surveys (84)	0.1	0.1	0.2
- Regular performance of taxpayer's perception surveys at least once every 3 years (85a) OR	0.1 OR	0.1 OR	0.2 OR
- Regular performance of taxpayer's perception surveys at least once every 5 years (85b)	0.05	0.05	0.1
- Publication of the results of the feedback (86)	0.1	0.1	0.2
- Online publication of the results of the feedback (87a OR 87c)	0.1	0.1	0.2
- Availability of the code of ethics (88)	0.2	0.2	0.4
- Presence of two independent and impartial investigative bodies (89a AND 89b) OR	0.4 OR	0.4 OR	0.8 OR
- Presence of one independent and impartial investigative body (89a OR 89b)	0.2	0.2	0.4
Total Points	1	1	2

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

2.4 TAX AUDITS AND RELATED DISPUTES

2.4.1 Tax Audits

90. Does the tax administration have an annual national (covering the whole economy) tax audit plan, which is accessible to all taxpayers? (Y/N)

- 91. If Yes to question 90, please indicate whether the annual national tax audit plan covers each of the following taxes: (Y/N)**
- 91a. [If CIT exists] Corporate income-based taxes
 - 91b. [If VAT exists] VAT or other consumption-based taxes
 - 91c. [If labor taxes and contributions exist] Social security contributions and employment-based taxes
- 92. Please select all types of audits that exist in [Economy]. (Y/N)**
- 92a. Comprehensive (multiple tax and multiple years) audits
 - 92b. Single-issue audits
 - 92c. Inspections of books and records
 - 92d. [If VAT exists] Examination of VAT refund claims
 - 92e. In-depth investigations of suspected tax fraud
 - 92f. Other (if Yes, please clarify)
- 93. Are tax audit manuals and guidelines publicly available? (Y/N)**
- 94. Are there publicly available reports presenting information on the quality of the tax audits? (Y/N)**
- 95. If Yes to question 94, please indicate in what form the information on the quality of tax audits are made publicly available:**
- 95a. Online
 - 95b. In hard copies
 - 95c. Both

2.4.2 Dispute of Tax Audit Results

- 96. In practice, can a taxpayer appeal a tax audit assessment to an independent complaint review mechanism? Please answer “Yes” only if this mechanism is available within a tax administration. For example, this could be a separate unit or designated review officer within a tax administration that acts independently from the tax administration’s audit department. (Y/N)**
- 97. If No to question 96, in practice, what body would conduct a review of complaints on a tax audit assessment in the majority of cases?**
- 97a. Internal dispute resolution review body within a tax administration, which is not independent (i.e., same body conducts the audit and the review)
 - 97b. External review by an independent external specialist review board or committee
 - 97c. Tax tribunal, tax court, or a specialized tax chamber within a regular court
 - 97d. First instance court of general jurisdiction or administrative court
 - 97e. Other
- 98. Please provide the name of the body that you have selected and provide the legal basis. (*not scored*)**
- 99. If Yes to question 96, in practice, what types of disputes does the independent complaint review mechanism within a tax administration review? Please select all applicable options: (Y/N)**
- 99a. The accuracy of the facts relied upon by the auditor
 - 99b. The correctness of the interpretation of the tax law
 - 99c. The value of penalties imposed by the tax administration
 - 99d. Other (if Yes, please clarify)

100. In practice, if the [independent complaint review mechanism/answer selected in question 97] does not review a complaint on a tax audit assessment within a reasonable period of time or by the legal deadline, is it possible for a taxpayer to escalate a dispute directly to the next stage (appeal level)? (Y/N)

101. Please provide the legal basis and specify the timeframe. (not scored)

102. In practice, what body provides the first avenue of appeal for a taxpayer dissatisfied with the decision of the [independent complaint review mechanism/answer selected in 97]? If multiple options exist, please select the one that will be used in most cases.

102a. A review board or committee within tax administration (i.e., head of tax administration)

102b. An independent external specialist, review board or committee

102c. Tax tribunal, tax court or a court with a specialized tax chamber in charge

102d. Court of general jurisdiction. Please clarify

102e. Other

103. Please provide the name of the body that you have selected and provide the legal basis. (not scored)

2.4 TAX AUDITS AND RELATED DISPUTES			
2.4.1 Tax Audits			
Indicators	FFP	SBP	Total Points
Existence of Annual National Tax Audit Plan	1	1	2
- The tax administration produces annual national tax audit plan (90)	0.5	0.5	1
- The audit plan covers all of the following taxes: CIT, consumption taxes, and social taxes and contributions (91a AND 91b AND 91c)	0.5	0.5	1
Existence of Different Types of Audits	1	1	2
- Tax audit types (92a AND 92b AND 92c AND 92d AND 92e)	0.5	0.5	1
- Publication of tax audit manuals and guidelines (93)	0.5	0.5	1
The Monitoring of Taxpayer Audits	n/a	1	1
- Publication of information on the quality of the tax administration's audits (94)	n/a	0.5	0.5
- Publication of the information is accessible online (95a OR 95c)	n/a	0.5	0.5
Total Points	2	3	5
2.4.2 Dispute of Tax Audit Results			
Indicators	FFP	SBP	Total Points
First-Level Review Mechanism	1	1	2
- Independent review unit within a tax administration (96) OR	0.5 OR	0.5 OR	1 OR
- Independent external specialist tax tribunal, review board or committee, or tax court (97b OR 97c)	0.25	0.25	0.5
- All three types of disputes can be reviewed (99a AND 99b AND 99c) OR	0.5 OR	0.5 OR	1 OR
- Two types of disputes can be reviewed (any 2 of 99a OR 99b OR 99c) OR	0.3 OR	0.3 OR	0.6 OR
- One type of disputes can be reviewed (99a OR 99b OR 99c)	0.2	0.2	0.4
Second-Level Review Mechanism	1	1	2
- Escalation of disputes to the next level (100)	0.5	0.5	1
- Graduate complaint mechanism (102b OR 102c)	0.5	0.5	1
Total Points	2	2	4

Note: CIT = Corporate-based Income Tax; FFP = Firm Flexibility Point; SBP = Social Benefits Point.

PILLAR III—OPERATIONAL EFFICIENCY OF TAX SYSTEM IN PRACTICE

The scores for Pillar III indicators are calculated using the Normal Cumulative Density Function (CDF) transformation method on a scale of 0 to 100, where 0 and 100 represent the lowest and highest possible scores, respectively. The best and worst performers are identified based on the 5th and 95th percentiles of the collected data.

Data for Pillar III on the Operational Efficiency of Tax System in Practice are collected through firm-level surveys, through the following questions:

- 104. Total time for preparation, filing, payment:** What was the total annual number of hours required for the preparation, filing, and payment of all taxes (profit taxes, labor taxes, VAT, GST, or sales taxes) for this establishment in fiscal year [Insert last complete fiscal year]?
- 105. Total time for preparation, filing, payment:** What was the average number of hours per month required for the preparation, filing, and payment of all taxes (profit taxes, labor taxes, VAT, GST, or sales taxes) for this establishment in fiscal year [Insert last complete fiscal year]?
- 106. The percentage of firms filing electronically:** In fiscal year [Insert last complete fiscal year], did this establishment file its taxes electronically?
- 107. The percentage of firms paying taxes electronically:** In fiscal year [Insert last complete fiscal year], did this establishment pay its taxes electronically?
- 108. Total time needed to complete the audit:** How many weeks did it take between the first interaction with the auditors and when the final audit report was received?
- 109. Obtaining a VAT refund in practice:** In the last three years, has this establishment applied for a VAT cash refund? (*not scored*)
- 110. Obtaining a VAT refund in practice:** If No to question 109, what was the main reason this establishment did not apply for a VAT cash refund?
- 110a. VAT cash refunds take too long to receive
 - 110b. The application for a VAT cash refund is too complicated
 - 110c. The establishment did not need to apply for a VAT cash refund
- 111. Obtaining a VAT refund in practice:** If Yes to question 109, in reference to the most recent VAT cash refund, how many weeks did it take from when the establishment submitted its application until the refund was received?
- 112. Effective tax rate (ETR) for profit taxes:** For fiscal year [Insert last complete fiscal year] as a share of total annual gross profits, what was the cost of annual income-based taxes? Please exclude any tax credits or deductions.
Note: If taxes have not yet been paid, please include the expected tax payments.
- 113. Effective tax rate (ETR) for employment taxes and social contributions:** From this establishment's Income Statement for fiscal year [Insert last complete fiscal year], please provide the following information:

- 113.1** Total annual cost of labor including wages, salaries, bonuses, social security payments
113.2 Of which total annual costs of social security payments and employment-based taxes, excluding employee taxes that were withheld

114. In practice, how long does it usually take for the [independent complaint review mechanism / answer selected in question 97] to review a complaint on tax audit assessment, from the time it is filed until a decision is made? Please note that the time in question shall not include the time for tax review or tax audit.

3.1 TIME AND FUNCTIONALITY OF PROCESSES			
Indicators	FFP	SBP	Total Points
Time to File and Pay Taxes (104 OR 105)	20 (20%)	n/a	20 (20%)
Use of Electronic Systems to File and Pay Taxes (106 AND 107)	20 (20%)	n/a	20 (20%)
Duration of a Generic Tax Audit (108)	20 (20%)	n/a	20 (20%)
Duration of a Tax Dispute (114)	20 (20%)	n/a	20 (20%)
Use of VAT Refund (110 AND 111)	20 (20%)	n/a	20 (20%)
Total Points	100	n/a	100
3.2 FINANCIAL BURDEN ON FIRMS			
Indicators	FFP	SBP	Total Points
Effective Tax Rate (ETR) for Profit Taxes (112)	50 (50%)	n/a	50 (50%)
Effective Tax Rate (ETR) for Employment Taxes and Social Contributions (113.1 AND 113.2)	50 (50%)	n/a	50 (50%)
Total Points	100	n/a	100

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent).
ETR = Effective Tax Rate; FFP = Firm Flexibility Point; SBP = Social Benefits Point; VAT = Value Added Tax.

CHAPTER 9. DISPUTE RESOLUTION–METHODOLOGY NOTE

I. MOTIVATION

In developed and developing economies alike, commercial disputes inevitably occur. Adverse economic outcomes for the private sector, ranging from reduced entrepreneurial activity and lower investment to macroeconomic volatility, can arise when these disputes cannot be adequately resolved.¹ This makes a well-functioning dispute resolution system essential for a healthy business environment. Such a system requires efficiency and quality.

Having time- and cost-effective mechanisms for resolving disputes is critical because excessively long and expensive proceedings may defeat the very purpose of bringing a case to formal institutions, making them unattractive and unaffordable. In fact, correlations have been established between judicial efficiency and facilitated entrepreneurial activity.² Evidence also suggests that under a more effective court system businesses are likely to have greater access to finance and borrow more.³ In addition, expeditious judiciaries are associated with higher levels of domestic and foreign investment.⁴ When investors know that in case of nonperformance of an obligation their claim will be considered in a timely manner, they may have more incentives to increase investment.⁵ Also, enhancing the efficiency of the judiciary may strengthen competition and foster innovation.⁶

The quality of the dispute resolution process also matters. Claims should be considered with due care by credible institutions capable of issuing sound judgments. In economies with low confidence in court systems, firms are less willing to expand their businesses and look for alternative trade partners.⁷ To attract more investors, economies should ensure not only judiciaries' effectiveness but also their strength and reliability.⁸ Limited enforceability of contracts is associated with the suboptimal distribution of resources, the use of inefficient technologies, and greater macroeconomic volatility.⁹ Because poor commercial dispute resolution might deprive firms of timely and full payments, liquidity and insolvency issues can follow, as can subsequent bankruptcies and unemployment.¹⁰

Efficient and quality dispute resolution systems require a clear and up-to-date regulatory framework and enhanced public services.¹¹ Robust laws and regulations are vital because they lay the foundation for resolving disputes in a timely and trustworthy manner.¹² Well-designed regulatory frameworks must be put into effect through a sound public services system.¹³ Key elements of such a system include advanced organizational structure, digitalization, transparency, and services related to alternative dispute resolution (ADR).¹⁴ In light of this, the Dispute Resolution topic focuses on quality of regulations and public services, as well as the operational efficiency with which these are applied in practice.

II. INDICATORS

The Dispute Resolution topic measures the operational efficiency and quality of the resolution of commercial disputes—those arising in the business context between firms—across three different dimensions, referred to as pillars. The first pillar assesses the adequacy of legislation pertaining to both court processes and alternative dispute resolution, covering *de jure* features that are necessary for the efficient processing of cases, facilitated resolution of cross-border claims, creating alternative venues for settling disputes, and ensuring trust in relevant institutions. The second pillar measures the attractiveness of the organizational structure, degree of digitalization, extent of transparency, and development of ADR-related services, thus assessing the *de facto* provision of public services. The third pillar measures the reliability of dispute resolution, the time and cost required to resolve a dispute, as well as the time and cost associated with the recognition and enforcement of decisions. Each pillar is divided into categories—defined by common features that inform the grouping into a particular category—and each category is further divided into subcategories. Generally, each subcategory consists of several indicators, which, in

turn, consist of one or several components. Relevant points are assigned to each indicator and subsequently aggregated to obtain the number of points for each subcategory, category, and pillar. Table 1 summarizes all three pillars and their respective categories.

Table 1. Summary Table of all Three Pillars for the Dispute Resolution Topic

Pillar I—Quality of Regulations for Dispute Resolution (24 indicators)	
1.1	Court Litigation (14 indicators)
1.1.1	Procedural Certainty (includes environment) (9 indicators)
1.1.2	Judicial Integrity (includes gender) (5 indicators)
1.2	Alternative Dispute Resolution (ADR) (10 indicators)
1.2.1	Legal Safeguards in Arbitration (6 indicators)
1.2.2	Legal Safeguards in Mediation (4 indicators)
Pillar II—Public Services for Dispute Resolution (28 indicators)	
2.1	Court Litigation (19 indicators)
2.1.1	Organizational Structure of Courts (4 indicators)
2.1.2	Digitalization of Court Processes (8 indicators)
2.1.3	Transparency of Courts (includes gender) (7 indicators)
2.2	Alternative Dispute Resolution (ADR) (9 indicators)
2.2.1	Public Services for Arbitration (includes gender) (4 indicators)
2.2.2	Public Services for Mediation (includes gender) (5 indicators)
Pillar III—Ease of Resolving a Commercial Dispute (14 indicators)	
3.1	Court Litigation (8 indicators)
3.1.1	Reliability of Courts (2 indicators)
3.1.2	Operational Efficiency of Court Processes (6 indicators)
3.2	Alternative Dispute Resolution (ADR) (6 indicators)
3.2.1	Reliability of ADR (2 indicators)
3.2.2	Operational Efficiency of Arbitration Processes (4 indicators)

1. PILLAR I. QUALITY OF REGULATIONS FOR DISPUTE RESOLUTION

Table 2 shows the structure for Pillar I, Quality of Regulations for Dispute Resolution. Each of this pillar's categories and subcategories will be discussed in more detail in the order shown in the table.

Table 2. Pillar I—Quality of Regulations for Dispute Resolution

1.1	Court Litigation
1.1.1	Procedural Certainty (includes environment)
1.1.2	Judicial Integrity (includes gender)
1.2	Alternative Dispute Resolution (ADR)
1.2.1	Legal Safeguards in Arbitration
1.2.2	Legal Safeguards in Mediation

1.1 Court Litigation

Category 1.1 has two subcategories consisting of several indicators, each of which may, in turn, consist of several components.

1.1.1 Procedural Certainty (includes environment)

Increasing procedural certainty in dispute resolution tends to facilitate the conduct of proceedings and prevent deadlocks. For example, time standards for specific key processes may address some of the most common inefficiencies in litigation, such as the ones related to granting an interim measure or preparing an expert opinion.¹⁵ In a similar vein, specifying a time limit in litigation, after which evidence can no longer be submitted, is likely to speed up consideration of cases.¹⁶ Another important procedural safeguard is to

regulate the maximum number of adjournments that the judge can grant.¹⁷ Crucially, holding a pre-trial conference is equally associated with procedural certainty.¹⁸ The dispute resolution process may be further streamlined when the judge has powers to issue a default judgment in case a duly notified defendant fails to respond to a court summons or to appear in court.¹⁹

To streamline international dispute resolution, it is important to lay down clear and straightforward rules on the process of recognizing and enforcing foreign judgments. For example, such rules eliminate the requirement for the creditor to provide a security and ensure that the local court is not allowed to review foreign judgments on the merits.²⁰ As to enforcement proceedings, they can be facilitated by providing enforcement agents with explicit powers to seize more classes of assets, such as the debtor's monetary claims toward a third party, financial instruments, or electronic assets (such as cryptocurrency).²¹ Last but not least, considering the growing importance of environmental sustainability for the private sector, it is critical to ensure that relevant environmental disputes are also settled promptly and thoroughly. Efficiency gains in this area can be achieved through making it easier to file a lawsuit against a polluting firm, facilitating the collection of evidence, and imposing additional dispute-specific remedies.²² Therefore, Subcategory 1.1.1–Procedural Certainty (includes environment) comprises nine indicators (table 3).

Table 3. Subcategory 1.1.1–Procedural Certainty (includes environment)

	Indicators	Components
1	Time Standards	i) Serving a complaint on the defendant ii) Filing a statement of defense iii) Issuing an expert opinion iv) Submitting a judgment
2	Deadline to Consider a Request for Interim Measures	Deadline to consider a request for interim measures
3	Time Limit on Suggesting Evidence	Time limit on suggesting evidence
4	Maximum Number of Adjournments	Maximum number of adjournments
5	Holding a Pre-Trial Conference	Holding a pre-trial conference
6	Availability of a Default Judgment	Availability of a default judgment
7	Recognition and Enforcement of Foreign Judgments	i) Not requiring a security from a foreign judgment creditor ii) Grounds for denying recognition and enforcement of foreign judgments
8	Powers of Enforcement Agents to Seize Extra Types of Assets	i) Powers of enforcement agents to seize the debtor's monetary claims toward a third party ii) Powers of enforcement agents to seize the debtor's financial instruments, such as bonds and stocks iii) Powers of enforcement agents to seize the debtor's electronic assets (such as cryptocurrency)
9	Environmental Sustainability	i) Expanded legal standing in environmental disputes ii) Holding polluting firms accountable for environmental damage caused abroad iii) Collection and public release of information on the environmental impact of firms iv) Expanded range of remedies in environmental disputes

1.1.2 Judicial Integrity (includes gender)

Judicial integrity is key to ensure public trust in the dispute resolution system. Businesses may avoid courts altogether if they perceive them as unreliable, biased, or corrupt. Incorporating good practices that strengthen the independence and impartiality of judges into the law is essential for judicial integrity. For example, clear rules on the recusal of judges should be established, and litigants should be allowed to call into question judges' independence and impartiality.²³ An important tool that enhances the accountability of judges is requiring them to disclose their assets.²⁴ Further, codified targeted instruments—such as the

code of ethics for judges or the code of ethics for enforcement agents—also help uphold integrity.²⁵ To ensure equal justice under the law, the dispute resolution system should serve as an example in the area of gender inclusion. This implies having no restrictions for women to become judges or to participate in proceedings on equal footing with men.²⁶ Therefore, Subcategory 1.1.2–Judicial Integrity (includes gender) has five indicators (table 4).

Table 4. Subcategory 1.1.2–Judicial Integrity (includes gender)

	Indicators	Components
1	Independence and Impartiality of Judges	i) Rules on the recusal of judges ii) Parties' right to call into question judges' independence and impartiality
2	Disclosure of Assets by Judges	Disclosure of assets by judges
3	Code of Ethics for Judges	Code of ethics for judges
4	Code of Ethics for Enforcement Agents	Code of ethics for enforcement agents
5	Gender Equality	i) No restrictions for a woman to become a judge, arbitrator, or mediator ii) Equal rights for men and women in commercial litigation

1.2 Alternative Dispute Resolution (ADR)

Category 1.2 has two subcategories consisting of several indicators, each of which may, in turn, consist of several components.

1.2.1 Legal Safeguards in Arbitration

Arbitration is an alternative dispute resolution mechanism that is widely used by firms to resolve their commercial disputes.²⁷ To benefit fully from arbitration, consideration should be given to respecting the parties' freedom of contract and lifting restrictions that limit its use. One group of such restrictions concerns the subject-matter of disputes, which is why it is important to ensure that different types of business-related cases—in particular, those that pertain to immovable property and intellectual property rights—can be submitted to arbitration.²⁸ Another category of restrictions involves the constraints set on parties' autonomy, specifically their freedom to choose arbitrators and legal counsel.²⁹ Related to this is the need to provide broad access to arbitration. For example, the law can tackle this issue by removing restrictions for state-owned enterprises and public bodies to use arbitration in resolving commercial disputes or expressly authorizing third-party funding to help smaller businesses cover their legal costs.³⁰

As in other types of dispute resolution, safeguards of independence and impartiality are of utmost importance in arbitration. Specifically, these include incorporating rules on disclosure of conflict of interest by arbitrators and parties' right to call into question arbitrators' independence and impartiality.³¹ Another key element of a robust regulatory framework on arbitration is the recognition of the "*kompetenz-kompetenz*" principle, which empowers an arbitral tribunal to rule on its own jurisdiction and requires domestic courts to defer to the arbitral tribunal on this question.³² Considering that the judiciary performs the primary role in any dispute resolution system, court support is crucial for making arbitration truly attractive. In particular, courts may render such support by assisting arbitral tribunals with interim measures and facilitating the collection of evidence.³³ Moreover, the attractiveness of arbitration can be further enhanced if the legislation sets out a straightforward, up-to-date, and predictable regime for recognizing and enforcing arbitral awards. Such a regime allows for recognition and enforcement of interim and partial awards as well as ensures that domestic and foreign awards may not be reviewed on the grounds of error of law or error of fact.³⁴ Therefore, Subcategory 1.2.1–Legal Safeguards in Arbitration comprises six indicators (table 5).

Table 5. Subcategory 1.2.1–Legal Safeguards in Arbitration

	Indicators	Components
1	Arbitrability and Parties' Autonomy	i) Arbitrability of immovable property disputes ii) Arbitrability of intellectual property disputes iii) Selection of arbitrators iv) Selection of a legal counsel
2	Access to Arbitration	i) Arbitration in disputes with state-owned enterprises and public bodies ii) Provision of third-party funding
3	Independence and Impartiality of Arbitrators	i) Disclosure of conflict of interest by arbitrators ii) Parties' right to call into question arbitrators' independence and impartiality
4	Incorporation of the Principle " <i>Kompetenz-Kompetenz</i> "	Incorporation of the principle " <i>kompetenz-kompetenz</i> "
5	Court Support of Arbitration	i) Support by courts in ordering interim measures in arbitration ii) Support by courts in the collection of evidence in arbitration
6	Recognition and Enforcement of Arbitral Awards	i) Recognition and enforcement of interim awards ii) Recognition and enforcement of partial awards iii) Grounds for setting aside, annulling, or vacating a domestic arbitral award iv) Grounds for denying recognition and enforcement of a foreign arbitral award

1.2.2 Legal Safeguards in Mediation

Mediation provides the parties with a unique mechanism to settle disputes in a constructive and mutually agreeable manner. Several good practices have proven to facilitate the conduct of mediation proceedings. Prescribing that commercial mediation is voluntary helps ensure that only parties interested in an amicable settlement resort to it.³⁵ Safeguards of independence and impartiality are equally important in mediation. In particular, these include establishing rules on disclosure of conflict of interest by the mediator and setting forth the restriction for the mediator to act as an arbitrator in the same or related dispute.³⁶ Another crucial guarantee in mediation is ensuring that suggestions and statements made for the purpose of mediation may not be used in other proceedings.³⁷ Further, mediation may become more appealing when the legal framework provides for a streamlined enforcement regime for mediation agreements and also allows for recognition and enforcement of international mediation agreements.³⁸ Therefore, Subcategory 1.2.2–Legal Safeguards in Mediation comprises four indicators (table 6).

Table 6. Subcategory 1.2.2–Legal Safeguards in Mediation

	Indicators	Components
1	Voluntary Nature of Commercial Mediation	Voluntary nature of commercial mediation
2	Independence and Impartiality of Mediators	i) Disclosure of conflict of interest by the mediator ii) Restriction for the mediator to act as an arbitrator in the same or related dispute
3	Inadmissibility of Using Suggestions and Statements Made for the Purpose of Mediation in Other Proceedings	Inadmissibility of using suggestions and statements made for the purpose of mediation in other proceedings
4	Recognition and Enforcement of Mediation Agreements	i) Streamlined enforcement regime for mediation settlement agreements ii) Recognition and enforcement of international mediation agreements

2. PILLAR II. PUBLIC SERVICES FOR DISPUTE RESOLUTION

Table 7 shows the structure for Pillar II, which covers the Public Services for Dispute Resolution. Each of this pillar's categories and subcategories will be discussed in more detail in the order shown in the table (table 7).

Table 7. Pillar II–Public Services for Dispute Resolution

2.1	Court Litigation
2.1.1	Organizational Structure of Courts
2.1.2	Digitalization of Court Processes
2.1.3	Transparency of Courts (includes gender)
2.2	Alternative Dispute Resolution (ADR)
2.2.1	Public Services for Arbitration (includes gender)
2.2.2	Public Services for Mediation (includes gender)

2.1 Court Litigation

Category 2.1 has three subcategories consisting of several indicators, each of which may, in turn, consist of several components.

2.1.1 Organizational Structure of Courts

Effective and reliable dispute resolution processes are conditional upon having a robust organizational structure. Within such a framework, aspects of court specialization and integrity play an important role. Ensuring that commercial cases are handled by specialized courts or chambers at the level of first instance may have a positive impact on the efficiency and quality of dispute resolution.³⁹ Providing for automated random assignment of cases is critical for upholding the integrity of the judiciary.⁴⁰ Furthermore, the establishment of small claims courts or procedures, and allowing self-representation before them, is associated with better access to justice and increased efficiency.⁴¹

In administering justice, complaints may often arise with regard to how the dispute resolution system is organized and how cases are handled in practice. If left unaddressed, these complaints may lead to a decline in institutional credibility and cause procedural inefficiencies. It is therefore critical to set up specific and independent review mechanisms that would allow aggrieved persons and parties to submit their complaints, especially in the areas such as judicial appointments (and promotions, where applicable), judges' misconduct, as well as misconduct of enforcement agents.⁴² Therefore, Subcategory 2.1.1–Organizational Structure of Courts comprises four indicators (table 8).

Table 8. Subcategory 2.1.1–Organizational Structure of Courts

	Indicators	Components
1	Existence of a Commercial Court or Chamber	Existence of a commercial court or chamber
2	Automated Random Assignment of Cases	Automated random assignment of cases
3	Existence of a Small Claims Court or Procedure	i) Establishment of a small claims court or procedure ii) Self-representation before a small claims court or procedure
4	Special Review Mechanisms to support Judicial Integrity	i) Review mechanism for complaints filed against decisions on appointment (and promotion, where applicable) of judges ii) Review mechanism for complaints filed against judges' misconduct iii) Review mechanism for complaints filed against the misconduct of enforcement agents

2.1.2 Digitalization of Court Processes

A key lesson from the COVID-19 pandemic for dispute resolution is that digitalization may have a substantial effect on ensuring access to justice and the streamlining of proceedings. Through technological advancement, litigants should be allowed to file and be served with court documents electronically. This includes filing and service during the commencement of proceedings and in all subsequent stages, extending to the receipt of court decisions in an electronic format.⁴³ When relevant, it is equally important to ensure that parties can communicate with court staff and enforcement agents through electronic means.⁴⁴

Digitalization of dispute resolution can be further promoted by providing for the admissibility of electronic evidence and introducing virtual hearings.⁴⁵ Other important aspects of digital proceedings include

electronic payment of court fees, electronic tracking of cases, and electronic access to court schedules.⁴⁶ When it comes to enforcement, its digitalization is also associated with online auctions.⁴⁷ Therefore, Subcategory 2.1.2–Digitalization of Court Processes comprises eight indicators (table 9).

Table 9. Subcategory 2.1.2–Digitalization of Court Processes

	Indicators	Components
1	Electronic Initiation of a Case	i) Electronic filing of the initial complaint ii) Electronic service of process for the initial complaint
2	Electronic Flow of Documents during the Proceedings	Electronic flow of documents during the proceedings
3	Issuing an Electronic Judgment	Issuing an electronic judgment
4	Electronic Communication with Courts and Enforcement Agents	i) Electronic communication with courts ii) Electronic communication with enforcement agents
5	Admissibility of Digital Evidence	Admissibility of digital evidence
6	Virtual Hearings	Virtual hearings
7	Auxiliary Electronic Services	i) Electronic payment of court fees ii) Electronic tracking of cases iii) Electronic access to court schedule
8	Online Auctions	Online auctions

2.1.3 Transparency of Courts (includes gender)

Transparency is fundamental for building trust in the judiciary. An open dispute resolution system is associated with an increased degree of public control over courts and proceedings, and it provides the parties with more certainty about the handling of their cases. Openness in dispute resolution starts with ensuring that all legal instruments (laws, regulations, directives, orders, and so on) are published free of charge.⁴⁸ As to the conduct of proceedings, the principle of transparency requires granting public access to hearings, whether they are held in person or online.⁴⁹ Apart from laws and regulations, it is vital to publish judgments of both first instance and higher courts.⁵⁰

The credibility of the judiciary may further grow if the dispute resolution system demonstrates a commitment to producing information about its organization and performance. To begin with, it is important to make publicly available the statistics on the number of judges, providing for disaggregation by the individual court, the level of the court, as well as by the sex of the judges.⁵¹ Related to this is the need to ensure that information on the process of appointment (and promotion, where applicable) of judges is published in a timely manner.⁵² Further, it is essential to collect and release key statistics about performance, such as data on the time it takes to adjudicate different categories of cases and the number of cases resolved versus the number of incoming cases.⁵³ Publication of information is of no less significance in enforcement, where data on the average length of proceedings, average cost, and number of resolved and unresolved cases represents a particular interest.⁵⁴ Therefore, Subcategory 2.1.3–Transparency of Courts (includes gender) comprises seven indicators (table 10).

Table 10. Subcategory 2.1.3–Transparency of Courts (includes gender)

	Indicators	Components
1	Public Database for Acts of Legislation	Public database for acts of legislation
2	Public Access to Court Hearings Held in Person	Public access to court hearings held in person
3	Public Access to Court Hearings Held Online	Public access to court hearings held online
4	Publication of Judgments of Higher Courts	Publication of judgments of higher courts

5	Publication of Judgments of First Instance Courts	Publication of judgments of first instance courts
6	Publication of Information on Courts' Composition	i) Statistics on the number of judges disaggregated by individual court and by level of court ii) Statistics on the number of judges disaggregated by sex iii) Publication of information on appointment (and promotion, where applicable) of judges
7	Publication of Information on Performance of Courts and Enforcement Agents	i) Time to disposition report ii) Clearance rate report iii) Statistics on the average length of enforcement proceedings iv) Statistics on the average cost of enforcement proceedings v) Statistics on the number of resolved cases and the number of unresolved cases (turnover rate)

2.2 Alternative Dispute Resolution (ADR)

Category 2.2 has two subcategories consisting of several indicators, each of which may, in turn, consist of several components.

2.2.1 Public Services for Arbitration (includes gender)

In commercial dispute resolution, it is important to ensure that businesses have access to alternative mechanisms, whether they are provided directly by the government or through private sector proxies. ADR mechanisms, such as arbitration and mediation, are typically more flexible than courts and thus may be better suited to the parties' specific needs. Considering their wide use, arbitration services—which require the existence of an operational arbitration institution—stand out as particularly important.⁵⁵ To assist the litigants with the initiation of proceedings, arbitration institutions may set up a roster of qualified arbitrators, while also ensuring that choosing arbitrators outside the roster is not prohibited.⁵⁶ To keep up with the latest trends, arbitration services should embrace digitalization, which includes developing a relevant online platform, enabling virtual conferences and hearings, and introducing electronic signing.⁵⁷ Moreover, transparency is critical for the credibility of arbitration. This prompts arbitration institutions to collect and disclose statistics on the number of handled cases, time to resolve disputes, number of arbitrators disaggregated by sex, as well as to publish summaries of arbitral awards.⁵⁸ Therefore, Subcategory 2.2.1—Public Services for Arbitration (includes gender) comprises four indicators (table 11).

Table 11. Subcategory 2.2.1—Public Services for Arbitration (includes gender)

	Indicators	Components
1	Availability of Commercial Arbitration Services	Availability of commercial arbitration services
2	Setting Up a Roster of Arbitrators	Setting up a roster of arbitrators
3	Digitalization of Arbitration	i) Online platform for arbitration ii) Virtual conferences and hearings in arbitration iii) Electronic signing of an arbitral award
4	Transparency of Arbitration	i) Statistics on the number of cases resolved through arbitration ii) Statistics on the time to resolve cases through arbitration iii) Publication of summaries of arbitral awards iv) Statistics on the number of arbitrators disaggregated by sex

2.2.2 Public Services for Mediation (includes gender)

Mediation is another common type of ADR. The provision of mediation services—which implies the existence of an operational mediation institution—is central to helping the parties to resolve disputes in an amicable manner.⁵⁹ As in arbitration, mediation institutions may facilitate the initiation process by creating a roster of qualified mediators, while also ensuring that choosing mediators outside the roster is not prohibited.⁶⁰ To promote an amicable resolution of disputes through mediation, it can be essential to introduce relevant financial incentives in practice.⁶¹ In mediation, digitalization is equally important, which

may extend to enabling electronic filing of a request to mediate, providing for virtual meetings, and introducing electronic signing.⁶² Mediation also benefits from transparency, and producing statistics on the number of resolved cases and the number of mediators disaggregated by sex can further increase its attractiveness.⁶³ Therefore, Subcategory 2.2.2–Public Services for Mediation (includes gender) comprises five indicators (table 12).

Table 12. Subcategory 2.2.2–Public Services for Mediation (includes gender)

	Indicators	Components
1	Availability of Commercial Mediation Services	Availability of commercial mediation services
2	Setting Up a Roster of Mediators	Setting up a roster of mediators
3	Financial Incentives to Use Mediation	Financial incentives to use mediation
4	Digitalization of Mediation	i) Electronic submission of a request to mediate ii) Virtual meetings in mediation iii) Electronic signing of a mediation agreement
5	Transparency of Mediation	i) Statistics on the number of cases resolved through mediation ii) Statistics on the number of mediators disaggregated by sex

3. PILLAR III. EASE OF RESOLVING A COMMERCIAL DISPUTE

Table 13 shows the structure for Pillar III, the Ease of Resolving a Commercial Dispute. Each of this pillar's categories and subcategories will be discussed in more detail in the order shown in the table.

Table 13. Pillar III–Ease of Resolving a Commercial Dispute

3.1	Court Litigation
3.1.1	Reliability of Courts
3.1.2	Operational Efficiency of Court Processes
3.2	Alternative Dispute Resolution (ADR)
3.2.1	Reliability of ADR
3.2.2	Operational Efficiency of Arbitration Processes

3.1 Court Litigation

Category 3.1 has two subcategories consisting of several indicators, each of which may, in turn, consist of several components.

3.1.1 Reliability of Courts

To turn to the dispute resolution system, businesses should know that the system is reliable and provides for good prospects that their cases would be handled with due care. When there is a lack of trust in the system, firms may consider avoiding it, subsequently giving up on their disputes, to the detriment of operations. Against this backdrop, ensuring that in resolving commercial disputes courts are independent and impartial is of paramount importance.⁶⁴ Therefore, Subcategory 3.1.1–Reliability of Courts comprises two indicators (table 14).

Table 14. Subcategory 3.1.1–Reliability of Courts

	Indicator	Component
1	In Resolving Commercial Cases, Courts are Independent and Impartial	In resolving commercial cases, courts are independent and impartial
2	Courts are Not an Obstacle to Business Operations	Courts are not an obstacle to business operations

3.1.2 Operational Efficiency of Court Processes

Considerations of efficiency play a critical role in dispute resolution. One of the core legal maxims in the field holds that justice delayed is justice denied. In a similar fashion, an excessively costly dispute resolution system may hamper access to justice. Businesses, therefore, have a direct interest in courts resolving commercial disputes in a timely and cost-effective manner.⁶⁵ In particular, the overall time for court litigation may be affected by such components as the time to adjudicate a case at the court of first instance, the time to go through mandatory mediation (when applicable), or the time to complete the case's review at the appellate court. The total cost may be influenced by attorney and court fees incurred at the first instance court, fees associated with mandatory mediation (when applicable), or attorney and court fees incurred at the appellate court. In cross-border litigation, it is equally important to guarantee that the process of recognition of foreign judgments before domestic courts is conducted effectively.⁶⁶ Specifically, this may depend on the time it takes for a local court to consider such a request and on related attorney and court fees.

Dispute resolution does not always end with the issuance of a final verdict. The creditor may be required to initiate enforcement proceedings should the losing party refuse to comply voluntarily.⁶⁷ To ensure that businesses are not deprived of justice, such proceedings should also be handled in an efficient manner. In fact, it is in the creditor's best interests to complete the enforcement process swiftly and with minimal extra costs. The time of compulsory enforcement may be influenced by the time that the relevant institution—enforcement institution or court—would take to locate the debtor's assets and transfer them to the creditor. Associated costs may include attorney fees and institutional charges. Therefore, Subcategory 3.1.2—Operational Efficiency of Court Processes comprises six indicators (table 15).

Table 15. Subcategory 3.1.2—Operational Efficiency of Court Processes

	Indicators	Components
1	Time for Court Litigation	Includes the time to adjudicate a commercial dispute at the court of first instance, time to go through mandatory mediation (when applicable), and time to complete the case's review at the appellate court
2	Cost for Court Litigation	Includes attorney and court fees incurred by the plaintiff at the first instance court, fees associated with mandatory mediation (when applicable), and attorney and court fees incurred by the plaintiff at the appellate court
3	Time to Recognize a Foreign Judgment	Includes the time for the local court to consider a request for recognizing a foreign judgment
4	Cost to Recognize a Foreign Judgment	Includes attorney and court fees incurred by the plaintiff in the process of recognizing a foreign judgment
5	Time to Enforce a Final Judgment	Includes the time for the relevant institution to locate the funds of the debtor, seize them, and complete their transfer to the creditor
6	Cost to Enforce a Final Judgment	Includes attorney and institutional fees incurred by the creditor, when applicable

3.2 Alternative Dispute Resolution (ADR)

Category 3.2 has two subcategories consisting of several indicators, each of which may, in turn, consist of several components.

3.2.1 Reliability of ADR

Reliability equally matters in alternative dispute resolution (ADR), such as arbitration and mediation. When businesses have sufficient confidence in ADR mechanisms, they are more likely to resort to them in practice.⁶⁸ In contrast, when there is a lack of credibility in arbitration and mediation, such mechanisms may remain barely used, contributing to the backlog of cases in the judiciary and depriving firms of efficient and flexible alternatives. Therefore, Subcategory 3.2.1—Reliability of ADR has two indicators (table 16).

Table 16. Subcategory 3.2.1–Reliability of ADR

	Indicators	Components
1	Arbitration is Reliable for Resolving Commercial Cases	Arbitration is reliable for resolving commercial cases
2	Mediation is Reliable for Resolving Commercial Cases	Mediation is reliable for resolving commercial cases

3.2.2 Operational Efficiency of Arbitration Processes

Given that arbitration represents another type of dispute resolution in which a binding decision is imposed on the parties, considerations of time and cost play in this process a crucial role.⁶⁹ The time for arbitration represents the time to resolve a commercial dispute at a domestic arbitration institution. The cost for arbitration is comprised of attorney, arbitrators, and administrative fees incurred at the domestic arbitration institution. Similar to foreign judgments, foreign arbitral awards are subject to the process of recognition before domestic courts.⁷⁰ The efficiency of this process is conditional upon the time it takes for a local court to consider a request for recognizing a foreign arbitral award as well as upon associated attorney and court fees. Therefore, Subcategory 3.2.2–Operational Efficiency of Arbitration Processes comprises four indicators (table 17).

Table 17. Subcategory 3.2.2–Operational Efficiency of Arbitration Processes

	Indicators	Components
1	Time for Arbitration	Includes the time to resolve a commercial dispute at the domestic arbitration institution
2	Cost for Arbitration	Includes attorney fees, arbitrators' fees, and administrative fees incurred by claimant at the domestic arbitration institution
3	Time to Recognize a Foreign Arbitral Award	Includes the time for the local court to consider a request for recognizing a foreign arbitral award
4	Cost to Recognize a Foreign Arbitral Award	Includes attorney and court fees incurred by the claimant in the process of recognizing a foreign arbitral award

III. DATA SOURCES

4.1 Data Collection Sources

The data for Pillar I and Pillar II are collected through consultations with private sector experts. These are lawyers practicing commercial litigation, commercial arbitration, commercial mediation, international dispute resolution, environmental law, and handling enforcement proceedings in commercial cases. Private sector arbitrators and mediators may be contacted too, when relevant. The data for Pillar III are obtained through expert consultations and World Bank Enterprise Surveys. In particular, the data on Operational Efficiency of Court Processes and Operational Efficiency of Arbitration Processes are collected through private sector experts, while the data on Reliability of Courts and Reliability of ADR are collected by way of Enterprise Surveys.

Enterprise Surveys provide representative data on the reliability of dispute resolution, as experienced by businesses in practice. A representative sample of companies captures the variation of user experience within each economy. Businesses with different characteristics, such as size, region, and sector, participate in the surveys. For more details on the collection of data by Enterprise Surveys, please refer to the Overview chapter of this Methodology Handbook.

4.2 Screening and Selection of Experts

A screener questionnaire is used to assist the selection of experts receiving the Dispute Resolution topic questionnaire based on a set of criteria (table 18). The information provided in the screener questionnaires allows the Dispute Resolution team to better understand the experts' professions, areas of specialization, and knowledge or experience related to the dispute resolution process.

Table 18. Screener Questionnaire and Respondent Criteria

Relevant Expert's Professions
Private sector lawyers/attorneys, arbitrators, and mediators
Relevant Areas of Specialization
Commercial litigation, commercial arbitration, commercial mediation, international dispute resolution, environmental law, and enforcement proceedings in commercial cases
Assessment of Experts' Knowledge and Experience Related to Commercial Dispute Resolution and Associated Regulations, Services, and Processes
Knowledge of and experience with preparing documents on behalf of firms to initiate commercial litigation, arbitration, or mediation; representing firms before courts, arbitration tribunals, and mediators; participating in international commercial dispute resolution; handling environmental cases; conducting proceedings to recognize foreign judgments and arbitral awards; and undertaking compulsory proceedings to enforce final commercial judgments.

IV. PARAMETERS

To ensure comparability of the data from expert consultations across economies, the Dispute Resolution topic uses general and specific parameters. A parameter refers to an assumption that is made about the business location (across all pillars), level of court (Pillar II only), and claim value (Pillar III only).

5.1 General Parameters

Dispute Resolution uses one general parameter, which is business location. It applies across all pillars and to both court litigation and ADR.

5.1.1 Business Location

Justification:

Geographic location is a key parameter for assessing the efficiency and reliability of dispute resolution. Across all pillars, the Dispute Resolution topic focuses on the largest city. Regarding Pillar I, the regulatory framework governing dispute resolution may be subject to subnational differences in many economies. Given that legal instruments may have country, regional, or municipal characters, this parameter is necessary to ensure the accuracy of the data. In Pillar II, geographic location is even more important because the availability and quality of public services often vary substantially depending on a specific location within an economy. Focusing on the largest city is therefore important for the purposes of comparability and data quality. Similarly, in Pillar III, the operational efficiency of dispute resolution is prone to differences based on business location. For example, it may take significantly more time and cost to resolve a case in a city where there is a high demand for dispute resolution, compared to another city in the economy where demand is relatively low. Using the largest city as a reference point, therefore, helps guarantee that all economies are treated equally, and that the data are comparable.

Application:

The largest city is chosen based on the population size, as detailed in the Overview chapter of this Methodology Handbook. In Pillar I and Pillar II, the parameter of business location is used to determine the specific city in which quality of regulations and public services for dispute resolution are measured. In Pillar III, this parameter applies only in cases when the data are collected through expert consultations, not

through Enterprise Surveys. Specifically, the parameter is relevant for measures in the categories of Operational Efficiency of Court Processes and Operational Efficiency of Arbitration Processes.

5.2 Specific Parameters

Dispute Resolution employs two specific parameters. One is level of court, which applies to Pillar II only. The other one is the claim value, relevant only for Pillar III.

5.2.1 Level of Court

Justification:

Availability and quality of public services may vary depending on the level of court (that is, first instance court, appellate court, supreme court, and so on). For example, the extent of digitalization in first instance courts can be significantly lower than in the apex court, which often has more resources. In terms of transparency, the nature and amount of released information may differ across various court levels, too. To ensure comparability of the data, in Pillar II, the topic will focus on public services in first instance courts. Generally, these are the first courts that adjudicate disputes and, accordingly, most cases go through them. Selecting first instance courts as a proxy also yields better representativeness because the data are relevant to the experience of most litigants.

Application:

The parameter of court level applies only to Pillar II and solely as regards its category of Court Litigation. Within this category, it is relevant to all three subcategories as they specifically assess judicial services: Organizational Structure of Courts, Digitalization of Court Processes, and Transparency of Courts (includes gender). The parameter does not apply to the Alternative Dispute Resolution (ADR) category.

5.2.2 Claim Value

Justification:

The time and cost characteristics of dispute resolution can vary depending on the claim value. Resources required to resolve a highly complex and extensive case that involves dozens of businesses are typically different from the resources needed to settle a straightforward dispute between two small firms. Importantly, the parameter of claim value has a substantial impact not only on the time and cost to resolve a dispute, but also on the efficiency proceedings related to recognition and enforcement of judgments and arbitral awards. To ensure comparability of the data, it is therefore critical to use this parameter.

Application:

The Dispute Resolution topic assumes that the claim value is equal to 20 times the economy's gross national income (GNI) per capita. This amount is considered because it ensures that the dispute is of sufficient significance to firms: that is, the losses would be material if they decide to not pursue the case. In a similar vein, this amount makes the case attractive to attorneys. The indicated claim value also makes it clear that the resolution of the dispute would require using a regular court procedure, rather than a simplified one. At the same time, the amount of 20 times the economy's GNI per capita indicates that the case is typical and not too expensive; a higher amount could skew the data toward the experience of large corporations. To sum up, the value of the claim reflects the amount of common commercial cases; it is meant to be neither too small nor too big, which ensures both comparability and representativeness of the data.

Furthermore, to account for instances when an economy has a very low GNI per capita or when an economy is struck by hyperinflation, the topic establishes the minimum threshold for the value of the claim at US\$ 20,000. In line with this assumption, whenever 20 times the economy's GNI per capita is less than US\$ 20,000, the topic assumes that the claim value is equal to US\$20,000.

V. TOPIC SCORING

The Dispute Resolution topic has three pillars: Pillar I–Quality of Regulations for Dispute Resolution; Pillar II–Public Services for Dispute Resolution; and Pillar III–Ease of Resolving a Commercial Dispute. The total number of points for each pillar is further rescaled to values from 0 to 100, and subsequently aggregated into the total topic score. Each pillar contributes one-third to the total topic score. The scores distinguish between benefits to the firm (captured as firm flexibility points) and benefits to society’s broader interests (captured as social benefits points). Table 19 shows the scoring for the Dispute Resolution topic. For further scoring details please see Annex A, which complements this section.

Table 19. Aggregate Scoring Overview

Pillar number	Pillars	Number of Indicators	Score			Rescaled Points (0–100)	Weight
			Firm Flexibility Points	Social Benefits Points	Total Points		
I	Quality of Regulations for Dispute Resolution	24	23	24	47	100	0.33
II	Public Services for Dispute Resolution	28	28	28	56	100	0.33
III	Ease of Resolving a Commercial Dispute	14	100	n/a	100	100	0.33

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent).

6.1 Pillar I–Quality of Regulations for Dispute Resolution

Pillar I covers 24 indicators with a total score of 47 points (23 points on firm flexibility and 24 points on social benefits). The scoring for each category under this pillar is as follows:

- 6.1.1** *Court Litigation* has 14 indicators with a total maximum score of 27 points (13 points on firm flexibility and 14 points on social benefits). Specifically, the *Procedural Certainty (includes environment)* subcategory has 9 indicators, while the *Judicial Integrity (includes gender)* subcategory has 5 indicators. Both businesses (firm flexibility) and society at large (social benefits) benefit from a regulatory framework that ensures efficiency and quality of court litigation. Hence, in most cases, equal points are assigned to both categories. The only exception is environmental sustainability, where points are not assigned to firm flexibility. This stems from the fact that once the legislation makes it easier to lodge an environmental claim against a business, some firms may lose as they will be constrained to adjust their operations to environmentally friendly rules. Other firms, however, are likely to win because the clean environment will allow them to set long-term goals.
- 6.1.2** *Alternative Dispute Resolution (ADR)* has 10 indicators with a total maximum score of 20 points (10 points on firm flexibility and 10 on social benefits). In particular, the *Legal Safeguards in Arbitration* subcategory has 6 indicators, and the *Legal Safeguards in Mediation* subcategory has 4 indicators. A regulatory framework that promotes establishing strong alternatives for resolving disputes is advantageous to both firms (firm flexibility) and society (social benefits). Hence, equal points are assigned to both categories.

Table 20. Aggregate Scoring Pillar I

Pillar I–Quality of Regulations for Dispute Resolution		No. of Indicators	FFP	SBP	Total Points	Rescaled Points
1.1	Court Litigation	14	13	14	27	66.67
1.1.1	Procedural Certainty (includes environment)	9	8	9	17	40.00
1.1.2	Judicial Integrity (includes gender)	5	5	5	10	26.67
1.2	Alternative Dispute Resolution (ADR)	10	10	10	20	33.33
1.2.1	Legal Safeguards in Arbitration	6	6	6	12	16.67
1.2.2	Legal Safeguards in Mediation	4	4	4	8	16.67
Total		24	23	24	47	100.00

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

6.2 Pillar II–Public Services for Dispute Resolution

Pillar II covers 28 indicators with a total score of 56 points (28 points on firm flexibility and 28 points on social benefits). The scoring for each category under the pillar is as follows:

6.2.1 *Court Litigation* has 19 indicators with a total maximum score of 38 points (19 points on firm flexibility and 19 points on social benefits). The *Organizational Structure of Courts* subcategory has 4 indicators, while *Digitalization of Court Processes* – 8, and *Transparency of Courts (includes gender)* – 7. Both businesses (firm flexibility) and the general public (social benefits) have a direct interest in having a robust organizational structure for dispute resolution, accompanied with high degrees of digitalization and transparency. As a result, equal points are assigned to these categories.

6.2.2 *Alternative Dispute Resolution (ADR)* has 9 indicators with a total maximum score of 18 points (9 points on firm flexibility and 9 on social benefits). The subcategory on *Public Services for Arbitration (includes gender)* has 4 indicators, and the subcategory on *Public Services for Mediation (includes gender)* has 5 indicators. Advanced services in the area of ADR make alternative channels for dispute resolution more attractive to the benefit of firms (firm flexibility) and society (social benefits). As a result, equal points are assigned to these categories.

Table 21. Aggregate Scoring Pillar II

Pillar II–Public Services for Dispute Resolution		No. of Indicators	FFP	SBP	Total Points	Rescaled Points
2.1	Court Litigation	19	19	19	38	66.67
2.1.1	Organizational Structure of Courts	4	4	4	8	22.22
2.1.2	Digitalization of Court Processes	8	8	8	16	22.22
2.1.3	Transparency of Courts (includes gender)	7	7	7	14	22.22
2.2	Alternative Dispute Resolution (ADR)	9	9	9	18	33.33
2.2.1	Public Services for Arbitration (includes gender)	4	4	4	8	16.67
2.2.2	Public Services for Mediation (includes gender)	5	5	5	10	16.67
Total		28	28	28	56	100.00

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

6.3 Pillar III–Ease of Resolving a Commercial Dispute

Pillar III covers 14 indicators with points ranging from 0 to 100 on firm flexibility (table 22). The points under this pillar are assigned to firm flexibility only, as the indicators measure the outcomes of service provision to firms. For example, long times and high costs for resolving a commercial dispute may cause

adverse consequences on firms, thus hampering firm flexibility. The scoring for each category under this pillar is as follows:

6.3.1 *Court Litigation* has 8 indicators with a maximum score of 66.67 points. Specifically, the *Reliability of Courts* Subcategory has 2 indicators, and the *Operational Efficiency of Court Processes* Subcategory has 6 indicators.

6.3.2 *Alternative Dispute Resolution (ADR)* has 6 indicators with a maximum score of 33.33 points. Specifically, the *Reliability of ADR* Subcategory has 2 indicators, and the *Operational Efficiency of Arbitration Processes* Subcategory has 4 indicators.

Table 22. Aggregate Scoring Pillar III

Pillar III—Ease of Resolving a Commercial Dispute		No. of Indicators	Rescaled Points
3.1	Court Litigation	8	66.67
3.1.1	Reliability of Courts	2	26.67
3.1.2	Operational Efficiency of Court Processes	6	40.00
3.2	Alternative Dispute Resolution (ADR)	6	33.33
3.2.1	Reliability of ADR	2	13.33
3.2.2	Operational Efficiency of Arbitration Processes	4	20.00
	Total	14	100.00

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ANNEX A. DISPUTE RESOLUTION–SCORING SHEET

This document outlines the scoring approach for the Dispute Resolution topic. For every indicator, a Firm Flexibility Point (FFP) and/or a Social Benefits Point (SBP) are assigned, along with a clarification on the detailed scoring for each such indicator and a note on the relevant background literature.

PILLAR I–QUALITY OF REGULATIONS FOR DISPUTE RESOLUTION					
1.1 COURT LITIGATION					
1.1.1 Procedural Certainty (includes environment)					
Indicators	FFP	SBP	Total Points	Rescaled Points	Background Literature
Time Standards (timeframes for serving a complaint on the defendant; filing a statement of defense; issuing an expert opinion; submitting a judgment)	1	1	2	4.71	CEPEJ (2021a); Jean and Gurbanov (2015); World Bank Group (2016)
Deadline to Consider a Request for Interim Measures	1	1	2	4.71	ECHR (2024); Jean and Gurbanov (2015)
Time Limit on Suggesting Evidence	1	1	2	4.71	CEPEJ (2018); Steelman (2008)
Maximum Number of Adjournments	1	1	2	4.71	UNODC (2011); World Bank Group (2016)
Holding a Pre-Trial Conference	1	1	2	4.71	CEPEJ (2016); NAPCO (2016)
Availability of a Default Judgment	1	1	2	4.71	EU (2006); World Bank Group (2016)
Recognition and Enforcement of Foreign Judgments (not requiring a security from a foreign judgment creditor; grounds for denying recognition and enforcing of foreign judgments)	1	1	2	4.71	Browne, Watret, and Blears (2021); HCCH (1961, 2019)
Powers of Enforcement Agents to Seize Extra Types of Assets (monetary claims toward a third party; financial instruments; electronic assets)	1	1	2	4.71	CECL and UIHJ (2021)
Environmental Sustainability (expanded legal standing in environmental disputes; holding polluting firms accountable for environmental damage caused abroad; collection and public release of information on the environmental impact of firms; expanded range of remedies in environmental disputes)	n/a	1	1	2.35	Ellis (2012); Murase (1995); UNEP (2016); EEA (2008); EU (2003); UNECE (2014)
Total Points for Subcategory 1.1.1	8	9	17	40.00	
1.1.2 Judicial Integrity (includes gender)					
Independence and Impartiality of Judges (rules on the recusal of judges; parties' right to call into question judges' independence and impartiality)	1	1	2	5.33	CEPEJ (2008a); Council of Europe (2020); United States Courts (2021); UNODC (2011); USAID (2002); World Bank Group (2016)

Disclosure of Assets by Judges	1	1	2	5.33	Transparency International (2007); UNODC (2011); USAID (2002, 2009)
Code of Ethics for Judges	1	1	2	5.33	UNODC (2011)
Code of Ethics for Enforcement Agents	1	1	2	5.33	GIZ (2020)
Gender Equality (no restrictions for a woman to become a judge, arbitrator, or mediator; equal rights for men and women in commercial litigation)	1	1	2	5.33	Feenan (2008); IDLO (2018); Samaha (2021); UN General Assembly (1979)
Total Points for Subcategory 1.1.2	5	5	10	26.67	
Total Points for Category 1.1	13	14	27	66.67	
1.2 ALTERNATIVE DISPUTE RESOLUTION (ADR)					
1.2.1 Legal Safeguards in Arbitration					
Arbitrability (immovable property disputes; intellectual property disputes) and Parties' Autonomy (selection of arbitrators; selection of a legal counsel)	1	1	2	2.78	AAA (2009); ICC (1998); WIPO (n.d.); ArbitralWomen (2016); ICCA (2020); UNCITRAL (2008)
Access to Arbitration (arbitration in disputes with state-owned enterprises and public bodies; provision of third-party funding)	1	1	2	2.78	ICC (2012); CAM (2020); European Parliament (2022); UNCITRAL (2022)
Independence and Impartiality of Arbitrators (disclosure of conflict of interest; parties' right to call into question arbitrators' independence and impartiality)	1	1	2	2.78	UNCITRAL (2008)
Incorporation of the Principle " <i>Kompetenz-Kompetenz</i> "	1	1	2	2.78	UNCITRAL (2008)
Court Support of Arbitration (support by courts in ordering interim measures in arbitration; support by courts in the collection of evidence in arbitration)	1	1	2	2.78	UNCITRAL (2008)
Recognition and Enforcement of Arbitral Awards (recognition and enforcement of interim awards; recognition and enforcement of partial awards; grounds for setting aside, annulling, or vacating a domestic arbitral award; grounds for denying recognition and enforcement of a foreign arbitral award)	1	1	2	2.78	UNCITRAL (1958, 2008)
Total Points for Subcategory 1.2.1	6	6	12	16.67	
1.2.2 Legal Safeguards in Mediation					
Voluntary Nature of Commercial Mediation	1	1	2	4.17	Decker (2013); Quek Anderson (2010); Reuben (2007); Streeter-Schaefer (2001); World Bank Group (2016)
Independence and Impartiality of Mediators (disclosure of conflict of interest by the mediator; restriction for the mediator to act as an arbitrator in the same or related dispute)	1	1	2	4.17	UNCITRAL (2018)
Inadmissibility of Using Suggestions and Statements Made for the Purpose of Mediation in Other Proceedings	1	1	2	4.17	UNCITRAL (2018)

Recognition and Enforcement of Mediation Agreements (streamlined enforcement regime for mediation settlement agreements; recognition and enforcement of international mediation agreements)	1	1	2	4.17	EU (2008); UN (2014); UNCITRAL (2018)
Total Points for Subcategory 1.2.2	4	4	8	16.67	
Total Points for Category 1.2	10	10	20	33.33	
Total Points for Pillar I	23	24	47	100.00	

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent). FFP = Firm Flexibility Point; SBP = Social Benefits Point.

PILLAR II–PUBLIC SERVICES FOR DISPUTE RESOLUTION					
2.1 COURT LITIGATION					
2.1.1 Organizational Structure of Courts					
Indicators	FFP	SBP	Total Points	Rescaled Points	Background Literature
Existence of a Commercial Court or Chamber	1	1	2	5.56	Blair (2019); OECD (2013a)
Automated Random Assignment of Cases	1	1	2	5.56	Cordella and Contini (2020); Gramckow and Nussenblatt (2013)
Existence of a Small Claims Court or Procedure (establishment of a small claims court or procedure; self-representation before a small claim court or procedure)	1	1	2	5.56	World Bank Group (2016, 2020)
Special Review Mechanisms to Support Judicial Integrity (complaints against decisions on appointment (and promotion, where applicable) of judges; complaints against judges' misconduct; complaints against the misconduct of enforcement agents)	1	1	2	5.56	Council of Europe (1998, 2007); UNODC (2011); World Bank Group (2021); USAID (2002); CEPEJ (2021)
Total Points for Subcategory 2.1.1	4	4	8	22.22	
2.1.2 Digitalization of Court Processes					
Electronic Initiation of a Case (electronic filing of the initial complaint; electronic service of process for the initial complaint)	1	1	2	2.78	ABA (2006); Cabral et al. (2012); CEPEJ (2021); Cordella and Contini (2020); EBRD (2020); Gramckow and Nussenblatt (2013); Greacen (2018)
Electronic Flow of Documents during the Proceedings	1	1	2	2.78	CEPEJ (2021); Cordella and Contini (2020); Gramckow and Nussenblatt (2013)
Issuing an Electronic Judgment	1	1	2	2.78	Cordella and Contini (2020)
Electronic Communication with Courts and Enforcement Agents	1	1	2	2.78	CEPEJ (2017); Cordella and Contini (2020); EU (2021); Gramckow and Nussenblatt (2013)
Admissibility of Digital Evidence	1	1	2	2.78	Council of Europe (2019); JTC (2016)
Virtual Hearings	1	1	2	2.78	CEPEJ (2020a2021d); Greacen (2018); OECD (2020)
Auxiliary Electronic Services (electronic payment of court fees; electronic tracking of cases; electronic access to court schedule)	1	1	2	2.78	Cabral et al. (2012); CEPEJ (2008b, 2021c); CJEU (n.d.); Cordella and Contini (2020); EBRD (2020); Gramckow and Nussenblatt (2013); UNODC (2011)
Online Auctions	1	1	2	2.78	CEPEJ (2015); EBRD (2020)
Total Points for Subcategory 2.1.2	8	8	16	22.22	

2.1.3 Transparency of Courts (includes gender)					
Public Database for Acts of Legislation	1	1	2	3.17	CEPEJ (2008c); World Bank Group (2016)
Public Access to Court Hearings Held in Person	1	1	2	3.17	ABA (2019); ECHR (2010); OHCHR (1966); UN (1948)
Public Access to Court Hearings Held Online	1	1	2	3.17	CEPEJ (2021)
Publication of Judgments of Higher Courts	1	1	2	3.17	CEPEJ (2008c); EU (2021); OSCE (2010); World Bank Group (2016, 2021)
Publication of Judgments of First Instance Courts	1	1	2	3.17	CEPEJ (2008c); EU (2021); OSCE (2010); World Bank Group (2016, 2021)
Publication of Information on Courts' Composition (statistics on the number of judges disaggregated by individual court and by level of court; statistics on the number of judges disaggregated by sex; publication of information on appointment (and promotion, where applicable) of judges)	1	1	2	3.17	CEPEJ (2020d); UN (2016); CEPEJ (2020b, 2020c); ECPR (2017); Transparency International (2021); UNODC (2011); UNODC (n.d.); USAID (2002)
Publication of Information on Performance of Courts and Enforcement Agents (time to disposition report; clearance rate report; average length of enforcement proceedings; average cost of enforcement proceedings; number of resolved cases and the number of unresolved cases (turnover rate))	1	1	2	3.17	CEPEJ (2008, 2020d); EU (2021); CEPEJ (2009, 2015, 2021); Gramckow (2014)
Total Points for Subcategory 2.1.3	7	7	14	22.22	
Total Points for Category 2.1	19	19	38	66.67	
2.2 ALTERNATIVE DISPUTE RESOLUTION (ADR)					
2.2.1 Public Services for Arbitration (includes gender)					
Availability of Commercial Arbitration Services	1	1	2	4.17	Pouget (2013); World Bank (2011); Yin (2021)
Setting Up a Roster of Arbitrators	1	1	2	4.17	Schimmel et al. (2018)
Digitalization of Arbitration (online platform for arbitration; virtual conferences and hearings in arbitration; electronic signing of an arbitral award)	1	1	2	4.17	Piers and Aschauer (2018)
Transparency of Arbitration (statistics on the number of cases resolved through arbitration; statistics on the time to resolve cases through arbitration; publication of summaries of arbitral awards; statistics on the number of arbitrators disaggregated by sex)	1	1	2	4.17	Baetens (2020); CAM (2015); Gramckow et al. (2016); ICCA (2022); New York City Bar (2014); UN (2016); Zlatanska (2015)
Total Points for Subcategory 2.2.1	4	4	8	16.67	
2.2.2 Public Services for Mediation (includes gender)					
Availability of Commercial Mediation Services	1	1	2	3.33	European Parliament (2011); Pouget (2013); World Bank (2011)
Setting Up a Roster of Mediators	1	1	2	3.33	UNCITRAL (2018)

Financial Incentives to Use Mediation	1	1	2	3.33	European Parliament (2011)
Digitalization of Mediation (electronic submission of a request to mediate; virtual meetings in mediation; electronic signing of a mediation agreement)	1	1	2	3.33	Cordella and Contini (2020); Cortés (2011); EBRD (2021); Greacen (2018); OECD (2020); UNCITRAL (2017); Van den Heuvel (2000)
Transparency of Mediation (statistics on the number of cases resolved through mediation, and the number of mediators disaggregated by sex)	1	1	2	3.33	Kessedjian (2022); Kray and Kennedy (2017); UN (2016); UNCITRAL (2017); World Bank Group (2016)
Total Points for Subcategory 2.2.2	5	5	10	16.67	
Total Points for Category 2.2	9	9	18	33.33	
Total Points for Pillar II	28	28	56	100.00	

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent); n.d. = no date. FFP = Firm Flexibility Point; SBP = Social Benefits Point.

PILLAR III–EASE OF RESOLVING A COMMERCIAL DISPUTE					
3.1 COURT LITIGATION					
3.1.1 Reliability of Courts					
Indicators	FFP	SBP	Total Points	Rescaled Points	Background Literature
In Resolving Commercial Cases, Courts are Independent and Impartial	20	n/a	20	13.33	Council of Europe (2020); Voigt, Gutmann, and Feld (2015)
Courts are Not an Obstacle to Business Operations	20	n/a	20	13.33	Colonnello and Herpfer (2021); Garcia-Posada and Mora-Sanguinetti (2015); Giacomelli and Menon (2017); Troilo and Markham Collins (2017)
3.1.2 Operational Efficiency of Court Processes					
Time for Court Litigation	17.5	n/a	17.5	11.67	Chemin (2009); Dejuan-Bitria and Mora-Sanguinetti (2021); Fabbri (2010); Ramos Maqueda and Chen (2021); Moro, Maresch, and Ferrando (2018)
Cost for Court Litigation	17.5	n/a	17.5	11.67	Garcia-Posada and Mora-Sanguinetti (2015); Lee III (2015); OECD (2013b)
Time to Recognize a Foreign Judgment	2.5	n/a	2.5	1.67	Garcimartin and Saumier (2020)
Cost to Recognize a Foreign Judgment	2.5	n/a	2.5	1.67	Garcimartin and Saumier (2020)
Time to Enforce a Final Judgment	10	n/a	10	6.67	Gramckow (2014)
Cost to Enforce a Final Judgment	10	n/a	10	6.67	Gramckow (2014)
Total Points for Category 3.1	100	n/a	100	66.67	
3.2 ALTERNATIVE DISPUTE RESOLUTION (ADR)					
3.2.1 Reliability of ADR					
Arbitration is Reliable for Resolving Commercial Cases	20	n/a	20	6.67	Pouget (2013); World Bank (2011)
Mediation is Reliable for Resolving Commercial Cases	20	n/a	20	6.67	Pouget (2013); World Bank (2011)
3.2.2 Operational Efficiency of Arbitration Processes					
Time for Arbitration	15	n/a	15	5.00	Chemin (2009); Dejuan-Bitria and Mora-Sanguinetti (2021); Fabbri (2010); Moro, Maresch, and Ferrando (2018); Ramos Maqueda and Chen (2021)

Cost for Arbitration	15	n/a	15	5.00	Lee III (2015); OECD (2013b); Garcia-Posada and Mora-Sanguinetti (2015)
Time to Recognize a Foreign Arbitral Award	15	n/a	15	5.00	IBA (2015); Mistelis and Baltag (2008)
Cost to Recognize a Foreign Arbitral Award	15	n/a	15	5.00	IBA (2015); Mistelis and Baltag (2008)
Total Points for Category 3.2	100	n/a	100	33.33	
Total Points for Pillar III	100	n/a	100	100.00	

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent). FFP = Firm Flexibility Point; SBP = Social Benefits Point.

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ANNEX B. DISPUTE RESOLUTION-ANNOTATED QUESTIONNAIRE

Annex B consists of a Glossary and Annotated Questionnaire for Dispute Resolution. The Annotated Questionnaire provides the mapping between each indicator and the corresponding question(s).

Glossary

Alternative dispute resolution (ADR): Arbitration and mediation.

Appellate court: The first court that handles the parties' appeal to a decision of the court of first instance in a commercial dispute of [CLAIM VALUE] that involves two business entities located in [CITY NAME]. Depending on the jurisdiction, this may include either a review of legal or factual errors, or legal errors alone.

Arbitration: An alternative dispute resolution process where parties submit their legal dispute to one or more independent third parties (arbitrators) who issue a binding decision (award).

Business entity: A legal entity, regardless of ownership, formed to conduct business for profit.

Commercial dispute: A legal dispute that occurs between two or more business entities in the conduct of their operations as a result of a failure to meet the terms or expectations of an agreement, including a contract, or a business relationship. Common examples of such disputes are as follows. Example 1 (goods): A buyer of auto parts (one firm) is not happy with their assortment and wants a replacement, which a seller (another firm) refuses to provide. Example 2 (services): A provider of accounting services (one firm) demands payment for its services, while a client (another firm) refuses to pay on the ground that the provided services were of inadequate quality. Please note that these examples are given for illustration purposes only and are by no means exhaustive.

Court litigation: The process of resolving disputes by filing and/or answering a complaint before a court, which makes a binding decision.

Court of first instance: A court that has primary jurisdiction over a commercial dispute of [CLAIM VALUE] that involves two business entities located in [CITY NAME]. This is the initial court before which a case is brought; also referred to as a trial court.

Court: A public body, composed of one or more judges, having the authority to resolve legal disputes between the parties and render binding decisions upon them.

Court-annexed mediation: Mediation that is conducted by the court.

Domestic arbitration: An arbitration that is not international, as defined below. If the definition of domestic arbitration in your jurisdiction is different from this definition, please refer to the definition used in your jurisdiction.

ECMS: Electronic case management system.

Enforcement agent: Any person, whether a public official or not, authorized by the government to enforce court orders and judgments. The enforcement agent may have a public status (that is, a judicial officer as court enforcement agent or civil servant under the executive department) or a private status (that is, a self-employed enforcement agent).

Enforcement institution: An established body composed of enforcement agents.

Environmental dispute: Any dispute regarding environmental quality, environmental protection or management, or other natural resources, including the enforcement of any legal right relating to the environment, that involves at least one business entity.

Foreign judgment: Any valid and final judgment, whether it grants a pecuniary or nonpecuniary relief, rendered by a court of a foreign country.

International arbitration: An arbitration where (1) the parties to an arbitration agreement have, at the time of the conclusion of that agreement, their places of business in different countries; or (2) one of the following places is situated outside the country in which the parties have their places of business: (a) the place of arbitration if determined in, or pursuant to, the arbitration agreement; (b) any place where a substantial part of the obligations of the commercial relationship is to be performed or the place with which the subject matter of the dispute is most closely connected; or (3) the parties have expressly agreed that the subject matter of the arbitration agreement relates to more than one country. If the definition of international arbitration in your jurisdiction is different from this definition, please refer to the definition used in your jurisdiction.

Investor-state dispute: A dispute between a foreign investor and the government of the country where the investment was made.

Legal framework: All legal instruments of general application that have a binding force in [CITY NAME], irrespective of whether they have a country, regional, or municipal character. This includes laws and statutes enacted by the legislature, regulations and decrees made by the executive, and comprehensive sets of rules adopted by the highest judicial bodies (for example, *Supreme Court Mediation Rules*, *Supreme Court General Guidance on Extensions and Adjournments*). Legal framework also includes international treaties to which a country is a party. However, arbitration and mediation rules that are provided by arbitration and mediation institutions and that can be departed from by the parties are not considered a part of the legal framework. Because the questionnaire focuses on general rules applicable to commercial dispute resolution, case law and commentaries are also not considered a part of the legal framework.

Local institutions: All institutions that are involved in the process of commercial dispute resolution in [CITY NAME].

Mediation/conciliation: An alternative dispute resolution process where parties request an independent third party (mediator or conciliator) to assist them in their attempt to reach an amicable settlement of a legal dispute. In contrast to court litigation or arbitration, the mediator or conciliator does not have the authority to impose a solution on the parties to the dispute. This questionnaire does not differentiate between the two terms—mediation and conciliation—and uses them interchangeably.

Private mediation: Mediation that is completely independent from the court and requires no court approval of a mediator(s) chosen by the parties.

Public body: All branches and levels of government, as well as all other bodies that exercise a public function.

State-owned enterprise: A business entity that is majority owned or controlled by a national or local government whether directly or indirectly.

Supreme court: The highest court in the judicial system that serves as the final instance for resolving all legal disputes.

DISPUTE RESOLUTION QUESTIONNAIRE

The tables that follow present all indicators (including their components, if applicable) under each pillar, with a reference to the corresponding question number in parenthesis. The questions are listed before each table for ease of reference.

For Y/N questions, the Y response accounts for the score and is considered as the good practice, unless otherwise indicated with the sign “Y/N; N - good practice”.

In the tables that follow, “AND” means all referenced questions must have a good practice response to obtain a score on the indicator.

In the tables that follow, “OR” means one or more referenced questions must have a good practice response to obtain a score on the indicator.

Certain questions are marked as “not scored,” which indicates that they do not affect the score in any way. The purpose of these questions is to further inform and refine the questions design for subsequent years of the rollout, as needed, as well as to substantiate and provide further information for the scored questions.

PILLAR I—QUALITY OF REGULATIONS FOR DISPUTE RESOLUTION	
Parameters	
Business Location	The largest (most populous) city in the economy. The parameter is used in cases where regulations may not be applicable at a national level and vary across states or regions. In Pillar I, the parameter of business location is used to determine the specific city, in which quality of regulations for dispute resolution will be measured.

1.1 COURT LITIGATION

In this part of the Questionnaire, please respond to the questions based on provisions of the legal framework only, regardless of practice.

1.1.1 Procedural Certainty (includes environment)

1. Please indicate the name of the first instance court that will have jurisdiction over the following commercial case: (not scored)

- The dispute involves two business entities located in [CITY NAME].
- The case relates solely to the conduct of their business.
- The value of the claim is [CLAIM VALUE].

Note: If several courts may have jurisdiction over this case at the first instance level, then please provide a response that would apply to the majority of commercial cases in [CITY NAME].

2. Please indicate the name of the appellate court that will have jurisdiction over the same case at the appellate level. (not scored)

Note: If several courts may have jurisdiction over this case at the appellate level, then please provide a response that would apply to the majority of commercial cases in [CITY NAME].

3. Does the legal framework provide for a time period within which the defendant must be served with a copy of the initial complaint in a commercial case? (Y/N)

4. Does the legal framework provide for a time period within which the defendant must file its statement of defense in a commercial case? (Y/N)
5. Does the legal framework provide for the time period within which the judge must decide on a request for an interim measure? (Y/N)
Note: "Interim measure" means a provisional or temporary relief granted by a court during the pendency of a case with the aim to safeguard the position or assets of a party and avoid irreversible harm before the final ruling on the merits.
6. Does the legal framework provide for a time period within which an expert must deliver his or her expert opinion in a commercial case? (Y/N)
Note: The term expert is defined in accordance with the legal framework in your jurisdiction.
7. Does the legal framework provide for a time period within which the judge must submit a complete written judgement after all hearings have been held? (Y/N)
8. Does the legal framework provide that, after a certain time period or court event (*for example, first hearing*), parties are no longer allowed to suggest new evidence? (Y/N)
9. Does the legal framework provide for the maximum number of adjournments of proceedings that can be granted in a commercial case? (Y/N)
10. Does the legal framework provide for holding a pre-trial hearing in commercial cases? (Y/N)
Note: A "pre-trial hearing" means a separate hearing that takes place at the beginning of proceedings to expedite resolution of the dispute, in particular by narrowing down contentious issues, clarifying the evidence, and discussing the possibility of settlement.
11. Does the legal framework provide that when a duly notified defendant fails to respond to a court summons or to appear in court, the judge may issue a default judgment? (Y/N)
12. Does the legal framework provide the enforcement agent with the right to seize the debtor's monetary claims toward a third party? (Y/N)
13. Does the legal framework provide the enforcement agent with the right to seize the debtor's financial instruments, such as bonds and stocks? (Y/N)
14. Does the legal framework provide the enforcement agent with the right to seize the debtor's electronic assets (for example, cryptocurrency)? (Y/N)
15. Does the legal framework require that a security, bond, or deposit must be provided by a party who applies for the recognition and enforcement of a foreign judgment on the sole ground that such party is not domiciled or does not reside in your jurisdiction? (Y/N; N – good practice)
16. Does the legal framework allow the court to deny recognition and enforcement of a foreign judgment on the grounds of error of law or error of fact, i.e., authorize it to review a foreign judgment on the merits ("révision au fond")? (Y/N; N – good practice)
17. Does the legal framework allow any party, including business entities, nongovernmental organizations or civil society, to bring an environmental dispute against a business entity in court, even if that party has not suffered actual harm? (Y/N)

18. Does the legal framework allow filing a lawsuit against business entities operating in your country for alleged environmental damage that they have caused abroad? (Y/N)

19. Does the legal framework require the government to collect from business entities and disclose to the public information on their environmental impact (for example, in a public pollutant release)? (Y/N)

20. As far as environmental disputes against a business entity are concerned, does the legal framework provide the court with the power to issue additional remedies, beyond pecuniary damages such as fines and compensation, in order to address the specific nature of environmental damage? (Y/N)

Note: Such additional remedies may include restoration of the polluted land, payment to support education on environmental protection, community service of the employees responsible for pollution, business or environmental license revocation, specific performance, etc.

1.1.2 Judicial Integrity (includes gender)

21. Does the legal framework impose on judges a duty to recuse themselves from consideration of a case in the event of an actual or potential conflict of interest? (Y/N)

Note: "Conflict of interest" means a real or apparent conflict between one's professional or official duties and one's private interests.

22. Does the legal framework allow parties to challenge a judge in a commercial case if circumstances exist that may impact the judge's independence or impartiality? (Y/N)

23. Does the legal framework require judges to disclose their assets on an annual basis?

23a. Yes, public disclosure is required

23b. Yes, but the disclosure is not public

23c. No

24. In your jurisdiction, is there a code of ethics for judges? (Y/N)

Note: Please answer Yes only if the code covers all or most of the following: conflict of interest; impartiality and independence; abuse of position; receipt of gifts; confidentiality; ex parte communications; diligent performance of official duties; extrajudicial activities.

25. In your jurisdiction, is there a code of ethics for enforcement agents? (Y/N)

Note: Please answer Yes only if the code covers all or most of the following: duties and obligations; independence, impartiality, and integrity; conflict of interest; enforcement of defined procedures; disciplinary sanctions; and transparency and predictability of costs.

26. Does the legal framework contain any restriction for a woman to become a judge (including in higher courts), arbitrator, or mediator? (Y/N; N – good practice)

27. According to the legal framework, do women have the same rights as men in all stages of procedure in commercial litigation? (Y/N)

Note: Examples of discriminatory treatment include instances when a testimony of a woman is weighted less than a testimony of a man, when a woman must request a permission (such as from her husband or parents) to go to court, etc.

1.1 COURT LITIGATION			
1.1.1 Procedural Certainty (includes environment)			
Indicators	FFP	SBP	Total Points
Time Standards	1	1	2
- Time frame for serving a complaint on the defendant (3)	0.25	0.25	0.5
- Time frame for filing a statement of defense (4)	0.25	0.25	0.5
- Time frame for issuing an expert opinion (6)	0.25	0.25	0.5
- Time frame for submitting a judgment (7)	0.25	0.25	0.5
Deadline to Consider a Request for Interim Measures (5)	1	1	2
Time Limit on Suggesting Evidence (8)	1	1	2
Maximum Number of Adjournments (9)	1	1	2
Holding a Pre-Trial Conference (10)	1	1	2
Availability of a Default Judgment (11)	1	1	2
Recognition and Enforcement of Foreign Judgments	1	1	2
- Not requiring a security from a foreign judgment creditor (15)	0.5	0.5	1
- Grounds for denying recognition and enforcement of foreign judgments (16)	0.5	0.5	1
Powers of Enforcement Agents to Seize Extra Types of Assets	1	1	2
- Seizing the debtor's claims against third parties (12)	0.33	0.33	0.66
- Seizing the debtor's financial instruments (13)	0.33	0.33	0.66
- Seizing the debtor's electronic assets (14)	0.33	0.33	0.66
Environmental Sustainability	0	1	1
- Expanded legal standing in environmental disputes (17)	0	0.25	0.25
- Holding polluting firms accountable for environmental damage caused abroad (18)	0	0.25	0.25
- Collection and public release of information on the environmental impact of firms (19)	0	0.25	0.25
- Expanded range of remedies in environmental disputes (20)	0	0.25	0.25
Total Points	8	9	17
1.1.2 Judicial integrity (includes gender)			
Indicators	FFP	SBP	Total Points
Independence and Impartiality of Judges	1	1	2
- Rules on the recusal of judges (21)	0.5	0.5	1
- Parties' right to question judges' independence and impartiality (22)	0.5	0.5	1
Disclosure of Assets by Judges	1	1	2
- Public disclosure is required (23a) OR	1 OR	1 OR	2 OR
- Non-public disclosure is required (23b)	1	1	2
Code of Ethics for Judges (24)	1	1	2
Code of Ethics for Enforcement Agents (25)	1	1	2
Gender Equality	1	1	2
- Restrictions for a woman to become a judge, arbitrator, or mediator (26)	0.5	0.5	1
- Equal rights for men and women in commercial litigation (27)	0.5	0.5	1
Total Points	5	5	10

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

1.2 ALTERNATIVE DISPUTE RESOLUTION (ADR)

In this part of the Questionnaire, please respond to the questions based on provisions of the legal framework only, regardless of practice.

1.2.1 Legal Safeguards in Arbitration

28. Is there a legal framework that governs international arbitration? (Y/N) *(not scored)*

29. Is there a legal framework that governs domestic arbitration? (Y/N) *(not scored)*

N to both questions 33 and 34 → 0 points on questions 30–44.

30. Does the legal framework allow arbitrating disputes involving rights over immoveable property (in rem) located within your jurisdiction? (Y/N)

31. Does the legal framework allow arbitrating intellectual property disputes (for example, involving patents, copyrights, trademarks, etc.), as long as they do not affect third party rights? (Y/N)

32. Does the legal framework allow privately owned business entities to arbitrate commercial disputes with public bodies and state-owned enterprises?

Note: Please answer Yes only if public bodies and state-owned enterprises would not be required to obtain permission or satisfy other additional conditions to this end.

32a. Yes, both in domestic and international arbitration

32b. Yes, but only in domestic arbitration

32c. Yes, but only in international arbitration

32d. No

33. Does the legal framework allow the parties to select arbitrators regardless of their nationality, professional qualifications, and gender?

33a. Yes, both in domestic and international arbitration

33b. Yes, but only in domestic arbitration

33c. Yes, but only in international arbitration

33d. No

34. Does the legal framework allow the parties to freely select a legal counsel to represent them in arbitration regardless of the counsel's nationality, professional qualifications, admission to courts or membership in professional organizations (for example, a bar association)?

34a. Yes, both in domestic and international arbitration

34b. Yes, but only in domestic arbitration

34c. Yes, but only in international arbitration

34d. No

35. Does the legal framework impose on arbitrators a duty of disclosure of any circumstances impacting their impartiality or independence, either before or after their appointment to the arbitral tribunal?

35a. Yes, both in domestic and international arbitration

35b. Yes, but only in domestic arbitration

35c. Yes, but only in international arbitration

35d. No

36. Does the legal framework allow parties to challenge an arbitrator if circumstances exist that may impact the arbitrator's independence or impartiality?

- 36a. Yes, both in domestic and international arbitration
- 36b. Yes, but only in domestic arbitration
- 36c. Yes, but only in international arbitration
- 36d. No

37. Does the legal framework incorporate the principle of kompetenz-kompetenz which, on the one hand, recognizes the power of arbitrators to determine their own jurisdiction under the arbitration agreement and, on the other hand, requires the courts to defer to the arbitral tribunal over disputes relating to jurisdiction unless the underlying agreement is prima facie null and void?

- 37a. Yes, both in domestic and international arbitration
- 37b. Yes, but only in domestic arbitration
- 37c. Yes, but only in international arbitration
- 37d. No

38. Does the legal framework allow courts to order interim measures in support of arbitration?

Note: "Interim measures" (also provisional or conservatory measures) mean remedies that a court may grant before arbitrators hear the merits and render their final award with the aim to protect a party during the course of arbitration to ensure a meaningful final adjudication on the merits.

- 38a. Yes, both in domestic and international arbitration
- 38b. Yes, but only in domestic arbitration
- 38c. Yes, but only in international arbitration
- 38d. No

39. Does the legal framework allow courts to order the production of documents or the appearance of witnesses in support of arbitration?

- 39a. Yes, both in domestic and international arbitration
- 39b. Yes, but only in domestic arbitration
- 39c. Yes, but only in international arbitration
- 39d. No

40. Does the legal framework explicitly allow the provision of third-party funding in investor-state arbitration? (Y/N)

Note: "Third-party funding" means an arrangement whereby a party to a dispute obtains funding to carry out arbitration proceedings from a third party unconnected to the dispute in exchange for an agreed return.

41. Does the legal framework provide that courts may recognize as binding and enforce interim awards?

Note: "Interim award" (also provisional award) means an arbitral award that is subject to a final determination at a later stage, granting an interim (also provisional) relief that an arbitral tribunal would have power to grant in a final award.

- 41a. Yes, both in domestic and international arbitration
- 41b. Yes, but only in domestic arbitration
- 41c. Yes, but only in international arbitration
- 41d. No

42. Does the legal framework provide that courts may recognize as binding and enforce partial awards?

Note: “Partial award” means an arbitral award that finally determines only part of the claims in dispute between the parties.

- 42a. Yes, both in domestic and international arbitration
- 42b. Yes, but only in domestic arbitration
- 42c. Yes, but only in international arbitration
- 42d. No

- 43. **Does the legal framework allow the court to set aside, annul or vacate a domestic arbitral award on the grounds of error of law or error of fact, i.e., authorize it to review a domestic arbitral award on the merits (“révision au fond”)? (Y/N; N – good practice)**
- 44. **Does the legal framework allow the court to deny recognition and enforcement of a foreign arbitral award on the grounds of error of law or error of fact, i.e., authorize it to review a foreign arbitral award on the merits (“révision au fond”)? (Y/N; N – good practice)**

1.2.2 Legal Safeguards in Mediation

- 45. **Is there a legal framework that governs mediation? (Y/N) (not scored)**
N → 0 points on questions 46-51.

- 46. **Does the legal framework establish that commercial mediation is mandatory: that is, parties are required to attempt mediation—whether before filing a lawsuit with the court or after the case has already been accepted—in order to proceed with court litigation? (Y/N; N – good practice)**

Note: An information session held with the sole purpose of explaining how mediation works is not considered mandatory mediation, as long as a party can withdraw from the session at any time without providing any reason and no sanctions would be imposed.

Y → provide response to questions 106 and 113.

- 47. **Does the legal framework impose on mediators a duty of disclosure of any circumstances impacting their impartiality or independence, either before or after their appointment? (Y/N)**
- 48. **Does the legal framework provide that, unless otherwise agreed by the parties, the mediator shall not serve as an arbitrator in respect of a dispute that was or is the subject of the mediation proceedings or another dispute that has arisen from the same or related contract or legal relationship? (Y/N)**

- 49. **Does the legal framework preclude parties to mediation proceedings, the mediator and any involved third person from relying on evidence or testimony provided during the mediation proceedings in arbitration, court litigation, or other types of dispute resolution? (Y/N)**

Note: Such matters may include views expressed or suggestions made by a party in respect of a possible settlement of the dispute; statements or admissions made by a party; proposals made by the mediator; a document prepared solely for purposes of mediation, etc.

- 50. **Does the legal framework provide for mediation settlement agreements a special enforcement regime that is more streamlined/expedited compared to bringing an action in court for a breach of contract?**

Note: Examples of such a regime include subjecting mediation agreements to a simplified court procedure (for example, endorsement by a court stamp, expedited conversion to a court judgment, etc.), making them enforceable upon notarization, granting them the status of an arbitral award, etc.

- 50a. Yes, both in court-annexed mediation and private mediation
- 50b. Yes, but only in court-annexed mediation

50c. Yes, but only in private mediation

50d. No, such a regime is not provided

51. Does the legal framework provide for specific rules on recognition and enforcement of international mediation settlement agreements that do not have a court approval, or do not enjoy the status of a court judgement or arbitral award? (Y/N)

1.2 ALTERNATIVE DISPUTE RESOLUTION (ADR)			
1.2.1 Legal Safeguards in Arbitration			
Indicators	FFP	SBP	Total Points
Arbitrability and Parties' Autonomy	1	1	2
- Arbitrability of immovable property disputes (30)	0.25	0.25	0.5
- Arbitrability of intellectual property disputes (31)	0.25	0.25	0.5
- Selection of arbitrators (33a)	0.25	0.25	0.5
- Selection of a legal counsel (34a)	0.25	0.25	0.5
Access to Arbitration	1	1	2
- Arbitration in disputes with state-owned enterprises and public bodies (32a)	0.5	0.5	1
- Provision of third-party funding (40)	0.5	0.5	1
Independence and Impartiality of Arbitrators	1	1	2
- Disclosure of conflict of interest (35a)	0.5	0.5	1
- Parties' right to question arbitrators' independence and impartiality (36a)	0.5	0.50	1
Incorporation of the Principle "Kompetenz-Kompetenz" (37a)	1	1	2
Court Support of Arbitration	1	1	2
- Support by courts in ordering interim measures in arbitration (38a)	0.5	0.5	1
- Support by courts in the collection of evidence in arbitration (39a)	0.5	0.5	1
Recognition and Enforcement of Arbitral Awards	1	1	2
- Recognition and enforcement of interim awards (41a)	0.25	0.25	0.5
- Recognition and enforcement of partial awards (42a)	0.25	0.25	0.5
- Grounds for setting aside, annulment, or vacating a domestic arbitral award (43)	0.25	0.25	0.5
- Grounds for denying recognition and enforcement a foreign arbitral award (44)	0.25	0.25	0.5
Total Points	6	6	12
1.2.2 Legal Safeguards in Mediation			
Indicators	FFP	SBP	Total Points
Voluntary Nature of Commercial Mediation (46)	1	1	2
Independence and Impartiality of Mediators	1	1	2
- Disclosure of conflict of interest (mediation) (47)	0.5	0.5	1
- Restriction for a mediator to act as an arbitrator in the same or related dispute (48)	0.5	0.5	1
Inadmissibility of Using Suggestions and Statements Made for the Purpose of Mediation in Other Proceedings (49)	1	1	2
Recognition and Enforcement of Mediation Agreements	1	1	2
Streamlined Enforcement for Mediation Settlement Agreements	0.5	0.5	1
- Both in court-annexed and private mediation (50a) OR	0.5 OR	0.5 OR	1 OR
- Only in court-annexed mediation (50b) OR	0.5 OR	0.5 OR	1 OR

- Only in private mediation (50c)	0.5	0.5	1
Recognition and Enforcement of International Mediation Agreements (51)	0.5	0.5	1
Total Points	4	4	8

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

PILLAR II—PUBLIC SERVICES FOR DISPUTE RESOLUTION	
Parameters	
Business Location	The largest (most populous) city in the economy. The parameter is used in cases where regulations may not be applicable at a national level and vary across states or regions. In Pillar II, the parameter of business location is used to determine the specific city, in which public services for dispute resolution will be measured.
First Instance Court	In Pillar II, category on Court Litigation, the Dispute Resolution topic focuses specifically on public services provided in first instance courts. The parameter does not apply to the category on Alternative Dispute Resolution (ADR).

2.1 COURT LITIGATION

In this part of the Questionnaire, please respond to the questions based on the current practice only, regardless of what is set out in the legal framework.

2.1.1 Organizational Structure of Courts

52. Is there a court or chamber of a court dedicated solely to hearing commercial cases at the first instance level? (Y/N)

Note: Please answer Yes only if this court or chamber is fully operational; dedicated to commercial cases only (for example, excludes other civil cases); and has a broad jurisdiction over commercial cases (for example, not limited only to cross-border lawsuits or insolvency disputes).

53. Are new commercial cases at the first instance level assigned to judges randomly through an automated electronic system? (Y/N)

Note: Please answer Yes only if assignment of cases is carried out without human intervention, and no judge or party has a possibility to influence or predict the assignment.

54. Is there a small claims court and/or a fast-track procedure for small claims? (Y/N)

Note: Please answer Yes only if this court and/or procedure is fully operational; applies to both civil and commercial contested cases; provides for appropriate maximum monetary threshold; and has simplified procedural rules (for example, shorter time frames, relaxed evidence rules, etc.).

N → proceed to question 56.

55. When a small claims court and/or a fast-track procedure for small claims is available, can parties self-represent themselves before it without an attorney? (Y/N)

56. Is there an independent review mechanism (for example, Judicial Ombudsman) established specifically to consider complaints filed by candidates for judicial appointments (and promotions, where applicable) about how their applications have been handled? (Y/N)

Note: “Independent” means there is no direct subordination between the body that makes decisions on selection of judges and the body that reviews the complaints. “Specifically” means the mandate of the review body explicitly covers such complaints.

57. Is there an independent review mechanism established specifically to consider complaints filed against judges’ misconduct, such as lack of integrity, undue influence, existence of a conflict of interest, failure to recuse, violation of the code of ethics, etc.? (Y/N)

Note: “Independent” means there is no direct subordination between the judge against whom a complaint has been filed and the body that reviews the complaint. “Specifically” means the mandate of the review body explicitly covers complaints filed against judges’ work.

58. Is there an independent review mechanism established specifically to consider complaints filed against the misconduct of enforcement agents, such as lack of integrity, undue influence, existence of a conflict of interest, violation of the code of ethics, etc.? (Y/N)

Note: “Independent” means there is no direct subordination between the enforcement agent against whom a complaint has been filed and the body that reviews the complaint. “Specifically” means the mandate of the review body explicitly covers such complaints.

2.1.2 Digitalization of Court Processes

Whenever applicable, please respond specifically based on the [FIRST INSTANCE COURT].

For the purpose of this section, please answer Yes whenever a particular electronic tool is fully implemented in practice, regardless of whether it is used by the majority of litigants or not. Please answer Yes only if this electronic tool is reliable and secure.

In this part of the Questionnaire, please respond to the questions based on the current practice only, regardless of what is set out in the legal framework.

59. Can the initial complaint together with all its attachments be filed electronically through a court’s platform or an electronic case management system (ECMS)? (Y/N)

Note: Please answer Yes only if no hard copies of the complaint and its attachments are required from the plaintiff, including at the first hearing. Filing by email is not considered an electronic submission for this question.

60. Can the court’s summons and the plaintiff’s initial complaint be served on the defendant electronically (including via email or an ECMS) before the first hearing? (Y/N)

Note: Please answer Yes only if no hard copies of the complaint are required from the plaintiff, including at the first hearing. If the consent of the user to be served by electronic means is required, it should be obtained before the first hearing.

61. Can parties receive and send subsequent documents, as well as file motions (for example, to request an injunction or reschedule a hearing) through a court’s platform or an ECMS while a case is under consideration? (Y/N)

Note: Email exchanges are not considered an electronic submission/receipt for this question.

62. When requested by a party, can judges handling commercial cases issue a court decision (for example, order, ruling, judgment, etc.) in an electronic format, which would have the same validity and status as a paper document for the purpose of its enforcement? (Y/N)

Note: A court decision is considered to be in an electronic format if it has been signed with an e-signature of a judge or if an actual signature in a PDF format has been inserted into the electronic document. Please answer Yes only if no hard copies are required for enforcement.

63. Can a party communicate with the court through electronic means, that is to send questions and receive notifications related to its case (for example, to inquire about a new court hearing or receive updates on additional submissions)? (Y/N).

Note: “Electronic means” may include communication through email, court’s platform, ECMS, etc.

64. Can a party communicate with the enforcement agent through electronic means, which includes receiving and submitting documents? (Y/N)

Note: “Electronic means” may include communication through email, court’s platform, enforcement institution’s portal, ECMS, etc.

65. Is digital evidence, including contracts, in practice admissible by the court in commercial cases? (Y/N)

Note: “Digital evidence” means any evidence derived from data contained in or produced by any device the functioning of which depends on a software program or data stored on or transmitted over a computer or network.

66. Can court conferences and hearings in a commercial case be conducted online (for example, through a court’s platform, or other types of software such as Microsoft Teams, Skype, Webex, Zoom, etc.), when requested by a party?

66a. Yes, in all matters

66b. Yes, but in urgent matters only

66c. No

Y (options 66a or 66b) → provide response to question 73.

67. Can all court fees be paid electronically, that is via a court’s platform, ECMS, or online banking? (Y/N)

Note: Please answer Yes only if no physical interaction with the bank (that is, to endorse the receipt with a bank stamp) or court (that is, to submit a hard copy of the receipt) is required from the plaintiff to complete the payment.

68. Can a party track the status of its commercial case online (for example, through a court’s platform or ECMS)? (Y/N)

69. Is court schedule of all hearings available online (for example, on a court’s platform)? (Y/N)

70. During the enforcement of commercial judgments, in practice, can auctions be conducted online? (Y/N)

2.1.3 Transparency of Courts (includes gender)

Whenever applicable, please respond specifically based on the [FIRST INSTANCE COURT].

In this part of the Questionnaire, please respond to the questions based on the current practice only, regardless of what is set out in the legal framework.

71. Are legal instruments (laws, regulations, directives, orders, etc.) published in your jurisdiction in a searchable database that allows the public to study their latest versions free of charge?

Note: A “searchable database” means a database that allows a user to find and study a relevant legal instrument by using such search criteria as title, subject matter, enacting authority, date of adoption, key words, etc.

71a. Yes, all legal instruments

71b. Yes, but main laws and regulations only, which excludes more specific instruments

71c. No

72. Are in-person court hearings of commercial cases open to the general public, with no arbitrary restrictions being applied in practice (for example, denying access on the ground that the court room is full without providing an online alternative)? (Y/N)

Note: Some legitimate reasons for restricting access of the public to court hearings may include: interests of public morality; protection of the private life; protection of trade secrets and confidential business information; public order or national security, etc.

73. Are online court hearings of commercial cases open to the general public, with no arbitrary restrictions being applied in practice (for example, denying access on the ground that the Internet connection is allegedly weak)? (Y/N)

Note: Some legitimate reasons for restricting access of the public to court hearings may include: interests of public morality; protection of the private life; protection of trade secrets and confidential business information; public order or national security, etc.

74. Are all commercial judgments at the supreme and appellate court levels published in a searchable database that allows the public to study them free of charge? (Y/N)

Note: A “searchable database” means a database that allows a user to find and study a relevant judgment by using such search criteria as case type, subject matter, legal issues raised, key words, name of the judges, names of the parties, etc.

74a. Yes, at the supreme and appellate levels

74b. Yes, but only at the supreme level

74c. Yes, but only at the appellate level

74d. No

75. Are all commercial judgments at the first instance level published in a searchable database that allows the public to study them free of charge? (Y/N)

Note: A “searchable database” means a database that allows a user to find and study a relevant judgment by using such search criteria as case type, subject matter, legal issues raised, key words, name of the judges, names of the parties, etc.

76. Is information on appointment (and promotion, when applicable) of judges across all levels of the judiciary made publicly available in a timely manner, that is, the information on the upcoming selection process is published at least 4 weeks prior to the deadline for candidates and the information on the outcome of the selection process is published no later than 4 weeks after its completion? (Y/N)

Note: Please answer Yes only if all of the following are made public: criteria for selection; time frame for selection; full names of the members of the selection body; outcome of the process, including full names of successful and unsuccessful candidates.

77. Does the judiciary, or other relevant body, publish a time to disposition report for commercial cases, at least once a year? (Y/N)

Note: A “time to disposition report” means a report that measures for each court the time it takes to adjudicate different categories of commercial cases. Please answer Yes only if the data for the year [20YY] are available.

78. Does the judiciary, or other relevant body, publish a clearance rate report for commercial cases, at least once a year? (Y/N)

Note: A “clearance rate report” means a report that measures for each court the number of commercial cases resolved versus the number of incoming cases per category. Please answer Yes only if the data for the year [20YY] are available.

79. Does the judiciary, or other relevant body, publish statistics on the number of judges disaggregated by individual court and by level of court (for example, first instance, appellate, supreme), at least once a year? (Y/N)

Note: Please answer Yes only if the data for the year [20YY] are available.

N → proceed to question 81.

80. Are these statistics on the number of judges sex-disaggregated? (Y/N)

81. Does the enforcement institution, or other relevant body, publish statistics on the average length of enforcement proceedings per category of cases, at least once a year? (Y/N)

Note: Please answer Yes only if the data for the year [20YY] are available.

82. Does the enforcement institution, or other relevant body, publish statistics on the average cost of enforcement proceedings per category of cases, at least once a year? (Y/N)

Note: Please answer Yes only if the data for the year [20YY] are available.

83. Does the enforcement institution, or other relevant body, publish statistics on the number of resolved enforcement cases and the number of unresolved cases per category, at least once a year? (Y/N)

Note: Please answer Yes only if the data for the year [20YY] are available.

2.1 COURT LITIGATION			
2.1.1 Organizational Structure of Courts			
Indicators	FFP	SBP	Total Points
Existence of a Commercial Court or Chamber (52)	1	1	2
Automated Random Assignment of Cases (53)	1	1	2
Existence of a Small Claims Court or Procedure	1	1	2
- Establishment of a small claims court or procedure (54)	0.5	0.5	1
- Self-representation before a small claims court or procedure (55)	0.5	0.5	1
Special Review Mechanisms to Support Judicial Integrity	1	1	1
- Review mechanism for complaints filed against decisions on appointment (and promotion, where applicable) of judges (56)	0.33	0.33	0.33
- Review mechanism for complaints filed against judges' misconduct (57)	0.33	0.33	0.33
- Review mechanism for complaints filed against the misconduct of enforcement agents (58)	0.33	0.33	0.33
Total Points	4	4	8
2.1.2 Digitalization of Court Processes			
Indicators	FFP	SBP	Total Points
Electronic Initiation of a Case	1	1	2
- Electronic filing of the initial complaint (59)	0.5	0.5	1

- Electronic service of process for the initial complaint (60)	0.5	0.5	1
Electronic Flow of Documents during the Proceedings (61)	1	1	2
Issuing an Electronic Judgment (62)	1	1	2
Electronic Communication with Courts and Enforcement Agents	1	1	2
- Electronic communication with courts (63)	0.5	0.5	1
- Electronic communication with enforcement agents (64)	0.5	0.5	1
Admissibility of Digital Evidence (65)	1	1	2
Virtual Hearings	1	1	2
- In all matters (66a) OR	1 OR	1 OR	2 OR
- In urgent matters only (66b)	1	1	1
Auxiliary Electronic Services	1	1	2
- Electronic payment of court fees (67)	0.33	0.33	0.66
- Electronic tracking of cases (68)	0.33	0.33	0.66
- Electronic access to court schedule (69)	0.33	0.33	0.66
Online Auctions (70)	1	1	2
Total Points	8	8	16
2.1.3 Transparency of Courts (includes gender)			
Indicators	FFP	SBP	Total Points
Public Database for Acts of Legislation (71a)	1	1	2
Public Access to Court Hearings Held in Person (72)	1	1	2
Public Access to Court Hearings Held Online (73)	1	1	2
Publication of Judgments of Higher Courts (74a)	1	1	2
Publication of Judgments of First Instance Courts (75)	1	1	2
Publication of Information on Courts' Composition	1	1	2
- Statistics on the number of judges disaggregated by individual court and by level of court (79)	0.33	0.33	0.66
- Statistics on the number of judges disaggregated by sex (80)	0.33	0.33	0.66
- Publication of information on appointment (and promotion, where applicable) of judges (76)	0.33	0.33	0.66
Publication of Information on Performance of Courts and Enforcement Agents	1	1	2
- Publication of a time to disposition report (77)	0.2	0.2	0.4
- Publication of a clearance rate report (78)	0.2	0.2	0.4
- Statistics on the average length of enforcement proceedings per category of cases (81)	0.2	0.2	0.4
- Statistics on the average cost of enforcement proceedings per category of cases (82)	0.2	0.2	0.4
- Statistics on the number of resolved enforcement cases and the number of unresolved cases (turnover rate) (83)	0.2	0.2	0.4
Total Points	7	7	14

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

2.2 ALTERNATIVE DISPUTE RESOLUTION (ADR)

In this part of the Questionnaire, please respond to the questions based on the current practice only, regardless of what is set out in the legal framework.

2.2.1 Public Services for Arbitration (includes gender)

84. In your jurisdiction, is there a domestic institution(s) that provides arbitration services with respect to commercial disputes?

Note: Please answer Yes only if the arbitration institution(s) is fully operational, that is, it considers cases in practice, and has its specific arbitration rules formally adopted.

84a. Yes, both domestic and international arbitration are available

84b. Yes, but only domestic arbitration is available

84c. Yes, but only international arbitration is available

84d. No, arbitration services are not provided in practice

Y to 84b or 84c, or N → 0 points on questions 85–92.

Y to 84a → respond to questions 131–135.

Y to 84b or 84c, or N → 0 points on questions 132–135.

85. Does the domestic arbitration institution(s) maintain an up-to-date publicly accessible roster of all qualified arbitrators, in which membership is not restricted based on such grounds as nationality, sex, residency, or belonging to a specific bar association?

Note: Please answer Yes only if the rules of the domestic arbitration institution(s) also do not preclude parties from choosing arbitrators outside the roster, with no restrictions being applied based on nationality, sex, residency, or belonging to a specific bar association.

85a. Yes, in both domestic and international arbitration

85b. Yes, but only in domestic arbitration

85c. Yes, but only in international arbitration

85d. No, such a roster does not exist

86. In commercial arbitration, can parties file, view, and download all submitted documents in an arbitration proceeding through a secure online platform of a domestic arbitration institution(s)?

Note: Please answer Yes only if no hard copies of the filed documents will be required from a party, including during the first arbitration hearing.

86a. Yes, in both domestic and international arbitration

86b. Yes, but only in domestic arbitration

86c. Yes, but only in international arbitration

86d. No, such an online platform is not available

87. In commercial arbitration, can virtual conferences and hearings be securely held through an online platform or via videoconferencing?

87a. Yes, in both domestic and international arbitration

87b. Yes, but only in domestic arbitration

87c. Yes, but only in international arbitration

87d. No, virtual conferences and hearings are not available

88. In commercial arbitration, can an arbitral award be securely signed electronically by all involved arbitrators?

Note: Please answer Yes only if an electronically signed arbitral award will have the same validity and status as a paper document and no hard copy will be required to proceed with any subsequent step.

88a. Yes, in both domestic and international arbitration

88b. Yes, but only in domestic arbitration

88c. Yes, but only in international arbitration

88d. No, electronic arbitral awards are not available

89. Does the domestic arbitration institution(s), or other relevant body, publish statistics on the number of commercial cases by category resolved through arbitration, at least once a year?

Note: Please answer Yes only if the data for the year [20YY] are available.

- 89a. Yes, in both domestic and international arbitration
- 89b. Yes, but only in domestic arbitration
- 89c. Yes, but only in international arbitration
- 89d. No, such statistics are not published

90. Does the domestic arbitration institution(s), or other relevant body, publish statistics on the time it takes to resolve different categories of commercial cases through arbitration, at least once a year?

Note: Please answer Yes only if the data for the year [20YY] are available.

- 90a. Yes, in both domestic and international arbitration
- 90b. Yes, but only in domestic arbitration
- 90c. Yes, but only in international arbitration
- 90d. No, such statistics are not published

91. Does the domestic arbitration institution(s), or other relevant body, regularly publish summaries of commercial arbitral awards, access to which is free of charge?

Note: Please answer Yes even if parties' names are anonymized in the summaries of arbitral awards or if parties can opt out from publication of an award in their case. "Regularly" means that there should be no gaps in time.

- 91a. Yes, in both domestic and international arbitration
- 91b. Yes, but only in domestic arbitration
- 91c. Yes, but only in international arbitration
- 91d. No, such summaries are not published

92. Does the domestic arbitration institution(s), or other relevant body, publish statistics on the number of arbitrators disaggregated by sex, at least once a year?

Note: Please answer Yes only if the data for the year [20YY] are available.

- 92a. Yes, in both domestic and international arbitration
- 92b. Yes, but only in domestic arbitration
- 92c. Yes, but only in international arbitration
- 92d. No, such statistics are not published

2.2.2 Public Services for Mediation (includes gender)

93. In your jurisdiction, is there a domestic institution(s) that provides mediation services with respect to commercial disputes?

Note: Please answer Yes only if the mediation institution(s) is fully operational: that is, it considers cases in practice.

- 93a. Yes, both court-annexed mediation and private mediation are available
 - 93b. Yes, but only court-annexed mediation is available
 - 93c. Yes, but only private mediation is available
 - 93d. No, mediation services are not provided in practice
- N → 0 points on questions 94–100.

94. Does the domestic mediation institution(s) maintain an up-to-date publicly accessible roster of all qualified mediators, in which membership is not restricted based on nationality, sex, residency, or belonging to a specific bar association?

Note: Please answer Yes only if the rules of the domestic mediation institution(s) also do not preclude parties from choosing mediators outside the roster, with no restrictions being applied on the basis of nationality, sex, residency, or belonging to a specific bar association.

- 94a. Yes, in both court-annexed mediation and private mediation
- 94b. Yes, but only in court-annexed mediation
- 94c. Yes, but only in private mediation
- 94d. No, such a roster does not exist

95. In your jurisdiction, are there any financial incentives available in practice for the parties to resolve their commercial cases through mediation?

Note: Such incentives may include substantially lower mediation fees compared to court fees, return of court fees, income tax credits, free legal services, etc. Sanctions for refusing to engage in mediation are not considered financial incentives.

- 95a. Yes, in both court-annexed mediation and private mediation
- 95b. Yes, but only in court-annexed mediation
- 95c. Yes, but only in private mediation
- 95d. No, financial incentives are not available in practice

96. In commercial mediation, can parties file a request to mediate through a secure online platform of the domestic mediation institution or website of the mediator?

Note: Please answer Yes only if no hard copies of the request and supporting documents will be required from a party, including during the first mediation session.

- 96a. Yes, in both court-annexed mediation and private mediation
- 96b. Yes, but only in court-annexed mediation
- 96c. Yes, but only in private mediation
- 96d. No, parties cannot file a request to mediate online

97. In commercial mediation, can virtual meetings between parties and the mediator be securely held through an online platform or via videoconferencing?

- 97a. Yes, in both court-annexed mediation and private mediation
- 97b. Yes, but only in court-annexed mediation
- 97c. Yes, but only in private mediation
- 97d. No, virtual meetings are not available

98. In commercial mediation, can a mediation settlement agreement be securely signed electronically by all parties and the mediator?

Note: Please answer Yes only if an electronically signed mediation settlement agreement will have the same validity and status as a paper document and no hard copy will be required to proceed with any subsequent step.

- 98a. Yes, in both court-annexed mediation and private mediation
- 98b. Yes, but only in court-annexed mediation
- 98c. Yes, but only in private mediation
- 98d. No, no electronic mediation settlement agreements are not available

99. Does the domestic mediation institution(s), or other relevant body, publish statistics on the number of commercial cases per category resolved through mediation, at least once a year?

Note: Please answer Yes only if the data for the year [20YY] are available.

- 99a. Yes, in both court-annexed mediation and private mediation
- 99b. Yes, but only in court-annexed mediation
- 99c. Yes, but only in private mediation
- 99d. No, such statistics are not published

100. Does the domestic mediation institution(s), or other relevant body, publish statistics on the number of mediators disaggregated by sex, at least once a year? (Y/N)

Note: Please answer Yes only if the data for the year [20YY] are available.

100a. Yes, in both court-annexed mediation and private mediation

100b. Yes, but only in court-annexed mediation

100c. Yes, but only in private mediation

100d. No, such statistics are not published

2.2 ALTERNATIVE DISPUTE RESOLUTION (ADR)			
2.2.1 Public Services for Arbitration (includes gender)			
Indicators	FFP	SBP	Total Points
Availability of Commercial Arbitration Services (84a)	1	1	2
Setting Up a Roster of Arbitrators (85a)	1	1	2
Digitization of Arbitration	1	1	2
- Online platform for arbitration (86a)	0.33	0.33	0.66
- Virtual conferences and hearings in arbitration (87a)	0.33	0.33	0.66
- Electronic signing of an arbitral award (88a)	0.33	0.33	0.66
Transparency of Arbitration	1	1	2
- Statistics on the number of cases resolved through arbitration (89a)	0.25	0.25	0.5
- Statistics on the time to resolve cases through arbitration (90a)	0.25	0.25	0.5
- Publication of summaries of arbitral awards (91a)	0.25	0.25	0.5
- Statistics on the number of arbitrators disaggregated by sex (92a)	0.25	0.25	0.5
Total Points	4	4	8
2.2.2 Public Services for Mediation (includes gender)			
Indicators	FFP	SBP	Total Points
Availability of Commercial Mediation Services	1	1	2
- Both in court-annexed and private mediation (93a) OR	1 OR	1 OR	2 OR
- Only in court-annexed mediation (93b) OR	1 OR	1 OR	2 OR
- Only in private mediation (93c)	1	1	2
Setting Up a Roster of Mediators	1	1	2
- Both in court-annexed and private mediation (94a) OR	1 OR	1 OR	2 OR
- Only in court-annexed mediation (94b) OR	1 OR	1 OR	2 OR
- Only in private mediation (94c)	1	1	2
Financial Incentives to Use Mediation	1	1	2
- Both in court-annexed and private mediation (95a) OR	1 OR	1 OR	2 OR
- Only in court-annexed mediation (95b) OR	1 OR	1 OR	2 OR
- Only in private mediation (95c)	1	1	2
Digitalization of Mediation	1	1	2
Electronic submission of a request to mediate	0.33	0.33	0.66
- Both in court-annexed and private mediation (96a) OR	0.33 OR	0.33 OR	0.66 OR
- Only in court-annexed mediation (96b) OR	0.33 OR	0.33 OR	0.66 OR
- Only in private mediation (96c)	0.33	0.33	0.66
Virtual Meetings in Mediation	0.33	0.33	0.66
- Both in court-annexed and private mediation (97a) OR	0.33 OR	0.33 OR	0.66 OR
- Only in court-annexed mediation (97b) OR	0.33 OR	0.33 OR	0.66 OR
- Only in private mediation (97c)	0.33	0.33	0.66

Electronic Signing of a Mediation Agreement	0.33	0.33	0.66
- Both in court-annexed and private mediation (98a) OR	0.33 OR	0.33 OR	0.66 OR
- Only in court-annexed mediation (98b) OR	0.33 OR	0.33 OR	0.66 OR
- Only in private mediation (98c)	0.33	0.33	0.66
Transparency of Mediation	1	1	2
Statistics on the Number of Cases Resolved through Mediation	0.5	0.5	1
- Both in court-annexed and private mediation (99a) OR	0.5 OR	0.5 OR	1 OR
- Only in court-annexed mediation (99b) OR	0.5 OR	0.5 OR	1 OR
- Only in private mediation (99c)	0.5	0.5	1
Statistics on the Number of Mediators Disaggregated by Sex	0.5	0.5	1
- Both in court-annexed and private mediation (100a) OR	0.5 OR	0.5 OR	1 OR
- Only in court-annexed mediation (100b) OR	0.5 OR	0.5 OR	1 OR
- Only in private mediation (100c)	0.5	0.5	1
Total Points	5	5	10

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

PILLAR III—EASE OF RESOLVING A COMMERCIAL DISPUTE

Scores for Pillar III are calculated using the Normal Cumulative Density Function (CDF) transformation method on a scale of 0 to 100, where 0 and 100 represent the lowest and highest possible scores, respectively. The best and worst performers are identified based on the 5th and 95th percentiles of the collected data, except for the indicators on time for court litigation and time for arbitration. In the latter case, to identify the best performance, the topic draws on relevant international standards and academic literature. The worst performance for both indicators, however, is identified based on the 95th percentiles of the collected data—same as with the rest of indicators under Pillar III.

3.1 COURT LITIGATION

3.1.1 Reliability of Courts

The data for the Subcategory on Reliability of Courts are collected through firm-level surveys, using the following questions:

101. In the last three years, has this establishment had any commercial dispute: that is, a failure of any party to meet the terms or expectations of an agreement, including a contract, or a business relationship? (Y/N) *(not scored)*

102. Did this establishment use courts, arbitration, mediation, or conciliation to resolve or attempt to resolve its commercial disputes? (Y/N) *(not scored)*

103. In resolving commercial disputes, courts are independent and impartial.

- 103a. Strongly disagree
- 103b. Tend to disagree
- 103c. Tend to agree
- 103d. Strongly agree

104. Courts are an obstacle to business operations.

- 104a. No obstacle
- 104b. Minor obstacle
- 104c. Moderate obstacle
- 104d. Major obstacle

3.1.2 Operational Efficiency of Court Processes

The data for the Subcategory on Operational Efficiency of Court Processes are collected through expert consultation, as detailed below:

Parameters	
Business Location	The largest (most populous) city in the economy. The parameter is used in cases where regulations may not be applicable at a national level and vary across states or regions. In Pillar III, this parameter applies only in cases when the data are collected through expert consultations, not Enterprise Surveys. Specifically, the parameter is relevant for measures on time and cost for court litigation, time and cost to recognize a foreign judgment, and time and cost to enforce a final judgment.
Claim Value	The Dispute Resolution topic assumes that the claim value is equal to 20 x Economy GNI (gross national income) per capita. In addition, whenever 20 x Economy GNI per capita is less than US\$20,000, the topic will assume that the claim value is equal to US\$20,000.

According to the current practice, how much time and cost would it take to resolve a commercial dispute between two business entities through a local court? In this part of the Questionnaire, please respond to the questions based on the current practice only.

It is assumed that the dispute is tried on merits. Following the judgment of the first instance court, both parties file an appeal. The appellate court affirms the judgment, after which it becomes final.

Please respond in accordance with your experience and best estimate of the current practice.

105. Please estimate the total time, in calendar days, that it would take for the court of first instance to adjudicate this case, starting from the time of filing the complaint until a formal written judgment is delivered to the parties.

106. Please estimate the time, in calendar days, that the procedure of mandatory mediation would additionally add to the time to resolve the dispute at the court of first instance.

107. Please specify the time, in calendar days, that it would take to file and serve the complaint before the first instance court. *(not scored)*

108. Please specify the time, in calendar days, that it would take between the moment when the complaint is filed and served and the moment when the pre-trial hearing (or first hearing, whatever is applicable) takes place. *(not scored)*

109. Please specify the approximate number of court hearings that this dispute would require. *(not scored)*

110. Please specify the time, in calendar days, that it would take for the judge to prepare and issue the judgment after all hearings are held. *(not scored)*

111. Please specify the time, in calendar days, that it would take to deliver the formal written judgment to the parties after it has been issued. *(not scored)*

- 112. Please estimate total attorney fees for preparing and filing the complaint as well as representing the plaintiff before the court of first instance, in percentage to the claim value.**
- 113. Please estimate fees incurred by the plaintiff in the procedure of mandatory mediation, in percentage to the claim value.**
- 114. Please estimate fees of the first instance court incurred by the plaintiff, in percentage to the claim value.**
- 115. Please estimate the total time, in calendar days, that it would take for the appellate court to review the case, starting from the time of filing an appeal until a formal written ruling is delivered to the parties.**
- 116. Please estimate total attorney fees for preparing and filing the appeal as well as representing the plaintiff before the appellate court, in percentage to the claim value.**
- 117. Please estimate fees of the appellate court incurred by the plaintiff, in percentage to the claim value.**

According to the current practice, how much time and cost would it take for a local court to consider a request to recognize and enforce a foreign judgment? In this part of the Questionnaire, please respond to the questions based on the current practice only.

It is assumed that the dispute involves two business entities, and that the defendant resists recognition and enforcement.

Please respond in accordance with your experience and best estimate of the current practice.

- 118. As far as a foreign judgment is concerned, please indicate the name of the court that will have jurisdiction over this case. *(not scored)***
- 119. Please estimate the time, in calendar days, that it would take for the local court to consider a request for recognizing and enforcing a foreign judgment, starting from the time of filing the request until a formal written decision is delivered to the parties.**
- 120. Please estimate attorney fees, incurred by the plaintiff, for the process of recognizing and enforcing a foreign judgment, in percentage to the claim value.**
- 121. Please estimate court fees, incurred by the plaintiff, for the process of recognizing and enforcing a foreign judgment, in percentage to the claim value.**

According to the current practice, how much time and cost would it take to enforce a final domestic judgment? In this part of the Questionnaire, please respond to the questions based on the current practice only.

It is assumed that the dispute involves two business entities, and that the debtor is not cooperating. Type of enforcement: Seizure of bank account funds of the debtor and their transfer to the creditor

Please respond in accordance with your experience and best estimate of the current practice.

122. Please indicate the name of the enforcement institution that will have jurisdiction over this case. If in your jurisdiction enforcement matters are handled directly by courts, please indicate the name of the relevant court. (not scored)

123. Please specify the nature of this institution: (not scored)

- 123a. Court
- 123b. Other public sector body
- 123c. Private sector body
- 123d. Mixed (public-private sector) body

124. Please estimate the total time, in calendar days, that it would take for the relevant institution, after a request has been filed, to locate the bank account funds of the debtor, seize them, and complete their transfer to the creditor.

125. Would attorneys be typically involved in this case of compulsory enforcement? (Y/N)

N → proceed to question 127.

126. Please estimate attorney fees incurred by the creditor, in percentage to the claim value.

127. Please estimate the institution's fees incurred by the creditor, in percentage to the claim value.

128. In practice, are the institution's fees typically paid out of the debtor's seized funds? (Y/N)

3.2 ALTERNATIVE DISPUTE RESOLUTION (ADR)

3.2.1 Reliability of ADR

The data for the Subcategory on Reliability of ADR are collected through firm-level surveys, using the following questions:

129. Arbitration is a reliable alternative to courts for resolving commercial disputes.

- 129a. Strongly disagree
- 129b. Tend to disagree
- 129c. Tend to agree
- 129d. Strongly agree

130. Mediation or conciliation is a reliable alternative to courts for resolving commercial disputes.

- 130a. Strongly disagree
- 130b. Tend to disagree
- 130c. Tend to agree
- 130d. Strongly agree

3.2.2 Operational Efficiency of Arbitration Processes

The data for the Subcategory on Operational Efficiency of Arbitration Processes are collected through expert consultation, as detailed below:

Parameters	
Business Location	The largest (most populous) city in the economy. The parameter is used in cases where regulations may not be applicable at a national level and vary across states or regions. In Pillar III, this parameter applies only in cases when the data are collected through expert consultations, not Enterprise Surveys. Specifically, the parameter is relevant for measures on time and cost for arbitration and time and cost to recognize a foreign arbitral award.
Claim Value	The Dispute Resolution topic assumes that the claim value is equal to 20 x Economy GNI (gross national income) per capita. In addition, whenever 20 x Economy GNI per capita is less than US\$20,000, the topic will assume that the claim value is equal to US\$20,000.

According to the current practice, how much time and cost would it take to resolve a commercial dispute between two business entities through domestic arbitration?

If the dispute can be submitted to several domestic arbitration institutions, then please provide responses that would apply to the majority of commercial cases in [CITY NAME].

131. Please indicate the name of the domestic arbitration institution that will have jurisdiction over this case. (not scored)

132. Please estimate the total time, in calendar days, that it would take for the domestic arbitration institution to administer this case, starting from the time of filing a notice of arbitration until a formal written arbitral award is delivered to the parties.

133. Please estimate total attorney fees for preparing and filing the claim as well as representing the claimant before the domestic arbitration institution, in percentage to the claim value.

134. Please estimate arbitrators' fees incurred by the claimant, in percentage to the claim value.

135. Please estimate administrative fees of the domestic arbitration institution incurred by the claimant, in percentage to the claim value.

According to the current practice, how much time and cost would it take for a local court to consider a request to recognize and enforce a foreign arbitral award? In this part of the Questionnaire, please respond to the questions based on the current practice only.

It is assumed that the dispute involves two business entities, and that the defendant resists recognition and enforcement.

Please respond in accordance with your experience and best estimate of the current practice.

136. As far as a foreign arbitral award is concerned, please indicate the name of the local court that will have jurisdiction over this case. (not scored)

137. Please estimate the time, in calendar days, that it would take for the local court to consider a request for recognizing and enforcing a foreign arbitral award, starting from the time of filing the request until a formal written decision is delivered to the parties.

138. Please estimate attorney fees, incurred by the claimant, for the process of recognizing and enforcing a foreign arbitral award, in percentage to the claim value.

139. Please estimate court fees, incurred by the claimant, for the process of recognizing and enforcing a foreign arbitral award, in percentage to the claim value.

3.1 Court Litigation			
Indicators	FFP	SBP	Total Points
In Resolving Commercial Cases, Courts are Independent and Impartial (103)	20 (13.3%)	n/a	20 (13.3%)
Courts are Not an Obstacle to Business Operations (104)	20 (13.3%)	n/a	20 (13.3%)
Time for Court Litigation (105–106, 115)	17.5 (11.7%)	n/a	17.5 (11.7%)
Cost for Court Litigation (112–114, 116–117)	17.5 (11.7%)	n/a	17.5 (11.7%)
Time to Recognize a Foreign Judgment (119)	2.5 (1.7%)	n/a	2.5 (1.7%)
Cost to Recognize a Foreign Judgment (120–121)	2.5 (1.7%)	n/a	2.5 (1.7%)
Time to Enforce a Final Judgment (124)	10 (6.7%)	n/a	10 (6.7%)
Cost to Enforce a Final Judgment (125–128)	10 (6.7%)	n/a	10 (6.7%)
Total Points	100 (3.3%)	n/a	100 (66.7%)
3.2 Alternative Dispute Resolution (ADR)			
Indicators	FFP	SBP	Total Points
Arbitration is Reliable for Resolving Commercial Cases (129)	20 (6.7%)	n/a	20 (6.7%)
Mediation is Reliable for Resolving Commercial Cases (130)	20 (6.7%)	n/a	20 (6.7%)
Time for Arbitration (132)	15 (5%)	n/a	15 (5%)
Cost for Arbitration (133–135)	15 (5%)	n/a	15 (5%)
Time to Recognize a Foreign Arbitral Award (137)	15 (5%)	n/a	15 (5%)
Cost to Recognize a Foreign Arbitral Award (138–139)	15 (5%)	n/a	15 (5%)
Total Points	100	n/a	100 (33.3%)

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent).
FFP = Firm Flexibility Point; SBP = Social Benefits Point.

CHAPTER 10. MARKET COMPETITION–METHODOLOGY NOTE

I. MOTIVATION

There is substantial economic evidence that a fair level of market competition spurs economic growth by increasing industry and firm innovation and productivity, leading to better products, more and better jobs, and higher incomes.¹ By affecting market entry and exit, competition stimulates product innovation and service quality, protects consumers, and forces market operators to provide their products and services at cost.² But competition is rarely perfect. Markets fail either due to firms' behaviors or government interventions. Market power—a firm's ability to raise prices well above cost, offer a low-quality good or service, and drive out competition—must be kept in check.³

Governments have a wide range of tools to deter anticompetitive behaviors, promote market entry, ensure a fair level of competition, and reduce distortions created by market failures.⁴ Competition policy is the set of policies and laws that ensure that competition in the marketplace is not restricted in a way that reduces economic welfare.⁵ Crucial for the business environment and the economy, competition policy can help alleviate poverty and foster shared prosperity. In some major markets where governments are the sole or principal buyer (for example, education, health, and infrastructure), the design and implementation of government regulations directly influence market entry and firm behavior.⁶

Having a dynamic and competitive market is key for faster growth and lower prices, which in conjunction with other policies is crucial for poverty eradication. Having a well-enforced competition law helps poor producers as well as poor consumers by enforcing the breaking up of cartels, exposing dominant firms that engage in anticompetitive conduct to more competition, and by reducing barriers to entry, helping small firms enter the market and survive. Market entry provides a dual benefit to the poor, not only by helping them as consumers by putting downward pressure on prices, but also by expanding their employment and small business opportunities.⁷

This topic benchmarks key regulations that promote competitive behaviors and innovation from the perspective of the entire private sector, rather than considering their impact on an individual firm. It assesses regulations that deter anticompetitive firm behaviors, regulations that promote competitive behaviors in government markets, regulations that promote innovation, key public services provided to implement such regulations, and their efficient implementation.

II. INDICATORS

The Market Competition topic measures good practices related to the enforcement of competition policy, intellectual property rights and innovation policy, and regulations that focus on improving competition and innovation in markets where the government is a purchaser of services or goods across the three different dimensions, here referred to as pillars. The first pillar assesses the quality of regulations that promote market competition, covering de jure features of a regulatory framework that enable firms to participate in fair market conditions and innovate, and where firms can participate in open and competitive government markets. The second pillar measures the adequacy of public services that promote market competition, thus assessing the de facto provision of services that create an equal level of playing field in markets, and that foster and promote innovation. The third pillar measures the operational efficiency in the implementation of key services promoting market competition (reflecting both the ease of compliance with the regulatory framework and the effective provision of public services directly relevant to firms that contribute in practice to the promotion of market competition). Each pillar is divided into three categories defined by common features that inform the grouping: (1) good practices related to competition regulations and institutions; (2) good practices in the area of intellectual property rights and innovation; (3) and good practices in public

procurement from a competition perspective. Each category is further divided into subcategories. Each subcategory consists of several indicators, each of which may, in turn, have several components. Relevant points are assigned to each indicator and subsequently aggregated to obtain the number of points for each subcategory, category, and pillar. Table 1 includes a summary of all three pillars, along with their respective categories.

Table 1. Summary Table of All Three Pillars for Market Competition Topic

Pillar I—Quality of Regulations that Promote Market Competition (83 indicators)	
1.1	Competition (33 indicators)
1.1.1	Antitrust (12 indicators)
1.1.2	Merger Control (10 indicators)
1.1.3	State-Owned Enterprises Framework and Scope of Competition Law (4 indicators)
1.1.4	Enforcement of Competition Regulations (7 indicators)
1.2	Innovation and Technology Transfer (27 indicators)
1.2.1	Strength of Intellectual Property Rights Protection (11 indicators)
1.2.2	Licensing and Technology Transfer (5 indicators)
1.2.3	Fair Access to Innovation (includes environment) (5 indicators)
1.2.4	University-Industry Collaboration (6 indicators)
1.3	Bidding for Public Contracts (23 indicators)
1.3.1	Access and Firm's Participation (includes gender) (7 indicators)
1.3.2	Best Value for Money (includes gender and environment) (8 indicators)
1.3.3	Fairness of the Procurement Process (6 indicators)
1.3.4	Transparency of Key Procurement Documents (2 indicators)
Pillar II—Public Services that Promote Market Competition (58 indicators)	
2.1	Competition Authority (19 indicators)
2.1.1	Institutional Framework (9 indicators)
2.1.2	Advocacy and Transparency (10 indicators)
2.2	Innovation in Firms (17 indicators)
2.2.1	Institutional Framework to Support Innovation (4 indicators)
2.2.2	Digitalization of Intellectual Property Services (4 indicators)
2.2.3	Innovation Systems (includes gender) (9 indicators)
2.3	E-Procurement (22 indicators)
2.3.1	Digitalization of Procurement Procedures (includes environment) (15 indicators)
2.3.2	Transparency of Key Procurement Documents (includes gender) (7 indicators)
Pillar III—Implementation of Key Services Promoting Market Competition (19 indicators)	
3.1	Competition (9 indicators)
3.1.1	Simplified Merger Review (3 indicators)
3.1.2	Market Dynamism and Competitive Behaviors (6 indicators)
3.2	Innovation (2 indicators)
3.2.1	Proportion of Highly Innovative Firms (1 indicator)
3.2.2	Use of International Quality Certifications (1 indicator)
3.3	Public Procurement (8 indicators)
3.3.1	Time to Award Public Contracts (5 indicators)
3.3.2	Time to Receive a Payment from a Government Contract (1 indicator)
3.3.3	Firms' Perceptions on the Ease of Bidding (1 indicator)
3.3.4	Gender Gap in Government Suppliers (1 indicator)

1. PILLAR I. QUALITY OF REGULATIONS FOR MARKET COMPETITION

Table 2 shows the structure for Pillar I, the regulatory framework for market competition regulations. Each of this pillar's categories and subcategories will be discussed in more detail subsequently, following the structure of this table.

Table 2. Pillar I–Quality of Regulations for Market Competition

1.1	Competition
1.1.1	Antitrust
1.1.2	Merger Control
1.1.3	State-Owned Enterprise Framework and Scope of Competition Law
1.1.4	Enforcement of Competition Regulations
1.2	Innovation and Technology Transfer
1.2.1	Strength of Intellectual Property Rights Protection
1.2.2	Licensing and Technology Transfer
1.2.3	Fair Access to Innovation (includes environment)
1.2.4	University-Industry Collaboration
1.3	Bidding for Public Contracts
1.3.1	Access and Firm's Participation (includes gender)
1.3.2	Best Value for Money (includes gender and environment)
1.3.3	Fairness of the Procurement Process
1.3.4	Transparency of Key Procurement Documents

1.1 Competition

Category 1.1 is divided into four subcategories consisting of several indicators, each of which may, in turn, consist of several components.

1.1.1 Antitrust

The regulation of anticompetitive behaviors addresses, at its core, any practices that may distort healthy competition between the various actors within a given economy and may have a negative effect upon markets. The indicator aims to examine the overall quality of the competition regulations pertaining specifically to matters of antitrust, including anticompetitive agreements (both horizontal and vertical) and abuse of dominance practices. To this end, the legal framework should also provide selective exemptions of anticompetitive agreements only under specific circumstances.⁸ Therefore, Subcategory 1.1.1–Antitrust comprises twelve indicators (table 3).

Table 3. Subcategory 1.1.1–Antitrust

	Indicators	Components
1	Legal Framework Prohibits Anticompetitive Agreements	Framework forbids anticompetitive agreements
2	Legal Framework Distinguishes between which Agreements Restrict Competition by Object or Effect	Framework specifies which agreements are forbidden in and of themselves
3	Exemptions for Non-Competitive Agreements Must be Justified Based on Public Interest or Efficiency	i) Framework provides exemptions for anticompetitive agreements that advance public interests ii) Framework provides exemptions for anticompetitive agreements that promote efficiency or technical and economic progress
4	Exemption Regulations Require to Identify Efficiency, Harm and Consumer's Impact of the Exempted Agreement	Exemptions are granted contingent upon the conditions that they are efficiency enhancing, do not eliminate competition and they allow a fair share for consumers
5	Exemptions are Granted for a Certain Period of Time and Renewals are Reviewed	i) Exemptions are granted contingent upon a certain time period ii) Renewals are subject to review, including the original circumstances for which the exemption was originally granted
6	Cartels are Forbidden, and Firms are not Allowed to Use Efficiency Defense for Cartels	i) Framework specifically prohibits cartels per se ii) Firms are not allowed to justify cartels that are being investigated on the basis of efficiency
7	Legal Framework Prohibits Abuse of Dominance	Framework prohibits abuse of dominant position
8	Definition of Market Dominance and Abuse of Dominant Position	i) Framework defines market dominance ii) Framework defines when firms are abusing market dominance

9	Availability of Leniency Programs with Procedural Guarantees	i) Framework provides leniency program ii) Framework provides procedural guarantees to organizations that cooperate with Competition Authorities during an investigation
10	Cooperation with Competition Authorities Offers Confidentiality, Anonymity, and Whistleblower Protection	i) Framework provides confidentiality to firms that cooperate with the Competition Authority during an investigation ii) Framework provides anonymity to organizations that cooperate with the Competition Authority during an investigation iii) Framework provides whistleblower protection to firms that cooperate with the Competition Authority during an investigation
11	Leniency Programs Establish Clear Immunity Regimes	Framework provides full immunity to the first firm that self-reports
12	Incentives for Voluntary Compliance	Framework offers incentives for firms in cases of voluntary compliance

1.1.2 Merger Control

Good quality regulations affecting competition law also turn on how effective merger control is within the given economy. This is because mergers are considered to have either a positive or a negative effect on competition depending on the circumstances and context of the specific market.⁹ Competition law frameworks must therefore be able to respond to this nuance by ensuring that merger control regulations are clear, signaling the types of transactions that do not need to be reviewed, detailing the processes through which the review will be carried out and ensuring procedural fairness throughout the process. Therefore, Subcategory 1.1.2–Merger Control comprises ten indicators (table 4).

Table 4. Subcategory 1.1.2–Merger Control

	Indicators	Components
1	Scope of Merger Control Regulations	Framework does not exclude sectors or firms from merger control regulations
2	Legal Framework Establishes the Economic Criteria used to Identify which Transactions Fall under Merger Control Regime	Framework provides economic quantitative and qualitative criteria for identifying which transactions fall under merger control regulations
3	Legal Framework Establishes a Merger Control Procedure to Assess Competition Distortions	Framework specifies when a transaction must be notified and whether that notification is ex ante or ex post
4	Legal Framework Establishes Clear Guidelines and Thresholds for Merger Notifications, Including Individual and Aggregate Thresholds	i) Framework establishes thresholds for merger notifications ii) Framework specifies whether thresholds are individual, aggregate or both
5	Existence of a Multi-Phased Merger Review Procedure with Specific Statutory Time Limits	i) Multi-phased merger review procedure available in the economy ii) Framework mandates procedure to be completed within set statutory time limits
6	Existence of a Simplified Merger Procedure	Framework provides for a simplified merger review procedure for transactions that are unlikely to create competition distortions
7	Requirement to Conduct a Substantive Economic Assessment on the Competitive Effects of a Transaction Submitted for a Merger Control Review	Framework requires the Competition Authority to conduct a substantive economic assessment on competitive effects of a merger transaction
8	Availability of Legitimate Justifications for Increases in Market Power Resulting from a Merger or Acquisition	Framework allows firms to justify an increase in market power when the transaction increases efficiency, when the firm would otherwise exit the market, when there is an underlying public interest
9	Merger Remedies should be Effective, and the Competition Authority should have the Authority to Ensure Compliance	i) Framework confers power to Competition Authority to impose a set of remedies to guarantee that the merger maintains, restores and does not distort competition ii) Remedies imposed by the Competition Authority must address competitive harm identified, must be the least intrusive, and must be capable of being effectively implemented

		iii) Competition Authority has the jurisdictional power to enforce a remedy order directly or indirectly
10	Powers to Block Mergers that May Otherwise Adversely Impact Competition and Sanctions for Failure to Notify	i) Framework confers Competition Authority the power to block mergers

1.1.3 State-Owned Enterprises Framework and Scope of Competition Law

State-owned enterprises (SOEs) constitute integral players of most markets across the world and are usually found competing with private entities in key sectors of an economy.¹⁰ It is therefore vital that SOEs do not enjoy advantages or disadvantages in the form of exemptions that would distort adequate enforcement of competition law within a given market,¹¹ and would allow SOEs to justify their anticompetitive behavior. In order to ensure competitive neutrality within an economy, the regulatory framework must ensure SOEs are subject to competition law enforcement in the same way as other actors in the market. Therefore, Subcategory 1.1.3–State-Owned Enterprises Framework and Score of Competition Law has four indicators (table 5).

Table 5. Subcategory 1.1.3–State-Owned Enterprises Framework and Scope of Competition Law

	Indicators	Components
1	Requirement to Justify Creation of SOEs Based on Economic, Social, and/or Sustainability Criteria and Requirement to Subject the Creation of an SOE to a Review by the Competition Authority	i) Need to justify the creation of SOEs based on economic, social, and sustainability criteria ii) Requirement that Competition Authority reviews the creation of SOE
2	Competition Law Applies to All SOEs and Sectors of the Economy	i) Exclusion of certain sectors of the economy from regulations ii) Exclusion of certain SOEs or legal monopolies from regulations
3	Requirement to Carry Out an Impact Evaluation Assessment to Justify SOE Commercial Activities	Requirement that impact evaluation assessments are carried out throughout the life cycle of the SOE to ensure activities are competitively neutral
4	Existence of Procedure to Exclude or Exempt Certain Firms or Sectors from the Application of Competition Law and Merger Control is Based on Economic, Social or Sustainability Criteria	i) Framework provides for an exclusion regime from the application of competition law ii) Exclusion regime requires a decision to be justified on economic, social, or sustainability grounds

Note: SOEs = State-Owned Enterprises.

1.1.4 Enforcement of Competition Regulations

To ensure that the competition law framework is effective, adequate enforcement must also be ensured within the economy because private enforcement is recognized as being able to substantially improve the functioning of a competition regime.¹² To this end, regulations should create the necessary balance¹³ and thus not only forbid anticompetitive agreements but should provide the best fit-for-purpose tools to investigate anticompetitive practices and apply a range of sanctions. At the same time, procedural guarantees in investigations should be present in order to allow parties to exercise their rights of defense. Therefore, Subcategory 1.1.4–Enforcement of Competition Regulations has seven indicators (table 6).

Table 6. Subcategory 1.1.4–Enforcement of Competition Regulations

	Indicators	Components
1	Procedural and Fairness Guarantees during Investigation	Framework provides for the following procedural fairness guarantees: i) At the beginning of an investigation, the Competition Authority issues a notice of the reasons and concerns leading to the investigation ii) Investigation procedures are written iii) The investigation phase of the Competition Authority must be completed within a set amount of time

		iv) Parties are provided a reasonable opportunity to consult with the Competition Authority v) Parties have a reasonable opportunity to be heard and provide evidence or testimony in their defense (This includes testimony of experts, cross-examination of testifying witnesses and the opportunity to review or rebut any evidence brought forward) vi) Parties are provided with an opportunity to settle or to reach a consent agreement
2	Legal Framework Defines What Constitutes Confidential Information	Framework sets out clear provisions over what constitutes confidential information in antitrust and merger control procedures
3	Adequate Powers and Resources to Investigate and to Enforce and Impose Sanctions are Conferred to Competition Authority	i) Framework provides the Competition Authority with the necessary power to investigate illegal anticompetitive practices ii) Framework grants the Competition Authority with powers to investigate whether firms have concluded a transaction that might raise competition concerns
4	Competition Authorities have the Powers to Collect Monetary Sanctions and to Enforce Non-Monetary Sanctions	i) Framework confers the Competition Authority with the power to collect monetary sanctions ii) Framework confers the Competition Authority with the power to enforce non-monetary sanctions
5	Competition Authority can Investigate a Failure to Notify Transactions and Impose Sanctions Based on the Firm's Turnover	i) Framework confers the Competition Authority with the power to investigate a failure to notify transactions ii) Framework confers the Competition Authority with the power to impose sanctions based on the firm's turnover
6	Decisions of the Competition Authority are Binding and/or Self-Enforceable and Designation of an Independent Body to Review Decisions of the Competition Authority, and Action for Damages is Allowed	i) Framework considers the Competition Authority's decisions as binding and enforceable ii) Framework designates an independent body to review decisions of the Competition Authority iii) Framework allows firms to file for an action for damages resulting from infringement of competition law
7	An Overall Cap on Fines is Provided in the Regulatory Framework	i) Framework establishes a cap on fines that can be imposed on a firm ii) Framework sets out the following criteria to be used to determine the maximum cap on fines: a percentage of the firm's global or relevant turnover, the firm's gain or harm caused by the anticompetitive practice, or a fixed amount

1.2 Innovation and Technology Transfer

Category 1.2 has four subcategories consisting of several indicators, each of which may, in turn, consist of several components.

1.2.1 Strength of Intellectual Property Rights Protection

Strong intellectual property rights (IPR) protection promotes research and development and facilitates innovation. A broad range of coverage by intellectual property (IP) type including copyrights, patents, and trademarks, as well as a high level of enforcement determines the confidence in IP systems.¹⁴ Therefore, Subcategory 1.2.1–Strength of Intellectual Property Rights Protection has eleven indicators (table 7).

Table 7. Subcategory 1.2.1–Strength of Intellectual Property Rights Protection

	Indicators	Components
1	Provisions for Establishment of Collective Management Organizations	Provisions for establishment of Collective Management Organizations
2	Patentability Requirements (Novelty, Inventive Step, Industrial Applicability) for Inventions and Experimental Use Exception or Research Exemption for Patents	i) Patentability requirements (novelty, inventive step, industrial applicability) for inventions ii) Experimental use exception or research exemption for patents
3	Patent Protection Reaching Back to the Filing Date	Patent protection reaching back to the filing date

4	Duration of Patent and Trademark Protection	i) Duration of patent protection ii) Duration of trademark protection
5	Opposition Mechanisms for Patents and Trademarks	i) Opposition mechanisms for patents ii) Opposition mechanisms for trademarks
6	Provisions for Information Submission System for Patents	Provisions for Information Submission System for patents
7	Public Disclosure of Patent	Public disclosure of patent
8	Trademark Use Obligation, Related Grace Period	i) Trademark use obligation ii) Grace period
9	Protection for Well-Known Marks	Protection for well-known marks
10	Actions or Remedies to Enforce Copyright, Patent, and Trademark Protection	i) Actions or remedies to enforce copyright protection ii) Actions or remedies to enforce patent protection iii) Actions or remedies to enforce trademark protection
11	Arbitration of Copyright, Patent, and Trademark Disputes	i) Arbitration of copyright disputes ii) Arbitration of patent disputes iii) Arbitration of trademark disputes

1.2.2 Licensing and Technology Transfer

Licensing plays a crucial role in technology transfer. Thus, ensuring adequate licensing procedures and guidelines for setting royalties can promote confidence of both IP holders and licensees.¹⁵ Therefore, Subcategory 1.2.2–Licensing and Technology Transfer has five indicators (table 8).

Table 8. Subcategory 1.2.2–Licensing and Technology Transfer

	Indicators	Components
1	Provisions on Copyright, Patent, Trademark Licensing Procedures	i) Provisions on copyright licensing procedures ii) Provisions on patent licensing procedures iii) Provisions on trademark licensing procedures
2	Guidelines for Setting Fair and Non-Discriminatory Royalties	Guidelines for setting fair and non-discriminatory royalties
3	Recordal of Change of Patent Owner and Related Timeframe	i) Recordal of change of patent owner ii) Timeframe for recordal of change of patent owner
4	Temporary Licenses/Waivers for Patents	Temporary licenses/waivers for patents
5	Disclosure of Patent and Trademark Licensing Agreements to IPO	i) Disclosure of patent licensing agreements to IPO ii) Disclosure of trademark licensing agreements to IPO

Note: IPO = Intellectual Property Office.

1.2.3 Fair Access to Innovation (includes environment)

Open access promotes transparency and access to information.¹⁶ Appropriate safeguards to public interest or environmental sustainability considerations help ensure fair use of innovation.¹⁷ Therefore, Subcategory 1.2.3–Fair Access to Innovation (includes environment) has five indicators (table 9).

Table 9. Subcategory 1.2.3– Fair Access to Innovation (includes environment)

	Indicators	Components
1	Open Access and Open-Source Definition	i) Open access definition ii) Open-source definition
2	Scope of Permissible Open Access Research Activities	Scope of permissible open access research activities
3	Provisions Safeguarding Public Interest	Provisions safeguarding public interest
4	Guidelines for IP-Based Financing	Guidelines for IP-based financing
5	Provisions on IP Relevant for Environmental Sustainability	Provisions on IP relevant for environmental sustainability

Note: IP = Intellectual Property.

1.2.4 University-Industry Collaboration

University-industry collaboration is important for the commercialization of basic research. Strong frameworks outlining institutional IP policies promote confidence in commercialization models.¹⁸ Therefore, Subcategory 1.2.4–University-Industry Collaboration has six indicators (table 10).

Table 10. Subcategory 1.2.4–University-Industry Collaboration

	Indicators	Components
1	Standard Model Research Collaboration Agreements	Standard model research collaboration agreements
2	Grace Period for Publishing Research Results without Compromising Patentability	Grace period for publishing research results without compromising patentability
3	Patent Ownership Developed within Public Research Organizations	Patent ownership developed within public research organizations
4	Institutional IP Policies of Public Research Organizations	Institutional IP policies of public research organizations
5	University Spin-offs	University spin-offs
6	Financial Incentives for Commercializing Research	Financial incentives for commercializing research

Note: IP = Intellectual Property.

1.3 Bidding for Public Contracts

Category 1.3 has four subcategories consisting of several indicators, each of which may, in turn, consist of several components.

1.3.1 Access and Firm's Participation (includes gender)

A robust regulatory framework is crucial for firms to participate in markets where the government is a purchaser. The quality of regulations that promote market access (entry) and competition for such firms ensure the basic framework that can benefit the whole private sector through open and competitive procurement as the default approach to public contracts. This is established through clearly defined guidelines on the procedures for framework agreements and setting out the terms and conditions for participation in public tenders through clear rules on content and participation. Therefore, Subcategory 1.3.1–Access and Firm's Participation (includes gender) has seven indicators (table 11).

Table 11. Subcategory 1.3.1–Access and Firm's Participation (includes gender)

	Indicators	Components
1	Open and Competitive Procurement as the Default	Open procurement is the default method for tendering a contract
2	Restrictions to Foreign Firms to Participate in Public Procurement	<ul style="list-style-type: none"> i) Framework does not impose participation or award restrictions on foreign firms ii) Framework does not require foreign firms to have partnerships with domestic firms to be eligible to participate in a tender iii) Framework does not require foreign firms to own subsidiaries in domestic economy to be eligible to participate
3	Ability to Divide Contracts into Lots	Framework provides for division of contracts in lots
4	Legal Deadline for Procuring Entities to Process Payments to the Contractor is Established	Framework applicable to procuring entities establishes a timeframe within which the entity must process a payment once an invoice has been received
5	Procurement Procedures for Framework Agreements are Established	Framework outlines a designated procedure for awarding contracts based on a framework agreement where contracts are awarded following a competitive two-stage process
6	Promoting Gender Equality in Public Procurement	Framework includes gender-specific provisions that promote gender equality in public procurement
7	Tender and Contractual Mechanisms to Promote SME Participation	Framework provides for preferential treatment approaches for Small and Medium Enterprises

Note: SME = Small and Medium Enterprises.

1.3.2 Best Value for Money (includes gender and environment)

Ensuring public money is spent in the most efficient way lies at the heart of public procurement regulation. It is therefore crucial to identify whether governments have adopted good regulatory practices in their selection of public contracts by conducting a clear and thorough evaluation of total and life cycle costs of public contracts before awarding contracts, in addition to having clear criteria as to how to establish the most economically advantageous tender considerations. Therefore, Subcategory 1.3.2–Best Value for Money (includes gender and environment) has eight indicators (table 12).

Table 12. Subcategory 1.3.2–Best Value for Money (includes gender and environment)

	Indicators	Components
1	Criteria for Identifying Abnormally Low Bids are Established	Framework establishes criteria for identifying abnormally low bids
2	Designation of Specialized Tendering Methods for Innovation Procurement	Framework designates specific tendering procedures for innovation procurement
3	Incorporation of Sustainability Clauses in Standard Bidding Documents	Framework establishes that standard bidding documents must contain sustainability clauses for all or some model documents
4	Incentives to Include Environmental Considerations in Tenders	Framework provides incentive for preparing bids with environmentally friendly components
5	Mechanisms to Introduce Gender-Responsive Public Procurement	Framework includes the following mechanisms: gender analysis in needs assessment, the principle of equal pay and non-discrimination and/or exclusion grounds for firms that have violated gender equality obligations, and award criteria with gender dimension.
6	Market-Based Tools to Estimate Contract Value	Framework establishes tools that must be used when procuring entities prepare to estimate the contract value of new procurement opportunities, including, market analysis, feasibility study and/or historical data from similar projects or tenders
7	Total Cost of Ownership and Life Cycle Cost Considerations are used in Bid Evaluation	i) Framework defines project life cycle cost ii) Framework defines total cost of ownership
8	Most Economically Advantageous Tender is the Preferred Evaluation Criteria	i) Framework provides for most economically advantageous tender or best value for money criteria ii) Framework explicitly recommends the preference to use Most Economically Advantageous tender criteria over lower price criteria

1.3.3 Fairness of the Procurement Process

Effective competition in government markets needs a public procurement framework that protects the fairness of tender processes. The tools that typically promote fairness in these cases aim at ensuring equal opportunity and treatment of bidders. Unequal treatment not only distorts the competitive process to award a contract but can also have detrimental effects on market entry. Fairness of the procurement process can only be clearly established through the procedural guarantees recognized for the granting of public contracts, including such aspects as a clear standstill period between contract award notice and the signing of the contract, the minimum duration between the notice and the award, the obligation to notify firms of the decisions, and adequate recourse to appeal. Therefore, Subcategory 1.3.3–Fairness of the Procurement Process has six indicators (table 13).

Table 13. Subcategory 1.3.3–Fairness of the Procurement Process

	Indicators	Components
1	Standstill Period between Contract Award Notice and Contract Signing to Allow Aggrieved Bidders to Challenge the Decision	Framework establishes a mandatory standstill period between the public notice of an award and contract signing to allow unsuccessful bidders to challenge the decision
2	Minimum Duration between Publication of Tender Notice and	Framework sets a minimum timeframe between advertisement of a tender notice and a submission deadline for all procurement procedures

	Submission Deadline is Clearly Defined	
3	Prohibition of Dividing Contracts to Circumvent Open Tendering Thresholds	Framework prohibits the splitting of contracts for the purpose of circumventing thresholds for open tendering
4	Obligation to Notify Firms of Procurement Decisions and Legal Framework Establishes How Clarification Requests from Potential Bidders should be addressed	i) Framework requires that clarification requests from potential bidders be communicated to all bidders ii) Framework mandates communication of an award decision to all bidders
5	Availability of Specialized Procurement Tribunals and the Right to Appeal its Decisions	i) Framework designates a specialized and independent authority to receive procurement challenges filed by firms on decisions issued by the procuring entities ii) Framework establishes the right for an aggrieved bidder to appeal decisions on challenges made by the authority that receives the procurement challenges
6	Time Limits to Resolve Appeals and Legal Recourses Granted to Firms When there are Delays in Resolving Appeals	i) Framework establishes legally binding time limits to challenge a review process ii) Framework establishes legal recourse for an aggrieved bidder experiencing delays in either challenge or review processes for all or some types of challenges

1.3.4 Transparency of Key Procurement Documents

Transparency is a core principle of high-quality public procurement. An open and transparent procurement process improves competition and increases efficiency. Transparency-enhancing measures are, in general, consistent with the promotion of competition. They promote competition by informing suppliers of opportunities to compete and by giving them confidence that bids will be assessed objectively on their merits—thereby increasing their incentive to bid.¹⁹ Transparency can only be guaranteed when it is established through the public procurement process. As a result, this calls for a continuous and effective publication at every stage of the procurement procedure. Therefore, Subcategory 1.3.4–Transparency of Key Procurement Documents has two indicators (table 14).

Table 14. Subcategory 1.3.4–Transparency of Key Procurement Documents

	Indicators	Components
1	Publication of Procurement Plans, Notices, Tender Documents, and Award Decisions	i) Framework establishes that procurement plans should be made publicly available ii) Framework establishes that tender notices should be made publicly available iii) Framework establishes that tender documents should be made publicly available iv) Framework establishes that award decisions should be made publicly available
2	Publication of Contracts and Contract Amendments	Framework establishes that contracts and contract amendments should be made publicly available

2. PILLAR II. PUBLIC SERVICES THAT PROMOTE MARKET COMPETITION

Table 15 shows the structure for Pillar II, public services that promote market competition. Each of this pillar's categories and subcategories will be discussed in more detail subsequently, following the structure of this table.

Table 15. Pillar II–Public Services that Promote Market Competition

2.1	Competition Authority
2.1.1	Institutional Framework
2.1.2	Advocacy and Transparency
2.2	Innovation in Firms
2.2.1	Institutional Framework to Support Innovation

2.2.2	Digitalization of Intellectual Property Services
2.2.3	Innovation Systems (includes gender)
2.3	E-Procurement
2.3.1	Digitalization of Procurement Procedures (includes environment)
2.3.2	Transparency of Key Procurement Documents (includes gender)

2.1 Competition Authority

Category 2.1 has two subcategories consisting of several indicators, each of which may, in turn, consist of several components.

2.1.1 Institutional Framework

Having a Competition Authority is key to effectively enforcing competition regulations and signaling a level playing field in the market.¹³ Competition authorities must operate within a clear and independent framework to investigate firm behaviors and implement sanctions to deter anticompetitive practices.¹⁴ By focusing on the institutional framework and the quality of the enforcement of competition regulations, the indicator serves as a proxy for the de facto operationalization of competition authorities. Therefore, Subcategory 2.1.1–Institutional Framework has nine indicators (table 16).

Table 16. Subcategory 2.1.1–Institutional Framework

	Indicators	Components
1	Competition Authority is Operationally Independent	Competition Authority is operationally independent
2	Competition Authority has a Clear and Non-Overlapping Mandate	Co-existing authorities that are responsible for protecting and fostering competition do not have overlapping mandates
3	Establishment of Procedure for Selection and Dismissal of Board Members	i) Due process for the appointment of the Competition Authority's board members ii) Due process to dismiss the Competition Authority's board members
4	Term Limits for Board Members of the Competition Authority	Framework sets out an official office term in questions for board members of the Competition Authority
5	Mechanisms are Established for Competition Authorities to Cooperate with Foreign Competition Authorities	Existence of established cooperation mechanisms between domestic and foreign Competition Authorities
6	Cooling off Period after Term Limits for Board Members of Competition Authority for Private Sector Jobs in Previously Investigated Companies	Cooling-off period during which board members of the Competition Authority cannot take jobs in previously investigated companies
7	Conflict of Interest Rules are Applied to Employees of the Competition Authority	Conflict of interest rules are applied to case-handlers of the Competition Authority
8	Competition Authority Issues Opinions on Policies and Regulations	Competition Authority has the mandate to issue opinions on government policies and regulations to ensure that they do not hamper competition
9	Competition Authority's Opinions are Binding	Competition Authority opinions are binding

2.1.2 Advocacy and Transparency

Through competition advocacy a competition agency can influence government policies by proposing alternatives that would be less detrimental to economic efficiency and consumer welfare. It can serve as a buttress against lobbying and economic rent-seeking behavior by various interest groups. And it can foster greater accountability and transparency in government economic decision making and promote sound economic management and business principles in both the public and private sectors. This indicator also benchmarks competition authorities' role in promoting accessibility and transparency by measuring whether the Competition Authority publishes its decisions and the legal and economic justification behind them; issues guidance/advocacy reports on antitrust and merger control; and enforces sanctions. Therefore, Subcategory 2.1.2–Advocacy and Transparency has ten indicators (table 17).

Table 17. Subcategory 2.1.2–Advocacy and Transparency

	Indicators	Components
1	Issuance of Guidance Documents on Horizontal and Vertical Agreements	i) Competition Authority issues guidance documents on horizontal agreements ii) Competition Authority issues guidance on vertical agreements iii) Competition Authority issues guidance on cooperation agreements
2	Issuance of Guidance Documents on Abuse of Dominance	Competition Authority issues guidance documents on abuse of dominance
3	Issuance of Guidance Documents on Leniency Programs	Competition Authority issues guidance documents on leniency programs
4	Issuance of Guidance on Market Definition	Competition Authority issues guidance documents on market definition
5	Issuance of Guidance Documents on Competition-Related Issues in Digital Platforms	Competition Authority issues guidance documents on competition-related issues in digital platforms
6	Issuance of Guidance on Merger Control	Competition Authority issues guidance documents on merger control
7	Issuance of Analytical Reports on Competition	Competition Authority may issue analytical reports on markets, behaviors, or practices from the perspective of competition policy
8	Organization of Workshops to Disseminate Competition Policy	Competition Authority organizes workshops or webinars to disseminate competition policy to firms
9	Online Publication of all Antitrust and Merger Control Decisions and Exemptions	i) Competition Authority publishes all antitrust and merger control decisions online ii) Competition Authority must publish decision on exemption of SOE from antitrust and merger control regulations online
10	Electronic Notification of Transaction for Merger Control	Firms may file notification of a transaction subject to merger control regulations electronically

Note: SOE = State-Owned Enterprise.

2.2 Innovation in Firms

Category 2.2 has three subcategories consisting of several indicators, each of which may, in turn, consist of several components.

2.2.1 Institutional Framework to Support Innovation

Strong institutional mechanisms are important to support innovation.²⁰ Therefore, Subcategory 2.2.1–Institutional Framework to Support Innovation has four indicators (table 18).

Table 18. Subcategory 2.2.1–Institutional Framework to Support Innovation

	Indicators	Components
1	Pro-Bono or Low-Cost Legal Assistance Offered by IPO to IP Licensees	Pro-bono or low-cost legal assistance offered by IPO to IP licensees
2	Availability of Information Submission System in Practice	Availability of Information Submission System in practice
3	Public Consultations on IP Laws and Regulations	Public consultations on IP laws and regulations
4	Public Body Responsible for Participation of Firms in Development of Technical Standards	Public body responsible for participation of firms in development of technical standards

Note: IP = Intellectual Property; IPO = Intellectual Property Office.

2.2.2 Digitalization of Intellectual Property Services

Digitalization of intellectual property services promotes access to IP rights and facilitates IPR protection and technology transfer, for instance through license of rights databases.²¹ Therefore, Subcategory 2.2.2–Digitalization of Intellectual Property Services has four indicators (table 19).

Table 19. Subcategory 2.2.2–Digitalization of Intellectual Property Services

	Indicators	Components
1	Availability of License of Rights Database	Availability of license of rights database
2	Availability of Electronic Database on Locally Registered IPR	Availability of electronic database on locally registered IPR
3	Availability of Online Platform for IP Holders to Manage IPR Electronically and Scope of its Features	i) Availability of online platform for IP holders to manage IPR electronically ii) Scope of electronic management features available through online platform
4	Online Publication of List of Qualified IP Professionals by the IPO	Online publication of list of qualified IP professionals by the IPO

Note: IP = Intellectual Property; IPO = Intellectual Property Office; IPR = Intellectual Property Rights.

2.2.3 Innovation Systems (includes gender)

Innovation systems contribute to the diffusion of innovation through increased collaboration, technical assistance, or financial incentives.²² Therefore, Subcategory 2.2.3–Innovation Systems (includes gender) has nine indicators (table 20).

Table 20. Subcategory 2.2.3–Innovation Systems (includes gender)

	Indicators	Components
1	Availability of Technology Transfer Offices	Availability of technology transfer offices
2	Type of Regulatory Approaches to Enable Technology Generation	Type of regulatory approaches to enable technology generation
3	Availability of Innovation Incubators	Availability of innovation incubators
4	Availability of Innovation Accelerators	Availability of innovation accelerators
5	Government Financial Assistance to Private Incubators/Accelerators	Government financial assistance to private incubators/accelerators
6	Public Research Organizations Technical Assistance to Private Incubators/Accelerators	Public research organizations technical assistance to private incubators/accelerators
7	Availability of Incubators/Accelerators that Target Women Entrepreneurs	Availability of incubators/accelerators that target women entrepreneurs
8	Availability of Science and Technology Parks	Availability of science and technology parks
9	Availability of Innovation Clusters	Availability of innovation clusters

2.3 E-Procurement

Category 2.3 has two subcategories consisting of several indicators, each of which, in turn, consist of several components.

2.3.1 Digitalization of Procurement Procedures (includes environment)

E-procurement matters because it has the potential to save time, create efficiency, and help new firms access the market. E-procurement also facilitates sustainable practices in public procurement through features such as environmental labels. Research suggests that e-procurement facilitates the entry of higher quality contractors.¹⁷ In addition, digital technologies provide a competitive edge by improving the speed and quality of procurement, reducing risk, and enhancing innovation. They can also be used to enhance the quality of public service delivery and quality of competition in government markets.²³ Web-based platforms

for making online payments for public procurement services prove to enhance efficiency and cost effectiveness. Therefore, Subcategory 2.3.1–Digitalization of Procurement Procedures (includes environment) has fifteen indicators (table 21).

Table 21. Subcategory 2.3.1 Digitalization of Procurement Procedures (includes environment)

	Indicators	Components
1	Availability of Central E-Procurement Portal	Existence of an operational central electronic public procurement (e-procurement) portal
2	Registering as a Vendor	E-procurement portal includes registering as a vendor
3	Asking the Procuring Entity for Clarifications and Notification of Decisions Electronically	i) E-procurement portal includes asking the procuring entity for clarifications ii) E-procurement portal includes notification of decisions
4	Submitting Tenders Electronically	E-procurement portal includes submitting tenders electronically
5	Open Bids Electronically and Virtual Workspace to Manage the Tender Procedure	i) E-procurement portal includes opening bids electronically ii) E-procurement portal includes a virtual workspace to manage the tender procedure
6	Submitting Bid Security Electronically and Performance Guarantee with Electronic Validation	i) E-procurement portal includes submitting bid guarantee electronically with electronic validation ii) E-procurement portal includes submitting performance guarantee electronically with electronic validation
7	Contract Signing Electronically	E-procurement portal includes contract signing electronically
8	E-Contract Management and Implementation Module	E-procurement portal includes an e-contract management and implementation module
9	Submitting Invoices to the Procuring Entity	E-procurement portal includes submitting invoices to the procuring entity
10	Receiving Payments from the Procuring Entity Electronically	E-procurement portal includes receiving payments from the procuring entity electronically
11	Module for Framework Agreement Management	E-procurement portal includes a module for framework agreement
12	E-Reverse Auction Module	E-procurement portal includes an e-reverse auction module
13	E-Catalogue of Approved Suppliers	E-procurement portal includes an e-catalogue of approved suppliers
14	Electronic Green Catalogues	E-procurement portal includes electronic green catalogues
15	Applying for Vendor Eco-Certifications or Eco/Labels Electronically	E-procurement portal includes applying for vendor eco-certifications or eco/labels electronically

2.3.2 Transparency of Key Procurement Documents (includes gender)

The availability of information promotes equal access for all types of businesses, including small and medium enterprises (SMEs), by reducing the possibility of large or well-connected firms gaining an advantage because of information asymmetries, and potentially increases competition for government contracts.¹⁶ Therefore, Subcategory 2.3.2–Transparency of Key Procurement Documents (includes gender) has seven indicators (table 22).

Table 22. Subcategory 2.3.2–Transparency of Key Procurement Documents (includes gender)

	Indicators	Components
1	Accessing Notices on Procurement Opportunities Electronically	E-procurement portal includes tender notices
2	Accessing Bidding Documents Electronically	E-procurement portal includes tender documents
3	Accessing Award Decisions (Including Their Rationale) Electronically	E-procurement portal includes awards and their rationale
4	Accessing Contracts and Contract Amendments Electronically	i) E-procurement portal includes contracts ii) E-procurement portal includes contract amendments
5	Access to Specifications, Standards, or Criteria for Eco-Labels and Environmentally Preferable Goods and Services Electronically	E-procurement portal includes sustainability standards, eco-labels and environmentally preferable foods and services

6	Publication of Open Data in Machine Readable Format on Suppliers Contracts and Tenders	i) Existence of data portal that provides open access to data on tenders ii) Existence of data portal that provides open access to data on suppliers
7	Gender - Publication of Open Data on Tenders and Contracts Disaggregated by Sex	E-procurement portal collects and publishes data on sex-disaggregated data on firms that have participated in tenders

3. PILLAR III. IMPLEMENTATION OF KEY SERVICES PROMOTING MARKET COMPETITION

Table 23 shows the structure for Pillar III, implementation of key services promoting market competition. Each of this pillar's categories and subcategories will be discussed in more detail subsequently, following the structure of this table.

Table 23. Pillar III–Implementation of Key Services Promoting Market Competition

3.1	Competition
3.1.1	Simplified Merger Review
3.1.2	Market Dynamism and Competitive Behaviors
3.2	Innovation
3.2.1	Proportion of Highly Innovative Firms
3.2.2	Use of International Quality Certifications
3.3	Public Procurement
3.3.1	Time to Award Public Contracts
3.3.2	Time to Receive a Payment from a Government Contract
3.3.3	Firm's Perceptions on the Ease of Bidding
3.3.4	Gender Gap in Government Suppliers

3.1 Competition

Category 3.1 has three subcategories consisting of several indicators, each of which, in turn, consist of several components.

3.1.1 Simplified Merger Review

Inadequate merger review processes and ineffective competition policy implementation can have negative effect on the economy (for example, by delaying mergers that do not raise concerns).¹⁸ Poorly implemented review processes can also undermine firm growth by discouraging firms from merging if the cost to do so is deemed too high, or if the outcome of the merger review is deemed too uncertain.²⁴ Most economies have regulations to review merger notifications and provide simplified procedures, but their effective implementation is crucial for the business environment. A key assumption for this subcategory is that the merger at stake does not raise competition concerns. Therefore, Subcategory 3.1–Simplified Merger Review has three indicators (table 24).

Table 24. Subcategory 3.1.1–Simplified Merger Review

	Indicators	Components
1	Use of the Simplified Merger Review Procedure	Use of simplified merger review procedure under a specific scenario with fixed parameters
2	Time to File a Simplified Merger Review	Time in days to comply with the documentary requirements and file a notification to the Competition Authority for the transaction with set parameters
3	Time to Clear a Simplified Merger Review	Time in days for the Competition Authority to review and clear a transaction with set parameters

3.1.2 Market Dynamism and Competitive Behaviors

This subcategory provides an overall measure of competition in the markets. It assesses market dynamics and competitive behaviors through proxy questions addressed directly to businesses about certain

characteristics of their markets and their ability to compete horizontally and vertically without restraints from anticompetitive practices or government regulations (for instance, constraints in their ability to set prices or the ease of changing a utility provider). Therefore, Subcategory 3.1.2–Market Dynamism and Competitive Behaviors has six indicators (table 25).

Table 25. Subcategory 3.1.2–Market Dynamism and Competitive Behaviors

	Indicators	Components
1	Market Structure (Number of Firms that Compete in the Market)	i) Percentage of firms that compete with less than two competitors. ii) Percentage of firms that compete with more than two firms and less than five firms. iii) Percentage of firms that compete with more than five firms
2	Market Concentration (Market Share of Largest Competitor)	Percentage of market share of the largest competitor
3	Changes in the Level of Competition	Changes in the level of competition experienced by firms over the last year
4	Pricing Power (Ability to Change Prices without Losing Customers)	Percentage of firms that can increase prices for its main product or service more so that its competitors without losing customers
5	Easiness to Switch Internet Provider	Degree of easiness that firms face if they would like to switch internet providers
6	Government Intervention in Prices	Percentage of firms reporting that their main product or service price is regulated

3.2 Innovation

Category 3.2 has two subcategories consisting of one indicator, each of which may, in turn, consist of several components.

3.2.1 Proportion of Highly Innovative Firms

This subcategory assesses super innovative firms. Therefore, Subcategory 3.2.1–Proportion of Highly Innovative Firms has one indicator (table 26).

Table 26. Subcategory 3.2.1–Proportion of Highly Innovative Firms

	Indicators	Components
1	Proportion of Highly Innovative Firms	i) Percentage of firms that introduced a new product ii) Percentage of firms that introduced a new process iii) Percentage of firms spending in R&D

Note: R&D = research and development.

3.2.2 Use of International Quality Certifications

This subcategory assesses use of international quality certifications. Therefore, Subcategory 3.2.2–Use of International Quality Certifications has one indicator (table 27).

Table 27. Subcategory 3.2.2–Use of International Quality Certifications

	Indicators	Components
1	Use of International Quality Certifications	Percentage of firms with international quality certifications

3.3 Public Procurement

Category 3.3 has four subcategories consisting of several indicators, each of which may, in turn, consist of several components.

3.3.1 Time to Award Public Contracts

In procurement markets, lengthy processes to award contracts can deter market entry and encourage collusive behaviors. Firms might incorporate the cost to prepare bids and the length of the tender procedure before deciding to participate in the government markets. Therefore, Subcategory 3.3.1–Time to Award Public Contracts has five indicators (table 28).

Table 28. Subcategory 3.3.1–Time to Award Public Contracts

	Indicators	Components
1	Time to Award a Large Works Contract in Competitive Bidding	Time that would usually pass between bid opening and contract signing for a large works contract procured under open competitive bidding in days
2	Time to Award a Small Service Contract in Selective Bidding	Time that would usually pass between bid opening and contract signing for a small service contract procured under selective or restricted bidding in days
3	Time to Prequalify Suppliers	Time that would usually pass between publication of the prequalification notice until the moment when all bidders are informed of the prequalification decision in days
4	Time to Award a Contract through Electronic Auction	Time that would usually pass between bid opening and contract signing for a contract procured under electronic auction in days
5	Time to Award a Contract in a Framework Agreement	Time that would usually pass to complete the first stage and the second stage of a framework agreement in days

3.3.2 Time to Receive a Payment from a Government Contract

Late payments create negative externalities on firms, such as disruption of market activity and postponed payments of employees and suppliers. This can have the effect of draining firms' liquidity, and in the presence of limited access to credit, delayed payments can ultimately force firms to exit the market, with additional negative effects on their suppliers and customers.²⁵ Therefore, Subcategory 3.3.2–Time to Receive a Payment from a Government Contract has one indicator (table 29).

Table 29. Subcategory 3.3.2–Time to Receive a Payment from a Government Contract

	Indicators	Components
1	Time to Receive a Payment from a Government Contract	Time to receive payment from a government contract after submitting an invoice in days

3.3.3 Firm's Perceptions on the Ease of Bidding

Administrative burden and high technical and financial capacity requirements can hinder competition in government markets, which are likely to disproportionately affect small and medium sized firm's participation in them.²⁶ This subcategory contains a measure of the ease of bidding by asking firms how difficult they find meeting the administrative requirements to participate in tenders. Therefore, Subcategory 3.3.3–Firm's Perceptions on the Ease of Bidding has one indicator (table 30).

Table 30. Subcategory 3.3.3–Firm's Perceptions on the Ease of Bidding

	Indicators	Components
1	Firm's Perceptions on the Ease of Bidding	Degree of easiness in meeting the administrative requirements to participate in tenders

3.3.4 Gender Gap in Government Suppliers

By promoting supplier diversity in their public procurement policies, governments can address inequities in the marketplace, foster the growth potential of women-owned businesses and introduce qualified women-owned businesses into the supply chain, which increases competition and potentially leads to cost savings.²⁷ Therefore, Subcategory 3.3.4–Gender Gap in Government Suppliers has one indicator (table 31).

Table 31. Subcategory 3.3.4–Gender Gap in Government Suppliers

	Indicators	Components
1	Gender Gap in Government Suppliers	Percentage of women-owned firms or women-managed firms who have held a government contract

III. DATA SOURCES

4.1 Data Collection Sources

The data for Pillar I, Pillar II, and part of Pillar III are collected through consultations with private sector experts. For the Competition category of indicators, this includes corporate lawyers and consultants with expertise in competition law, and legal professionals acting in competition law. For Innovation, lawyers and consultants specialized in intellectual property rights, chartered patent and trademark attorneys are the main contributors. Finally, for the Public Procurement category of indicators, experts include lawyers with expertise in public procurement, consultants who assist in the preparation of tenders, and in-house procurement officers. Desk research corroborates the data gathered through expert consultations.

Part of the data for Pillar III is collected through Enterprise Surveys, including all indicators in the Market Dynamism and Competitive Behaviors subcategory, all indicators in the Innovation category, and all indicators in the Time to Receive a Payment from a Government Contract subcategory, Firm's Perceptions on the Ease of Bidding subcategory, and Gender Gap in Government Suppliers subcategory. These surveys provide representative data on innovation in firms as well as practices on government contracts.

4.2 Screening and Selection of Experts

The Market Competition topic has three questionnaires, one for each topic: Competition, Innovation, and Public Procurement. Each questionnaire targets experts in their respective areas of expertise. In order to select potential experts to participate in the questionnaires, screener questionnaires for competition, innovation, and public procurement have been developed (table 32). The information provided in the screener questionnaires will allow the team to better understand the experts' professions; areas of specializations and experts' knowledge or experience related to market competition, including competition, innovation, and procurement. Ultimately, this will allow the team to select the experts to respond the questionnaire on competition, innovation, and procurement.

Table 32. Screener Questionnaire and Respondent Criteria

Relevant Experts' Professions	
Competition	Corporate lawyers, legal consultants, Competition Authority representatives, etc.
Innovation	Intellectual property lawyers, chartered patent attorneys, etc.
Procurement	Public procurement lawyers, consultants, in-house procurement officers, etc.
Relevant Areas of Specialization	
Competition	Antitrust/competition, abuse of dominance, merger control procedures, etc.
Innovation	Intellectual property registration and management, etc.
Procurement	Public procurement and government tenders at state, national and federal level (if applicable), etc.
Assessment of the Experts' Knowledge and Experience Related to Competition Law, Innovation, and Procurement	
Competition	Experience in antitrust/competition litigation and providing advice to concerned firms; providing advice for mergers and acquisitions, including litigation experience; advising on abuse of dominance matters including litigation; experience in advising firms on how to self-comply with competition law requirements; experience in regulated markets.
Innovation	Experience with IPR registration, management, licensing, litigation, technology transfer.
Procurement	Experience with public procurement at the state/national/federal level, in either an advisory, consultant, compliance or litigation role; experience in bidding or assisting firms to bid for government tenders for goods, services and works; experience in assessing contract awards; experience in contractual issues

related to payment; experience in formal challenges and appeals procedures on public procurement decisions.

Note: IPR = Intellectual Property Rights.

IV. PARAMETERS

To ensure comparability of the data from expert consultations across economies, the Market Competition topic uses specific parameters for public procurement indicators. However, it does not have a general parameter applicable to all the three thematic areas of the topic (Competition, Innovation, and Procurement). A parameter refers to an assumption that is made about the characteristics through which the practice of the topics shall be measured, such as location or centralized relevant public authority (including Competition Authority or public procurement entity).

5.1 General Parameters

The Market Competition topic does not have general parameters that are applicable to all the categories of indicators. However, the topic benchmarks only central/federal regulations and services provided by central/federal authorities to keep the data comparable across economies.

5.2 Specific Parameters

Market Competition uses specific parameters in some categories of indicators to ensure that the information gathered as to the relevant authorities and the relevant procedures are comparable across economies. In particular, for the category of indicators that measure public procurement regulations and services, the relevant procedures along with the public institutions that are in charge vary widely and can compromise the quality and comparability of the data.

5.2.1 Procurement–Procuring Entity

Justification:

Procurement procedures and the legal framework that governs a procurement process can vary depending on which institution is undertaking the procurement. This parameter impacts both de jure and de facto indicators.

Application:

For Pillars I and II, indicators that fall within the category of public procurement are benchmarked as applicable to the three largest procuring entities based on the volume of tenders (number of tenders) they have procured over the last three years. The procuring entities are identified by the private sector experts who respond the market competition questionnaire based on their experience and knowledge or based on reliable publicly available data.

V. TOPIC SCORING

The Market Competition topic has three pillars: Pillar I–Quality of Regulations that Promote Market Competition; Pillar II–Public Services that Promote Market Competition; and Pillar III– Implementation of Key Services Promoting Market Competition. The total points for each Pillar are further rescaled to values from 0 to 100, and subsequently aggregated into the total topic score. Each pillar contributes one-third to the total topic score. The scores distinguish between benefits to the firm (captured as firm flexibility points) and benefits to society’s broader interests (captured as social benefits points). Table 33 shows the scoring for the Market Competition topic. For further scoring details, please see Annex A, which complements this section.

Table 33. Aggregate Scoring Overview

Pillar Number	Pillar	Number of Indicators	Score			Rescaled Points (0–100)	Weight
			Firm Flexibility Points	Social Benefits Points	Total Points		
I	Quality of Regulations that Promote Market Competition	83	83	83	166	100	0.33
II	Public Services that Promote Market Competition	58	58	58	116	100	0.33
III	Implementation of Key Services Promoting Market Competition	19	100	n/a	100	100	0.33

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent).

6.1 Pillar I—Quality of Regulations that Promote Market Competition

Pillar I covers 83 indicators with a total score of 166 points (83 points on firm flexibility and 83 points on social benefits) (table 34). The scoring for each category under this pillar is as follows:

- 6.1.1** *Competition* has 33 indicators with a total maximum score of 66 points (33 points on firm flexibility and 33 points on social benefits). Specifically, the *Antitrust (cartels, horizontal and vertical agreements, abuse of dominant position)* Subcategory has 12 indicators; *Merger Control* has 10 indicators; *State-Owned Enterprises Framework and Scope of Competition Law* has 4 indicators; and *Enforcement of competition regulations* has 7 indicators. A regulatory framework that promotes market competition benefits both firms (firm flexibility) and society/customers (social benefits). Hence, equal scores are assigned to both categories.
- 6.1.2** *Innovation and Technology Transfer* has 27 indicators with a total maximum score of 54 points (27 points on firm flexibility and 27 on social benefits). Specifically, the *Strength of Intellectual Property Rights Protection* Subcategory has 11 indicators; the *Licensing and Technology Transfer and Fair Access to Innovation (includes environment)* has 5 indicators each, and the *University-Industry Collaboration* Subcategories has 6 indicators. A regulatory framework that promotes innovation and technology transfer benefits both the firm (firm flexibility) and the society (social benefits). Hence, equal scores are assigned to both categories.
- 6.1.3** *Bidding for Public Contracts* has 23 indicators with a total maximum score of 46 points (23 points on firm flexibility and 23 points on social benefits). Specifically, the *Access and Firm's Participation (includes gender)* Subcategory has 7 indicators; the *Best Value for Money (includes gender and environment)* Subcategory has 8 indicators; the *Fairness of the Procurement Process* Subcategory has 6 indicators; and the *Transparency of Key Procurement Documents* Subcategory has 2 indicators. A regulatory framework that promotes fair bidding for public contracts benefits both the firm (firm flexibility) and the society (social benefits). Hence, equal scores are assigned to both categories.

Table 34. Aggregate Scoring Pillar I

Pillar I— Quality of Regulations that Promote Market Competition		No. of Indicators	FFP	SBP	Total Points	Rescaled Points
1.1	Competition	33	33	33	66	33.33
1.1.1	Antitrust	12	12	12	24	10.00

1.1.2	Merger Control	10	10	10	20	10.00
1.1.3	State-Owned Enterprises Framework and Scope of Competition Law	4	4	4	8	6.67
1.1.4	Enforcement of Competition Regulations	7	7	7	14	6.67
1.2	Innovation and Technology Transfer	27	27	27	54	33.33
1.2.1	Strength of IPR Protection	11	11	11	22	8.33
1.2.2	Licensing and Technology Transfer	5	5	5	10	8.33
1.2.3	Fair Access to Innovation (includes environment)	5	5	5	10	8.33
1.2.4	University-Industry Collaboration	6	6	6	12	8.33
1.3	Bidding for Public Contracts	23	23	23	46	33.33
1.3.1	Access and Firm's Participation (includes gender)	7	7	7	14	11.67
1.3.2	Best Value for Money (includes gender and environment)	8	8	8	16	11.67
1.3.3	Fairness of the Procurement Process	6	6	6	12	5.00
1.3.4	Transparency of Key Procurement Documents	2	2	2	4	5.00
Total		83	83	83	166	100.00

Note: FFP = Firm Flexibility Point; IPR = Intellectual Property Rights; SBP = Social Benefits Point.

6.2 Pillar II–Public Services that Promote Market Competition

Pillar II includes 58 indicators with a total score of 116 points (58 points on firm flexibility and 58 points on social benefits) (table 35). The scoring for each category under this pillar is as follows:

6.2.1 *Competition Authority* has 19 indicators with a total maximum score of 38 points (19 points on firm flexibility and 19 points on social benefits). Specifically, the *Institutional Framework* Subcategory has 9 indicators and the *Advocacy and Transparency* Subcategory has 10 indicators. Strong institutional framework and high quality of enforcement benefit both firms (firm flexibility) and society/customers (social benefits). Hence, equal scores are assigned to both categories.

6.2.2 *Innovation in Firms* has 17 indicators with a total maximum score of 34 points (17 points on firm flexibility and 17 on social benefits). Specifically, the *Institutional Framework to Support Innovation* Subcategory has 4 indicators; the *Digitalization of Intellectual Property Services* Subcategory has 4 indicators; and the *Innovation Systems (includes gender)* Subcategory has 9 indicators. Public services that support innovation in firms benefit both the firm (firm flexibility) and the society (social benefits). Hence, equal scores are assigned to both categories.

6.2.3 *E-Procurement* has 22 indicators with a total maximum score of 44 points (22 points on firm flexibility and 22 points on social benefits). Specifically, the *Digitalization of Procurement Procedures (includes environment)* Subcategory has 15 indicators; and the *Transparency of Key Procurement Documents (includes gender)* Subcategory has 7 indicators. High quality of e-procurement services benefits both the firm (firm flexibility) and the society (social benefits). Hence, equal scores are assigned to both categories.

Table 35. Aggregate Scoring Pillar II

Pillar II– Public Services that Promote Market Competition		No. of Indicators	FFP	SBP	Total Points	Rescaled Points
2.1	Competition Authority	19	19	19	38	33.33
2.1.1	Institutional Framework	9	9	9	18	16.67
2.1.2	Advocacy and Transparency	10	10	10	20	16.67

2.2	Innovation in Firms	17	17	17	34	33.33
2.2.1	Institutional Framework to Support Innovation	4	4	4	8	11.11
2.2.2	Digitalization of Intellectual Property Services	4	4	4	8	11.11
2.2.3	Innovation Systems (includes gender)	9	9	9	18	11.11
2.3	E-Procurement	22	22	22	44	33.33
2.3.1	Digitalization of Procurement Procedures (includes environment)	15	15	15	30	22.22
2.3.2	Transparency of Key Procurement Documents (includes gender)	7	7	7	14	11.11
	Total	58	58	58	116	100.00

Note: IP = Intellectual Property.

6.3 Pillar III–Implementation of Key Services Promoting Market Competition

Pillar III covers 19 indicators with a score ranging from 0 to 100 (table 36). The points under this pillar are assigned to firm flexibility only, as the indicators measure the outcomes of service provision to firms. For example, a long time to award a public contract may cause adverse consequences on firms, thus hampering firm flexibility. The scoring for each category under this pillar is as follows:

6.3.1 *Competition* has 9 indicators with a total maximum score of 33.33 points. Specifically, the *Simplified Merger Review* Subcategory has 3 indicators, and the *Market Dynamism and Competitive Behaviors* Subcategory has 6 indicators.

6.3.2 *Innovation* has 2 indicators with a total maximum score of 33.33 points. The *Proportion of Highly Innovative Firms* Subcategory has 1 indicator, and the *Use of International Quality Certifications* Subcategory has 1 indicator.

6.3.3 *Public Procurement* has 8 indicators with a total maximum score of 33.33 points. The *Time to Award Public Contracts* Subcategory has 5 indicators, the *Time to Receive a Payment from a Government Contract* Subcategory has 1 indicator, the *Firm's Perceptions on the Ease of Bidding* Subcategory has 1 indicator, and the *Gender Gap in Government Suppliers* Subcategory has 1 indicator.

Table 36. Aggregate Scoring Pillar III

Pillar III– Implementation of Key Services Promoting Market Competition		No. of Indicators	Rescaled Points
3.1	Competition	9	33.33
3.1.1	Simplified Merger Review	3	6.67
3.1.2	Market Dynamism and Competitive Behaviors	6	26.67
3.2	Innovation	2	33.33
3.2.1	Proportion of Highly Innovative Firms	1	16.67
3.2.2	Use of International Quality Certifications	1	16.67
3.3	Public Procurement	8	33.33
3.3.1	Time to Award Public Contracts	5	8.33
3.3.2	Time to Receive a Payment from a Government Contract	1	8.33
3.3.3	Firms' Perceptions on the Ease of Bidding	1	8.33
3.3.4	Gender Gap in Government Suppliers	1	8.33

	Total	19	100.00
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ANNEX A. MARKET COMPETITION-SCORING SHEET

This document outlines the scoring approach for the Market Competition topic. For every indicator, a Firm Flexibility Point (FFP) and/or a Social Benefits Point (SBP) are assigned, along with a clarification on the detailed scoring for each such indicator and a note on the relevant background literature.

PILLAR I—QUALITY OF REGULATIONS THAT PROMOTE MARKET COMPETITION					
1.1 COMPETITION					
1.1.1 Antitrust					
Indicators	FFP	SBP	Total Points	Rescaled Points	Background Literature
Legal Framework Prohibits Anticompetitive Agreements	1	1	2	0.83	UNCTAD (2007)
Legal Framework Distinguishes between which Agreements Restrict Competition by Object or Effect	1	1	2	0.83	UNCTAD (2007)
Exemptions for Non-competitive Agreements Must be Justified Based on Public Interest or Efficiency	1	1	2	0.83	UNCTAD (2007)
Exemption Regulations Require to Identify the Efficiency, Harm and Consumer's Impact of the Exempted Agreement	1	1	2	0.83	UNCTAD (2007)
Exemptions are Granted for a Certain Time Period and Renewals are Reviewed	1	1	2	0.83	UNCTAD (2007)
Cartels are Forbidden, and Firms are not Allowed to Use Efficiency Defense for Cartels	1	1	2	0.83	UNCTAD (2007)
Legal Framework Prohibits Abuse of Dominance	1	1	2	0.83	UNCTAD (2007)
Definition of Market Dominance and Abuse of Dominant Position	1	1	2	0.83	UNCTAD (2007)
Availability of Leniency Programs with Procedural Guarantees	1	1	2	0.83	ICN (2019)
Cooperation with Competition Authorities Offers Confidentiality, Anonymity, and Whistleblower Protection	1	1	2	0.83	ICN (2019)
Leniency Programs Establish Clear Immunity Regimes	1	1	2	0.83	ICN (2019)
Incentives for Voluntary Compliance	1	1	2	0.83	OECD (2021b)
Total Points for Subcategory 1.1.1	12	12	24	10.00	
1.1.2 Merger Control					
Scope of Merger Control Regulations	1	1	2	1.00	ICN (2018); OECD (2005)

Legal Framework Establishes the Economic Criteria used to Identify which Transactions Fall under the Merger Control Regime	1	1	2	1.00	ICN (2018)
Legal Framework Establishes a Merger Control Procedure to Assess Competition Distortions	1	1	2	1.00	ICN (2018)
Legal Framework Establishes Clear Guidelines and Thresholds for Merger Notifications including Individual and Aggregate Thresholds	1	1	2	1.00	ICN (2018)
Existence of a Multi-Phased Merger Review Procedure with Specific Statutory Time Limits	1	1	2	1.00	OECD (2005)
Existence of a Simplified Merger Procedure	1	1	2	1.00	OECD (2005)
Requirement to Conduct a Substantive Economic Assessment on the Competitive Effects of a Transaction Submitted for a Merger Control Review	1	1	2	1.00	Bradford and Chilton (2018); ICN (2018)
Availability of Legitimate Justifications for Increases in Market Power Resulting from a Merger or Acquisition	1	1	2	1.00	ICN (2018); OECD (2018b)
Merger Remedies should be Effective, and the Competition Authority should have the Authority to Ensure Compliance	1	1	2	1.00	Bradford and Chilton (2018); ICN (2018)
Powers to Block Mergers that May Otherwise Adversely Impact Competition and Sanctions for Failure to Notify	1	1	2	1.00	ICN (2018); OECD (2018b)
Total Points for Subcategory 1.1.2	10	10	20	10.00	
1.1.3 State-Owned Enterprises Framework and Scope of Competition Law					
Requirement to Justify the Creation of SOEs Based on Economic, Social and/or Sustainability Criteria and Requirement to Subject the Creation of an SOE to a Review by the Competition Authority	1	1	2	1.67	OECD (2015a), Recommendation I & III
Competition Law Applies to All SOEs and Sectors of the Economy	1	1	2	1.67	OECD (2015a), Recommendation I & III
Requirement to Carry Out an Impact Evaluation Assessment to Justify SOE Commercial Activities	1	1	2	1.67	OECD (2015a), Recommendation I
Existence of Procedure to Exclude or Exempt Certain Firms or Sectors from the Application of Competition Law and Merger Control is Based on Economic, Social or Sustainability Criteria	1	1	2	1.67	OECD (2015a), Recommendation I and III
Total Points for Subcategory 1.1.3	4	4	8	6.67	
1.1.4 Enforcement of Competition Regulations					
Procedural and Fairness Guarantees during Investigation	1	1	2	0.95	ICN (2019)
Legal Framework Defines What Constitutes Confidential Information	1	1	2	0.95	OECD (2005)
Adequate Powers and Resources to Investigate and to Enforce and Impose Sanctions are Conferred to Competition Authority	1	1	2	0.95	ICN (2019)
Competition Authorities have the Powers to Collect Monetary Sanctions and to Enforce Non-Monetary Sanctions	1	1	2	0.95	ICN (2019)
Competition Authority can Investigate a Failure to Notify Transactions and Impose Sanctions Based on the Firm's Turnover	1	1	2	0.95	ICN (2019)

Decisions of the Competition Authority are Binding and/or Self-Enforceable and Designation of an Independent Body to Review Decisions of the Competition Authority, and Action for Damages is Allowed	1	1	2	0.95	Bradford and Chilton (2018); UNCTAD (2007)
An Overall Cap on Fines is Provided in the Regulatory Framework	1	1	2	0.95	OECD (2019b)
Total Points for Subcategory 1.1.4	7	7	14	6.67	
Total Points for Category 1.1	33	33	66	33.33	
1.2 INNOVATION AND TECHNOLOGY TRANSFER					
1.2.1 Strength of Intellectual Property Rights Protection					
Provisions for Establishment of Collective Management Organizations	1	1	2	0.76	WIPO (2004); WIPO (2022)
Patentability Requirements (Novelty, Inventive Step, Industrial Applicability) for Inventions and Experimental Use Exception or Research Exemption for Patents	1	1	2	0.76	WIPO (2004); WIPO (2010)
Patent Protection Reaching Back to the Filing Date	1	1	2	0.76	WIPO (2004)
Duration of Patent and Trademark Protection	1	1	2	0.76	TRIPS (1994)
Opposition Mechanisms for Patents and Trademarks	1	1	2	0.76	WIPO (2023a); WIPO (2009)
Provisions for Information Submission System for Patents	1	1	2	0.76	WIPO (2023b)
Public Disclosure of Patent	1	1	2	0.76	WIPO (2004)
Trademark Use Obligation, Related Grace Period	1	1	2	0.76	WIPO (2004)
Protection for Well-Known Marks	1	1	2	0.76	WIPO (2000)
Actions or Remedies to Enforce Copyright, Patent, and Trademark Protection	1	1	2	0.76	TRIPS (1994)
Arbitration of Copyright, Patent, and Trademark Disputes	1	1	2	0.76	Reed et al. (2021)
Total Points for Subcategory 1.2.1	11	11	22	8.33	
1.2.2 Licensing and Technology Transfer					
Provisions on Copyright, Patent, Trademark Licensing Procedures	1	1	2	1.67	WIPO (2004)
Guidelines for Setting Fair and Non-Discriminatory Royalties	1	1	2	1.67	OECD (2019a)
Recordal of Change of Patent Owner and Related Timeframe	1	1	2	1.67	WIPO (2010)
Temporary Licenses/Waivers for Patents	1	1	2	1.67	World Bank (2020)
Disclosure of Patent and Trademark Licensing Agreements to IPO	1	1	2	1.67	WIPO (2010)
Total Points for Subcategory 1.2.2	5	5	10	8.33	
1.2.3 Fair Access to Innovation (includes environment)					
Open Access and Open-Source Definition	1	1	2	1.67	WIPO (2011); BSA (2005)
Scope of Permissible Open Access Research Activities	1	1	2	1.67	Priest (2012); WIPO (2021)

Provisions Safeguarding Public Interest	1	1	2	1.67	TRIPS (1994)
Guidelines for IP-Based Financing	1	1	2	1.67	WIPO (2008)
Provisions on IP Relevant for Environmental Sustainability	1	1	2	1.67	WIPO (2020)
Total Points for Subcategory 1.2.3	5	5	10	8.33	
1.2.4 University-Industry Collaboration					
Standard Model Research Collaboration Agreements	1	1	2	1.39	WIPO (n.d.)
Grace Period for Publishing Research Results without Compromising Patentability	1	1	2	1.39	WIPO (n.d.)
Patent Ownership Developed within Public Research Organizations	1	1	2	1.39	Aridi and Cowey (2018)
Institutional IP Policies of Public Research Organizations	1	1	2	1.39	WIPO (n.d.)
University Spin-offs	1	1	2	1.39	Aridi and Cowey (2018)
Financial Incentives for Commercializing Research	1	1	2	1.39	Aridi and Cowey (2018)
Total Points for Subcategory 1.2.4	6	6	12	8.33	
Total Points for Category 1.2	27	27	54	33.33	
1.3 BIDDING FOR PUBLIC CONTRACTS					
1.3.1 Access and Firm's Participation (includes gender)					
Indicators	FFP	SBP	Total Points	Rescaled Points	Background Literature
Open and Competitive Procurement as the Default	1	1	2	1.67	OECD (2011); UNCITRAL (2011)
Restrictions to Foreign Firms to Participate in Public Procurement	1	1	2	1.67	Anderson et al. (2010); MAPS (2018); OECD (2011); UNCITRAL (2011)
Ability to Divide Contracts into Lots	1	1	2	1.67	EBRD (2017); OECD (2011, 2015b); Uyarra et al. (2014)
Legal Deadline for Procuring Entities to Process Payments to the Contractor is Established	1	1	2	1.67	MAPS (2018)
Procurement Procedures for Framework Agreements are Established	1	1	2	1.67	UNCITRAL (2011)
Promoting Gender Equality in Public Procurement	1	1	2	1.67	MAPS (2022); OECD (2021e)
Tender and Contractual Mechanisms to Promote SME Participation	1	1	2	1.67	ADB (2012); Beck and Demirguc-Kunt (2006); EBRD (2017b); OECD (2015b, 2017a)
Total Points for Subcategory 1.3.1	7	7	14	11.67	
1.3.2 Best Value for Money (includes gender and environment)					
Criteria for Identifying Abnormally Low Bids are Established	1	1	2	1.46	UNCITRAL (2011)

Designation of Specialized Tendering Methods for Innovation Procurement	1	1	2	1.46	Edler and Georghiou (2007); Ghisetti (2017); OECD (2017b)
Incorporation of Sustainability Clauses in Standard Bidding Documents	1	1	2	1.46	MAPS (2018); OECD (2015c)
Incentives to Include Environmental Considerations in Tenders	1	1	2	1.46	MAPS (2018); OECD (2015c)
Mechanisms to Introduce Gender-Responsive Public Procurement	1	1	2	1.46	MAPS (2022)
Market-Based Tools to Estimate Contract Value	1	1	2	1.46	MAPS (2018)
Total Cost of Ownership and Life Cycle Cost Considerations are used in Bid Evaluation	1	1	2	1.46	Dimitri (2012); MAPS (2018); UNCITRAL (2011)
Most Economically Advantageous Tender is the Preferred Evaluation Criteria	1	1	2	1.46	Dimitri (2012); Lewis and Bajari (2011); MAPS (2018); UNCITRAL (2011)
Total Points for Subcategory 1.3.2	8	8	16	11.67	
1.3.3 Fairness of the Procurement Process					
Standstill Period between Contract Award Notice and Contract Signing to Allow Aggrieved Bidders to Challenge the Decision	1	1	2	0.83	MAPS (2018); OECD (2015b); UNCITRAL, (2011)
Minimum Duration between Publication of Tender Notice and Submission Deadline is Clearly Defined	1	1	2	0.83	MAPS (2018); UNCITRAL (2011)
Prohibition of Dividing Contracts to Circumvent Open Tendering Thresholds	1	1	2	0.83	
Obligation to Notify Firms of Procurement Decisions and Legal Framework Establishes how Clarification Requests from Potential Bidders should be addressed	1	1	2	0.83	OECD (2015b); UNCITRAL (2011)
Availability of Specialized and Independent Procurement Tribunals and the Right to Appeal its Decisions	1	1	2	0.83	MAPS (2018); UNCITRAL (2011)
Time Limits to Resolve Appeals and Legal Recourse for Delays in Resolving Appeals	1	1	2	0.83	MAPS (2018); UNCITRAL (2011)
Total Points for Subcategory 1.3.3	6	6	12	5.00	
1.3.4 Transparency of Key Procurement Documents					
Publication of Procurement Plans, Notices, Tender Documents, and Award Decisions	1	1	2	2.50	ADB (2013); EBRD (2015); Kinsey (2004); MAPS (2018); OECD (2015b)
Publication of Contracts and Contract Amendments	1	1	2	2.50	MAPS (2018); OECD (2015b)
Total Points for Subcategory 1.3.4	2	2	4	5.00	
Total Points for Category 1.3	23	23	46	33.33	
Total Points for Pillar I	83	83	166	100.00	

Note: IP = Intellectual Property; SME = Small and Medium Enterprise; SOE = State-Owned Enterprise.

PILLAR II—PUBLIC SERVICES THAT PROMOTE MARKET COMPETITION					
2.1 COMPETITION AUTHORITY					
2.1.1 Institutional Framework					
Indicators	FFP	SBP	Total Points	Rescaled Points	Background Literature
Competition Authority is Operationally Independent	1	1	2	1.85	Bradford and Chilton (2018)
Competition Authority has a Clear and Non-Overlapping Mandate	1	1	2	1.85	OECD (2022)
Establishment of Procedure for Selection and Dismissal of Board Members	1	1	2	1.85	Bradford and Chilton (2018)
Term Limits for Board Members of the Competition Authority	1	1	2	1.85	Bradford and Chilton (2018)
Mechanisms are Established for Competition Authorities to Cooperate with Foreign Competition Authorities	1	1	2	1.85	ICN (2013)
Cooling off Periods after Term Limits for Board Members of Competition Authority for Other Government Jobs and for Private Sector Jobs in Previously Investigated Companies	1	1	2	1.85	Bradford and Chilton (2018)
Conflict of Interest Rules are Applied to Employees of the Competition Authority	1	1	2	1.85	Bradford and Chilton (2018)
Competition Authority Issues Opinions on Policies and Regulations	1	1	2	1.85	ICN (2014)
Competition Authority's Opinions are Binding	1	1	2	1.85	ICN (2014)
Total Points for Subcategory 2.1.1	9	9	18	16.67	
2.1.2 Advocacy and Transparency					
Issuance of Guidance Documents on Horizontal and Vertical Agreements	1	1	2	1.67	OECD (2021c)
Issuance of Guidance Documents on Abuse of Dominance	1	1	2	1.67	OECD (2021c)
Issuance of Guidance Documents on Leniency Programs	1	1	2	1.67	OECD (2021c)
Issuance of Guidance on Market Definition	1	1	2	1.67	ICN (2018)
Issuance of Guidance Documents on Competition-Related Issues in Digital Platforms	1	1	2	1.67	ICN (2018)
Issuance of Guidance on Merger Control	1	1	2	1.67	ICN (2018)
Issuance of Analytical Reports on Competition	1	1	2	1.67	ICN (2017)
Organization of Workshops to Disseminate Competition Policy	1	1	2	1.67	ICN (2012)
Online Publication of all Antitrust and Merger Control Decisions and Exemptions	1	1	2	1.67	ICN (2019); OECD (2015a)
Electronic Notification of Transaction for Merger Control	1	1	2	1.67	ICN (2019)
Total Points for Subcategory 2.1.2	10	10	20	16.67	

Total Points for Category 2.1	19	19	38	33.33	
2.2 INNOVATION IN FIRMS					
2.2.1 Institutional Framework to Support Innovation					
Indicators	FFP	SBP	Total Points	Rescaled Points	Background Literature
Pro-Bono or Low-Cost Legal Assistance Offered by IPO to IP Licensees	1	1	2	2.78	WIPO (n.d.)
Availability of Information Submission System in Practice	1	1	2	2.78	WIPO (2023b)
Public Consultations on IP Laws and Regulations	1	1	2	2.78	US Chamber of Commerce (2022)
Public Body Responsible for Participation of Firms in Development of Technical Standards	1	1	2	2.78	WIPO (n.d.)
Total Points for Subcategory 2.2.1	4	4	8	11.11	
2.2.2 Digitalization of Intellectual Property Services					
Availability of License of Rights Database	1	1	2	2.78	WIPO (2010)
Availability of Electronic Database on Locally Registered IPR	1	1	2	2.78	WIPO (2004)
Availability of Online Platform for IP Holders to Manage IPR Electronically and Scope of its Features	1	1	2	2.78	WIPO (2004)
Online Publication of List of Qualified IP Professionals by the IPO	1	1	2	2.78	WIPO (2004)
Total Points for Subcategory 2.2.2	4	4	8	11.11	
2.2.3 Innovation Systems (includes gender)					
Availability of Technology Transfer Offices	1	1	2	1.23	Aridi and Cowey (2018)
Type of Regulatory Approaches to Enable Technology Generation	1	1	2	1.23	World Bank (2020)
Availability of Innovation Incubators	1	1	2	1.23	Cirera et al. (2020)
Availability of Innovation Accelerators	1	1	2	1.23	Cirera et al. (2020)
Government Financial Assistance to Private Incubators/Accelerators	1	1	2	1.23	Cirera et al. (2020)
Public Research Organizations Technical Assistance to Private Incubators/Accelerators	1	1	2	1.23	Cirera et al. (2020)
Availability of Incubators/Accelerators that Target Women Entrepreneurs	1	1	2	1.23	Cirera et al. (2020)
Availability of Science and Technology Parks	1	1	2	1.23	Cirera et al. (2020)
Availability of Innovation Clusters	1	1	2	1.23	Cirera et al. (2020)
Total Points for Subcategory 2.2.3	9	9	18	11.11	
Total Points for Category 2.2	17	17	34	33.33	

2.3 E-PROCUREMENT					
2.3.1 Digitalization of Procurement Procedures (includes environment)					
Indicators	FFP	SBP	Total Points	Rescaled Points	Background Literature
Availability of Central E-Procurement Portal	1	1	2	1.48	EBRD (2015); MAPS (2018); PwC (2013)
Registering as a Vendor	1	1	2	1.48	ADB (2013); EBRD (2015); OECD (2015b); PwC (2013)
Asking the Procuring Entity for Clarifications and Notification of Decisions Electronically	1	1	2	1.48	ADB (2013); EBRD (2015); Kinsey (2004); OECD (2015b)
Submitting Tenders Electronically	1	1	2	1.48	ADB (2013); EBRD (2015); Kinsey (2004); OECD (2015b)
Open Bids Electronically and Virtual Workspace to Manage the Tender Procedure	1	1	2	1.48	ADB (2013); EBRD (2015); MAPS (2018); PwC (2013)
Submitting Bid Security Electronically and Performance Guarantee with Electronic Validation	1	1	2	1.48	ADB (2013); EBRD (2015)
Contract Signing Electronically	1	1	2	1.48	ADB (2013); EBRD (2015); PwC (2013)
E-Contract Management and Implementation Module	1	1	2	1.48	ADB (2013); EBRD (2015); PwC (2013)
Submitting Invoices to the Procuring Entity	1	1	2	1.48	ADB (2013); EBRD (2015)
Receiving Payments from the Procuring Entity Electronically	1	1	2	1.48	ADB (2013); EBRD (2015)
Module for Framework Agreement Management	1	1	2	1.48	ADB (2013); EBRD (2015)
E-Reverse Auction Module	1	1	2	1.48	ADB (2013); EBRD (2015)
E-Catalogue of Approved Suppliers	1	1	2	1.48	ADB (2013); EBRD (2015)
Electronic Green Catalogues	1	1	2	1.48	ADB (2013); EBRD (2015)
Applying for Vendor Eco-Certifications or Eco/Labels Electronically	1	1	2	1.48	ADB (2013); EBRD (2015); OECD (2015b); PwC (2013)
Total Points for Subcategory 2.3.1	15	15	30	22.22	
2.3.2 Transparency of Key Procurement Documents (includes gender)					
Accessing Notices on Procurement Opportunities Electronically	1	1	2	1.59	ADB (2013); EBRD (2015); Kinsey (2004); MAPS (2018); PwC (2013)
Accessing Bidding Documents Electronically	1	1	2	1.59	ADB (2013); EBRD (2015); Kinsey (2004); MAPS (2018); PwC (2013)
Accessing Award Decisions (Including Their Rationale) Electronically	1	1	2	1.59	ADB (2013); EBRD (2015); Kinsey (2004); MAPS (2018); PwC (2013)
Accessing Contracts and Contract Amendments Electronically	1	1	2	1.59	MAPS (2018); PwC (2013)
Access to Specifications, Standards, or Criteria for Eco-Labels and Environmentally Preferable Goods and Services Electronically	1	1	2	1.59	MAPS (2018); OECD (2015c); PwC (2013)

Publication of Open Data in Machine Readable Format on Suppliers Contracts and Tenders	1	1	2	1.59	EBRD (2015); MAPS (2018); OECD (2015b)
Gender - Publication of Open Data on Tenders and Contracts Disaggregated by Sex	1	1	2	1.59	MAPS (2022)
Total Points for Subcategory 2.3.2	7	7	14	11.11	
Total Points for Category 2.3	22	22	44	33.33	
Total Points for Pillar II	58	58	116	100.00	

Note: IP = Intellectual Property.

PILLAR III—IMPLEMENTATION OF KEY SERVICES PROMOTING MARKET COMPETITION					
3.1 COMPETITION					
3.1.1 Simplified Merger Review					
Indicators	FFP	SBP	Total Points	Rescaled Points	Background Literature
Use of the Simplified Merger Review Procedure	33.33	n/a	33.33	2.22	ICN (2018)
Time to File a Simplified Merger Review	33.33	n/a	33.33	2.22	ICN (2018)
Time to Clear a Simplified Merger Review	33.33	n/a	33.33	2.22	ICN (2018)
Total Points for Subcategory 3.1.1	100	n/a	100	6.67	
3.1.2 Market Dynamism and Competitive Behaviors					
Market Structure (Number of Firms that Compete in the Market)	16.67	n/a	16.67	4.45	OECD (2018a, 2021a); Szarzec, Dombi, and Matuszak (2021)
Market Concentration (Market Share of Largest Competitor)	16.67	n/a	16.67	4.45	OECD (2018a, 2021a); Szarzec, Dombi, and Matuszak (2021)
Changes in the Level of Competition	16.67	n/a	16.67	4.45	OECD (2018a, 2021a); Szarzec, Dombi, and Matuszak (2021)
Pricing Power (Ability to Change Prices without Losing Customers)	16.67	n/a	16.67	4.45	OECD (2018a, 2021a); Szarzec, Dombi, and Matuszak (2021)
Easiness to Switch Internet Provider	16.67	n/a	16.67	4.45	OECD (2018a, 2021a); Szarzec, Dombi, and Matuszak (2021)
Government Intervention in Prices	16.67	n/a	16.67	4.45	OECD (2018a, 2021a); Szarzec, Dombi, and Matuszak (2021)
Total Points for Subcategory 3.1.2	100	n/a	100	26.67	
Total Points for Category 3.1	100	n/a	100	33.33	
3.2 INNOVATION					
3.2.1 Proportion of Highly Innovative Firms					
Percentage of Firms that Have Introduced New Improved Products, Processes, and have Spent in R&D	100	n/a	100	16.67	Cirera and Muzi (2020)
Total Points for Subcategory 3.2.1	100	n/a	100	16.67	
3.2.2 Use of International Quality Certifications					
Percentage of Firms with International Quality Certifications	100	n/a	100	16.67	OECD (2018c)

Total Points for Subcategory 3.2.1	100	n/a	100	16.67	
Total Points for Category 3.2	100	n/a	100	33.33	
3.3 PUBLIC PROCUREMENT					
3.3.1 Time to Award Public Contracts					
Time to Award a Large Works Contract in Open Competitive Bidding	25	n/a	25	1.67	Kinsey (2004); MAPS (2018)
Time to Award a Small Services Contract in Selective Bidding	25	n/a	25	1.67	Kinsey (2004); MAPS (2018)
Time to Prequalify Suppliers	25	n/a	25	1.67	Kinsey (2004); MAPS (2018)
Time to Award a Contract through Electronic Auction	25	n/a	25	1.67	Kinsey (2004); MAPS (2018)
Time to Award a Contract in a Framework Agreement	25	n/a	25	1.67	Kinsey (2004); MAPS (2018)
Total Points for Subcategory 3.3.1	100	n/a	100	8.33	
3.3.2 Time to Receive a Payment from a Government Contract					
Time to Receive a Payment from a Government Contract	100	n/a	100	8.33	ADB (2013); Conti et al. (2021); MAPS (2018)
Total Points for Subcategory 3.3.2	100	n/a	100	8.33	
3.3.3 Firm's Perceptions on the Ease of Bidding					
Firm's Perceptions on the Difficulty to Meet the Administrative Requirements to Participate in Tenders	100	n/a	100	8.33	ADB (2012); EBRD (2017b); MAPS (2018); OECD (2011)
Total Points for Subcategory 3.3.3	100	n/a	100	8.33	
3.3.4 Gender Gap in Government Suppliers					
Gender Gap in Government Suppliers	100	n/a	100	8.33	MAPS (2022)
Total Points for Subcategory 3.3.4	100	n/a	100	8.33	
Total Points for Category 3.3	100	n/a	100	33.33	
Total Points for Pillar III	100	n/a	100	100.00	

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent); R&D = research and development.

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ANNEX B. MARKET COMPETITION–ANNOTATED QUESTIONNAIRE

Annex B consists of a Glossary and three Annotated Questionnaires for Competition, Innovation, and Procurement. The Annotated Questionnaires provide the mapping between each indicator and the corresponding question(s). Due to the presence of multiple questionnaires, the numbering of categories in the Annotated Questionnaire does not match the numbering in the Market Competition Methodology Note.

Glossary

Accelerator: Targets high growth-oriented firms in the process of scale up and entails an intensive mentoring program accompanied by the possibility of an early-stage investment.

Abuse of dominant position: The unilateral practices exercised by a dominant firm in order to maintain or increase its position in the market, thereby damaging market competition and ultimately decreasing consumer welfare.

Action for damages: A claim brought before a national court by a party harmed by a competition law infringement, requesting a sum of money in compensation for that infringement and any effects it has had upon the injured party's business.

Agreement on Government Procurement (GPA): International instrument regulating the conduct of international trade in government procurement markets. It aims to ensure fair, transparent, and non-discriminatory conditions of competition for purchases of goods, services, and construction services by the public entities covered by the Agreement. It also serves broader purposes of promoting good governance, the efficient and effective management of public resources, and the attainment of best value for money in national procurement systems.

Cartel: An anticompetitive agreement or concerted practice among two or more rival firms that aims at coordinating their behavior on the market or influencing other parameters of competition such as prices, total industry output, market shares, allocation of customers, allocation of territories, bid-rigging, establishment of common sales agencies, and the division of profits or combination of these.

Central purchasing body: A contracting entity that acquires goods or services (commonly through framework agreements) intended for several public sector entities.

Collective Management Organization: An organization that is authorized to manage copyright or rights related to copyright on behalf of more than one right holder, for the collective benefit of those right holders.

Competitive neutrality: The recognition that significant government business activities that are in competition with the private sector should not have a competitive advantage or disadvantage simply by virtue of government ownership and control.

Duration: The specific timeframes within which the protection will be valid, either from the date of registration or from the date the application is made. If the legislation provides multiple durations, the one that is most protecting to the intellectual property right holder is considered.

Experimental use exception: Limitations on the rights of the patent holder for specific purposes that promote innovation through scientific research or technological innovation.

Framework agreement: A fixed term contractual agreement between procuring entities and selected supplier(s), which sets conditions for future, repetitive purchases.

Goods: Objects of every kind and description including raw materials, products and equipment and objects in solid, liquid, or gaseous form, and electricity, as well as services incidental to the supply of the goods if the value of those incidental services does not exceed that of the goods themselves.

Guidelines for intellectual property-based financing: May include any legal instrument that provides guidance on IP valuation, sale or lease, terms of transfer, and securitization.

Guidelines for setting fair, reasonable and non-discriminatory royalties: Any relevant guidelines, data tools, circulars, and/or manuals that can be used for benchmarking or calculating royalty rates, including resources on legal and market assessments, economic analyses, and/or valuation benchmarking.

Horizontal agreements: Cooperation agreements made between two or more competing undertakings operating at the same level of the market, either in the production or distribution chains.

Incubator: A company or facility that provides physical space and a number of services to new businesses, helping them through the earlier stages of their development.

Industrial applicability: Means that an invention must be capable of being used for an industrial or business purpose beyond a mere theoretical phenomenon or be useful itself.

Information submission system: A system for third parties to make observations referring to prior art that they believe to be relevant to the question of whether the invention is new and/or involves an inventive step.

Innovation cluster: A system of close links between firms, their suppliers and clients, and knowledge institutions resulting in the generation of innovation.

Inventive step: When the invention could not be obviously deduced by a person having ordinary skills in the relevant technical field.

Legal monopoly: A firm that is protected from competition by the government, usually through legislation.

Leniency program: An opportunity provided to firms under which their fines or other penalties or totally or partially reduced in exchange for collaborating with the competition authorities, voluntarily disclosing the existence of agreements or practices within a cartel or group of firms that hinder competition.

Life cycle costing: LLC is the sum of all recurring and one-time (nonrecurring) costs over a lifespan or a specified period of a good, service, structure, or system. It includes purchase price, installation cost, operating costs, maintenance and upgrade costs, and remaining (residual or salvage) value at the end of ownership or its useful life.

Lowest price: Bid evaluation process in which a procuring entity determines the winning bid by eliminating ineligible bidders and technically unacceptable bids and then selecting the lowest priced bid for award.

Machine readable format: Data in a format that can be automatically read and processed by a computer, such as CSV, JSON, XML, etc. Machine-readable data must be structured data. Non-digital material (for example printed or hand-written documents) are not machine-readable. But even digital material need not be machine-readable. For example, consider a PDF document containing tables of data. These are definitely digital but are not machine-readable because a computer would struggle to access the tabular information -

even though they are very human readable. The equivalent tables in a format such as a spreadsheet would be machine readable.

Market dominance: Involves a dominant firm, which is one that accounts for a significant share of a given market enabling it to prevent effective competition on the relevant market and allowing it to behave independently of other firms, acting either on the same or different levels of the production or distribution chains.

Merger remedies: Aim at preserving or restoring competition within a relevant market that would otherwise be lost as a result of a particular merger transaction, by either eliminating or resolving the harm caused, while allowing any efficiencies or benefits that would result from the transaction. Merger remedies can either be structural, through the divestiture of the firm or its assets, or behavioural, when they might impose obligations upon the future conduct of the firms involved in the merger.

Most Economically Advantageous Tender (MEAT): Bid evaluation process through which the successful bid is ascertained on the basis of combining technical and financial characteristics of the bids.

Novelty: Some new characteristic that is not known in the body of existing knowledge in its technical field.

Open access: The freely available online, digital sharing of academic information, either in the form of publications or data.

Open-source: Software provided on license terms that allow it to be used, modified, and distributed freely.

Open tender: Refers to the process whereby a procuring entity invites bids that should be submitted within a set deadline. It is often used for a bidding process that is open to all qualified bidders (open tender) and where sealed bids are opened in public and are chosen on the basis of stated award criteria. The term “tender” is usually used interchangeably with “bids” or “proposals.”

Opposition rights: May refer to pre-granting opposition or post-granting opposition. Pre-granting opposition rights are the rights available to third parties to oppose the granting of a patent before it is registered. Post-granting opposition rights are the rights available to third parties to oppose the granting of a patent after it has been registered.

Operational independence: When the Competition Authority decides and acts on its own, without the influence or necessary validation of external authorities or individuals.

Organizational independence: The ability of the Competition Authority to organize itself and define its activities and the roles of its agents without external influence.

Procurement procedure: A procedure by which a public sector entity can acquire goods, services, and works. Occasionally referred to as Call for Tenders, Public Procurement Competition, or Tender.

Provisional measure: A temporary remedy granted under special circumstances to immediately stop an alleged infringement of intellectual property rights.

Regulatory approaches enabling technology adoption: These approaches include: (1) a wait-and-see approach in which the regulator acts mainly as an observer, monitoring trends to determine when formal intervention is necessary; (2) a test-and-learn approach under which a custom framework is created for each individual business case; (3) regulatory sandboxes involving active policymaking where a virtual

environment is created that enables the live testing of new products or services in a controlled and time-bound manner.

Regulatory framework (Innovation Questionnaire): The comprehensive body of instruments (laws, acts, regulations, guidance documents, soft law instruments, and so on) that regulate intellectual property rights and innovation systems. For soft law instruments, please consider only instruments that have the following features: (1) They have the goal of expressing the view of the government on matters that have a direct or indirect impact to firms; (2) Such instruments provide guidance to firms and experts as the expected position of the government in such matters, and thus facilitate self-compliance in IPR or related matters; and (3) These instruments must be publicly available.

Regulatory framework (Competition Questionnaire): The comprehensive body of instruments (laws, acts, regulations, guidance documents, soft law instruments, and so on) that regulate competition law and competition law enforcement. For soft law instruments, please consider only instruments with the following features: (1) They have the goal of expressing the view of the government or the Competition Authority on matters that have a direct or indirect impact to firms; (2) Such instruments provide guidance to firms and experts as the expected position of the government in such matters, and thus facilitate self-compliance in competition-related matters; and (3) These instruments must be publicly available.

Regulatory framework (Procurement Questionnaire): Refers to a comprehensive body of instruments (laws, acts, regulations, detailed procedures, standard tender documents, and so on) that regulate procurement processes (from needs-assessment to post-tendering). independently of its form, as long as it binds the procuring entities in a manner that the private sector will expect such entities to comply with such instruments. For soft law instruments, please consider only instruments with the following features: (1) They have the goal of expressing the view of the government on matters that have a direct or indirect impact to firms; (2) Such instruments provide guidance to firms and experts as the expected position of the government in such matters, and thus facilitate self-compliance in procurement related matters; and (3) These instruments must be publicly available.

Research collaboration agreements or consortium agreements: Agreements concluded by two or more parties that wish to cooperate to develop and possibly commercialize a new technology.

Rules and criteria on the ownership of IPRs: Can either be reflected in the patent or employment legislation or may take the form of specific legislation dealing with university IPRs and technology transfer, so long as a nation-wide policy is in place that clearly establishes the rules of ownership of IPRs developed by university researchers.

Science and technology parks: Property-based ventures providing research and development (R&D) facilities to technology-and science companies.

Services: Services of intellectual and consulting nature and any other services not covered by the terms “goods” and “works.”

Spin-offs: Newly created companies based on a new technology developed by a university or research institution.

Standard tender documents: A document issued by a competent authority (centralized procurement body, procuring entity, etc.) that sets out the terms and conditions for a set of procurement procedures, usually categorized by type of procurement, value and or sector. Alternative terms: standard solicitation documents or standard procurement documents.

Standstill period: Period starting from the moment bidders of a competition are informed of an outcome, during which time they are allowed to express objections or file complaints. Procuring entities cannot proceed to signing a contract with a winning bidder until this period elapses and all complaints are resolved.

State-owned enterprise (SOE): Any legal entity engaged in commercial activities that is recognized by national law as an enterprise and in which the government exercises ownership. This includes enterprises established as joint stock companies, limited liability corporations, and partnerships. Ownership may be determined either by the number of shares the government holds within the SOE or through the de facto control of the government upon the activities and decision making of the enterprise.

Structural independence: Whether the Competition Authority is an independent agency, organically separate from other governmental agencies, or whether it forms a part of another public authority.

Substantive economic assessment: Involves an in-depth economic analysis, supported by robust and technical evidence, of the competitive effects of the merger in question upon the relevant market.

Tacit anticompetitive agreement: Also known as tacit collusion, concerted practice, or conscious parallel behavior, this type of implied agreements or practices results when multiple firms either consciously or unconsciously follow a unilateral firm's anticompetitive actions (such as pricing fixing or output restrictions) that ultimately significantly hinder competition.

Technology Transfer Office: Can facilitate technology transfer and collaborative innovation toward commercialization between research institutions and firms.

Temporary license: Can give firms a license but set limitations on their authorization, such as the type of service that can be provided, the number of customers that can be served, or the time validity of the license.

Total Cost of Ownership (TCO): TCO calculates the complete cost—from purchase to disposal—including expected costs to be incurred during the product lifetime, such as service, repair, and insurance.

Value for money: A term used in different ways to convey the effective, efficient, and economic use of resources. In the context of public procurement, it can be defined as the most advantageous combination of cost, quality, and sustainability to meet defined requirements. Cost means consideration of the cost and risks over the entire life cycle; quality means meeting a specification that is fit for purpose and sufficient to meet the requirements; and sustainability comprises economic, social, and environmental benefits.

Vertical agreements: Agreements entered into by two or more undertakings acting at different levels of the production or distribution chains, which relate to the conditions under which they may purchase, sell, or resell certain products or services.

Voluntary compliance: Reflects the possibility for firms under an ongoing investigation to cooperate with the Competition Authority, in exchange for a reduction in fines or penalties to be imposed upon them at the conclusion of the procedure, if any.

Well-known mark: A trademark that, in view of its widespread reputation or recognition, may enjoy broader protection than an ordinary mark.

Works: All works associated with construction, reconstruction, demolition, repair, or renovation of a building, structure, or activities (such as site preparation, excavation, erection, building, installation of equipment or materials, decoration and finishing), as well as services incidental to construction (such as

drilling, mapping, satellite photography, seismic investigations and similar services provided pursuant to the procurement contract, if the value of those services does not exceed that of the construction itself).

Written justification: Consider as written justification as one that includes adequate explanation and reasoning of its decision based upon the current rules, regulations and law affecting competition.

COMPETITION QUESTIONNAIRE

The tables below present all indicators (including their components, if applicable) under each pillar, with a reference to the corresponding question number in parenthesis. The questions are listed before each table for ease of reference.

For Y/N questions, the Y response accounts for the score and is considered as the good practice, unless otherwise indicated with the sign “Y/N; N – good practice”.

In the tables that follow, “AND” means all referenced questions must have a good practice response to obtain a score on the indicator.

In the tables that follow, “OR” means one or more referenced questions must have a good practice response to obtain a score on the indicator.

Certain questions are marked as “not scored,” which indicates that they do not impact the score in any way. The purpose of these questions is to further inform and refine the questions design for subsequent years of the rollout, as needed, as well as to substantiate and provide further information for the scored questions.

PILLAR I—QUALITY OF REGULATIONS THAT PROMOTE MARKET COMPETITION

1.1. QUALITY OF COMPETITION REGULATIONS

1.1.1 Antitrust

1. Does the regulatory framework forbid anticompetitive agreements between firms? (Y/N)
2. Does the regulatory framework specify which agreements (between competitors) are forbidden in and of themselves, without the necessity to prove actual harm to either competition or consumers? (Y/N)
3. Does the regulatory framework identify which horizontal and vertical agreements must have a negative effect on competitors or consumers to be prohibited? (Y/N) *(not scored)*
4. Are cartels included in the agreements that are forbidden in and of themselves? (Y/N)
5. Does the regulatory framework provide exemptions for anticompetitive agreements that advance certain public interests? (Y/N)
6. Does the regulatory framework provide exemptions for anticompetitive agreements if they promote efficiency or technical and economic progress? (Y/N)
7. According to the regulatory framework, can cartels be exempted from the application of competition law provisions? (Y/N) *(not scored)*
8. Are exemptions for anticompetitive agreements granted contingent upon the following conditions? Please select all that apply:
 - 8a. The agreement must be efficiency enhancing
 - 8b. The agreement must not eliminate competition
 - 8c. The agreement should allow a fair share for consumers

→ 0 points if only one or two are selected

9. Please list sectors or types of agreements that have exemptions, including the any legal instruments providing for such exemption. *(not scored)*
10. Are exemptions from the competition regulatory framework granted only for certain time periods?
- 10a. Yes → 1 point if selected
 - 10b. No, there is no time period in some exemptions
 - 10c. No, there is no time period in any exemptions
 - 10d. No, exemptions cannot be granted
11. Is renewal of an exemption at the end of its term contingent upon a review of the reasons for which the exemption was granted by the Competition Authority? (Y/N)
12. Does the regulatory framework allow firms to justify cartels on the basis of efficiency? (Y/N; N - good practice)
13. Does the regulatory framework prohibit firms from abusing dominant positions? (Y/N)
14. Does the regulatory framework define market dominance? (Y/N)
15. Does the regulatory framework define when firms are abusing their market dominance? (Y/N)
16. Does the regulatory framework define any of the following abuses of dominant position? Please select all that apply: *(not scored)*
- 16a. Predatory activities
 - 16b. Exclusionary activities
 - 16c. Disciplinary and/or rewarding activities
 - 16d. Discriminatory activities
 - 16e. Other: Please describe
 - 16f. None of the above
17. Over the past year, has the Competition Authority used any incentives for firms in cases of voluntary compliance? *(not scored)*
18. Does the regulatory framework contain provisions that allow firms to justify behavior that is being investigated by the Competition Authority on the basis of efficiency? *(not scored)*
19. Does the regulatory framework provide a leniency program? (Y/N)
20. Does the leniency program provide procedural guarantees to organizations that cooperate with the Competition Authority during an investigation? (Y/N)
21. Is the confidentiality of organizations that cooperate with the Competition Authority during an investigation protected by the regulatory framework? (Y/N)
22. Is the anonymity of organizations that cooperate with the Competition Authority during an investigation protected by the regulatory framework? (Y/N)

23. According to the regulatory framework, are firms or individuals that cooperate with the Competition Authority during an investigation given whistleblower protection? (Y/N)
24. Does the leniency program provide full immunity to the first firm that self-reports its involvement in anticompetitive behavior? (Y/N)
25. Within the context of an open antitrust investigation, does the regulatory framework offer incentives for firms in cases of voluntary compliance? (Y/N)
26. Does the antitrust law apply to firms located outside of the economy and whose behavior directly or indirectly affects competition and/or consumers in the domestic market? *(not scored)*

1.1.2 Merger Control

27. Are there any sectors, firms, or transactions that are excluded from merger control? (Y/N; N - good practice)
28. Does the regulatory framework provide economic criteria for identifying which transactions fall under merger control regulations?
 - 28a. Yes, it provides for both quantitative and qualitative criteria → 1 point if selected
 - 28b. Yes, but it provides only quantitative criteria
 - 28c. Yes, but it provides only qualitative criteria
 - 28d. No
29. Does the regulatory framework establish thresholds for merger notifications? (Y/N)
30. Does the regulatory framework specify whether the thresholds for merger notifications are (Select all that apply):
 - 30a. Individual, concerning the turnover of the target firm. → 0.5 points if selected
 - 30b. Aggregate, concerning the turnover of all firms involved in the merger. → 0.5 points if selected
 - 30c. Both, depending on the transaction. → 1 point if selected
 - 30d. No such indication
31. According to the regulatory framework, is it mandatory for firms to file a notification of a transaction, such as a merger or an acquisition, with the Competition Authority when the transaction exceeds a set threshold?
 - 31a. Yes, the transaction must be notified ex ante
 - 31b. Yes, but the notification can be filed ex post
 - 31c. No, but firms can voluntarily submit their transaction for review ex ante
 - 31d. No, but firms can voluntarily submit their transaction for review ex post
 - 31e. There is no provision regulating this matter → 0 points if no provision
32. Please specify the types of merger control procedures available in your economy *(not scored)*
33. Does the regulatory framework establish a multi-phased merger control procedure? (Y/N)
34. Does the regulatory framework set out statutory time limits within which merger control procedures must be completed? (Y/N)
35. What is the statutory time limit for the simplified merger control procedure? *(not scored)*

36. Does the regulatory framework establish a procedure for conducting a simplified merger review? (Y/N)
37. Does the regulatory framework require a Competition Authority to conduct a substantive economic assessment on competitive effects of a transaction submitted for a merger control review? (Y/N)
38. Does the regulatory framework allow firms to justify an increase in market power resulting from a merger or acquisition? Select all that apply.
- 38a. Yes, by arguing that a transaction increases efficiency
 - 38b. Yes, by arguing that a firm would otherwise exit the market
 - 38c. Yes, by arguing that there is an underlying public interest that supersedes competition
 - 38d. Yes, by other argument: [OPEN-ENDED RESPONSE] (*not scored*)
 - 38e. No
- 1 point if criteria 38a, 38b and 38c are met. 0 points if 38d or 38e.
39. According to the regulatory framework, does the Competition Authority have powers to impose a set of remedies to guarantee that the merger maintains, restores, and does not distort competition in the relevant market? (Y/N)
40. According to the legal framework, must the remedies proposed by the Competition Authority satisfy the following conditions? (Y/N)
- 40a. Remedies should adequately address the potential competitive harm identified.
 - 40b. Consideration must be given to the least intrusive remedy while permitting the realization of merger's efficiencies.
 - 40c. Remedies must be capable of being effectively implemented within a short period of time.
- If Y to all three → 1 point
If Y to one or two → 0 points
41. Does the Competition Authority have the jurisdictional power to enforce a remedy order?
- 41a. Yes, it has the power to directly enforce a remedy order itself
 - 41b. Yes, it has the power to request a court to enforce a remedy order
 - 41c. Yes, both possibilities are available
 - 41d. No
- If Y to 41a or 41b or 41c → 1 point
If N → 0 points
42. According to the regulatory framework, does the Competition Authority have powers to block mergers? (Y/N)
43. Does the regulatory framework require firms to show whether a transaction has a direct or indirect impact on a market(s) within the economy? (*not scored*)

1.1.3 State-Owned Enterprises Framework and Scope of Competition Law

44. Does the regulatory framework require governments to justify the creation of SOEs based on economic, social and/or sustainability criteria (Y/N)
45. Is the creation of SOEs subject to a review by the Competition Authority? (Y/N)

46. According to the regulatory framework, are any sectors in the economy excluded from the application of antitrust and merger control regulations? (Y/N; N – good practice)
47. According to the regulatory framework, are any SOEs and/or legal monopolies excluded from application of antitrust and merger control regulations? (Y/N; N – good practice)
48. Does the regulatory framework provide for a procedure to exclude a particular firm or sector from the application of antitrust and/or merger control regulations while conducting commercial activities? (Y/N)
49. Does the regulatory framework require that an impact evaluation assessment be carried out throughout the life-cycle of an SOE to evaluate its effects on market distortions and whether its activities remain competitively neutral?
- 49a. Yes, at the creation of all SOEs → 1 point if selected
- 49b. Yes, at the creation of some SOEs → 0.5 points if selected
- 49c. No → 0 points
50. Does the exclusion regime require a decision to be justified on economic, social, or sustainability grounds? (Y/N)

1.1.4 Enforcement of Competition Regulations

51. Does the regulatory framework grant the Competition Authority powers to investigate whether firms have concluded a transaction that might raise competition concerns?
- 51a. Yes, for all transactions → 1 point if selected
- 51b. Yes, but only for transactions that fall within the mandatory notification thresholds → 1 point if selected
- 51c. No
52. According to the regulatory framework, please select all procedural fairness guarantees that are applicable in your economy:
- 52a. At the beginning of an investigation, the Competition Authority issues a notice of the reasons and concerns leading to the investigation
- 52b. The investigation procedures are written
- 52c. The investigation phase of the Competition Authority must be completed within a set amount of time
- 52d. Parties are provided a reasonable opportunity to consult with the Competition Authority
- 52e. Parties have a reasonable opportunity to be heard and provide evidence or testimony in their defense (This includes testimony of experts, cross-examination of testifying witnesses, and the opportunity to review or rebut any evidence brought forward)
- 52f. Parties are provided with an opportunity to settle or to reach a consent agreement
- If Y to 52a and 52b and 52c and 52d and 52e and 52f → 1 point
53. Does the regulatory framework mandate the Competition Authority to issue a reasoned and written decision on whether there is anti-competitive behavior? *(not scored)*
54. Are there clear provisions on what constitutes confidential information to be protected within investigations and merger control procedures? (e.g., business secrets) (Y/N)

55. Does the regulatory framework provide the Competition Authority with the necessary power to investigate illegal anticompetitive practices? (such as unsolicited inspections on firm's premises, ability to request information, etc.) (Y/N)
56. In the enforcement of sanctions, does the regulatory framework confer the Competition Authority with the power to collect monetary sanctions? (Y/N)
57. In the enforcement of sanctions, does the regulatory framework confer the Competition Authority with the power to enforce nonmonetary sanctions? (Y/N)
58. Which authority has the power to enforce sanctions? (*not scored*)
59. According to the regulatory framework, does the Competition Authority have powers to impose sanctions when firms fail to comply with the merger control regime? (Y/N)
60. Would the sanction be calculated on the basis of the firm's turnover? (Y/N)
61. Does the regulatory framework establish that Competition Authority's decisions are binding and enforceable? (Y/N)
62. Is there a designated independent body before which firms can challenge the decisions of the Competition Authority? (Y/N)
63. Please indicate the body before which firms can challenge decisions of the Competition Authority (*not scored*)
64. Does the regulatory framework allow firms to file an action for damages resulting from infringement of the competition law? (Y/N)
65. Does the regulatory framework establish an overall cap on fines that can be imposed on a firm? (Y/N)
66. Please select the criteria used to determine the maximum cap on fines. Select all that apply:
- 66a. As a percentage of the firm's global turnover
 - 66b. As a percentage of the firm's relevant turnover
 - 66c. Based on the firm's gain from the anticompetitive practice
 - 66d. Based on the harm caused by the anticompetitive practice
 - 66e. Fixed amount
 - 66f. None of the above
- If any a–e → 1 point
If f → 0 points

1.1 COMPETITION			
1.1.1 Antitrust			
Indicators	FFP	SBP	Total Points
Legal Framework Prohibits Anticompetitive Agreements (1)	1	1	2
Legal Framework Distinguishes Between which Agreements Restrict Competition by Object or Effect (2)	1	1	2

Exemptions for Non-competitive Agreements Must be Justified Based on Public Interest or Efficiency	1	1	2
- Exemptions for public interests (5)	0.5	0.5	1
- Exemptions for efficiency or technical and economic progress (6)	0.5	0.5	1
Exemption Regulations Require to Identify the Efficiency, Harm and Consumer's Impact of the Exempted Agreement (8)	1	1	2
Exemptions are Granted for a Certain Time Period and Renewals are Reviewed	1	1	2
- Exemptions granted for certain time periods (10)	0.5	0.5	1
- Renewal of exemptions conditions (11)	0.5	0.5	1
Cartels are Forbidden, and Firms are not Allowed to Use Efficiency Defense for Cartels (4 AND 12)	1	1	2
Legal Framework Prohibits Abuse of Dominance (13)	1	1	2
Definition of Market Dominance and Abuse of Dominant Position (14 AND 15)	1	1	2
Availability of Leniency Programs with Procedural Guarantees	1	1	2
- Availability of leniency program (19)	0.5	0.5	1
- Leniency program provides procedural guarantees (20)	0.5	0.5	1
Cooperation with Competition Authorities Offers Confidentiality, Anonymity, and Whistleblower Protection	1	1	2
- Confidentiality (21)	0.33	0.33	0.67
- Anonymity (22)	0.33	0.33	0.67
- Whistleblower protection to firms (23)	0.33	0.33	0.67
Leniency Programs Establish Clear Immunity Regimes (24)	1	1	2
Incentives for Voluntary Compliance (25)	1	1	2
Total Points	12	12	2
1.1.2 Merger Control			
Indicators	FFP	SBP	Total Points
Scope of Merger Control Regulations (27)	1	1	2
Legal Framework Establishes the Economic Criteria used to Identify Which Transactions Fall Under the Merger Control Regime (28)	1	1	2
Legal Framework Establishes a Merger Control Procedure to Assess Competition Distortions (31)	1	1	2
Legal Framework Establishes Clear Guidelines and Thresholds for Merger Notifications Including Individual and Aggregate Thresholds (29 AND 30)	1	1	2
Existence of a Multi-Phased Merger Review Procedure, Procedure with Specific Statutory Time Limits (33 AND 34)	1	1	2
Existence of a Simplified Merger Procedure (36)	1	1	2
Requirement to Conduct a Substantive Economic Assessment on the Competitive Effects of a Transaction Submitted for a Merger Control Review (37)	1	1	2
Availability of Legitimate Justifications for Increases in Market Power Resulting from a Merger or Acquisition (38)	1	1	2
Merger Remedies are Fit for Purpose and the Competition Authority has the Power to Enforce Them (39 AND 40 AND 41)	1	1	2
Powers to Block Mergers that May Otherwise Adversely Affect Competition and Sanctions for Failure to Notify (42)	1	1	2
Total Points	10	10	20
1.1.3 State-Owned Enterprises Framework and Scope of Competition Law			
Indicators	FFP	SBP	Total Points
Requirement to justify the Create of SOEs Based on Economic, Social, and/or Sustainability Criteria and Requirement to Subject the Creation of an SOE to a Review by the Competition Authority	1	1	2
- Justification of creation of SOEs (44)	0.5	0.5	1
- Requirement that Competition Authority reviews the creation of SOE (45)	0.5	0.5	1
Competition Law Applies to All SOEs and Sectors of the Economy (46 AND 47)	1	1	2

Requirement to Carry out an Impact Evaluation Assessment to Justify SOE Commercial Activities (49)	1	1	2
The Procedure to Exclude or Exempt Certain Firms or Sectors from the Application of Competition Law and Merger Control is Based on Economic, Social or Sustainability Criteria	1	1	1
- Procedure to exclude firm or sector exists (48)	0.5	0.5	0.5
- Exclusion must be justified on economic, social or sustainability criteria (50)	0.5	0.5	0.5
Total Points	4	4	7
1.1.4 Enforcement of Competition Regulations			
Indicators	FFP	SBP	Total Points
Procedural and Fairness Guarantees during Investigation (52)	1	1	2
Legal Framework Defines What Constitutes Confidential Information (54)	1	1	2
Adequate Powers to Investigate and to Enforce and Impose Sanctions are Conferred to Competition Authority (55 AND 51)	1	1	2
Competition Authorities have the Powers to Collect Monetary Sanctions and to Enforce Non-Monetary Sanctions (56 AND 57)	1	1	2
Competition Authority can Investigate a Failure to Notify Transactions and Impose Sanctions Based on the Firm's Turnover (59 AND 60)	1	1	2
Decisions of the Competition Authority are Binding and/or Self-Enforceable and Designation of an Independent Body to Review Decisions of the Competition Authority, and Action for Damages is Allowed (61 AND 62 AND 64)	1	1	2
An Overall Cap on Fines is Provided in the Regulatory Framework (65 AND 66)	1	1	2
Total Points	7	7	14

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point; SOEs = State-Owned Enterprises.

PILLAR II—PUBLIC SERVICES THAT PROMOTE MARKET COMPETITION

2.1 COMPETITION AUTHORITY

2.1.1 Institutional Framework

67. Does (the economy) have a functional Competition Authority? (not scored)

67a. Please provide the Competition Authority's name (not scored)

67b. Please provide the Competition Authority's website link (not scored)

68. Are there any other authorities (e.g., sectoral regulators) that are responsible for protecting and fostering competition in a targeted sector? (not scored)

69. Is the Competition Authority operationally independent in practice?

69a. Yes → 1 point if selected

69b. Not in practice, although it should be independent according to the regulatory framework

69c. No

70. Please provide an example of why the Competition Authority is not considered to be operationally independent (not scored)

71. Do these authorities have well-defined mandates in the areas of antitrust and merger control, to avoid overlapping interventions? (Y/N)

72. Does the regulatory framework establish a due process for the appointment of the Competition Authority's board members? (Y/N)
73. Is there a due process to dismiss Competition Authority board members? (Y/N)
74. Is there an official office term in years for board members of the Competition Authority? (Y/N)
75. Which administrative body has a legal authority to make the final appointment of the head of the Competition Agency and its board members? *(not scored)*
76. What is the official office term of the head of the Competition Agency and its board members in years? *(not scored)*
77. Are there any established cooperation mechanisms between the domestic and foreign Competition Authorities? (Y/N)
78. Is there a cooling-off period during which board members and staff of the Competition Authority cannot take jobs in previously investigated companies? (Y/N)
79. Do case handlers of the Competition Authority apply conflict of interest rules in practice? (Y/N/No such conflict of interest rules exist)
80. Does the Competition Authority have a mandate to issue opinions on government policies and regulations to ensure they do not hamper competition? (Y/N)
81. Are these opinions binding? (Y/N)

2.1.2 Advocacy and Transparency

82. Please indicate whether the Competition Authority issues general guidance documents on each of the following competition areas: (Y/N)
- 82a. Horizontal agreements → 0.33 point if selected
 - 82b. Vertical agreements → 0.33 point if selected
 - 82c. Cooperation agreements → 0.33 point if selected
 - 82d. Abuse of dominance → 1 point if selected
 - 82e. Market definition (including analysis of product and geographical scope) → 1 point if selected
 - 82f. Digital platforms or multi-sided markets → 1 point if selected
 - 82g. Merger control → 1 point if selected
 - 82h. Lenience → 1 point if selected
83. Does the Competition Authority issue analytical reports on markets, behaviors or practices from the perspective of competition policy? (Y/N)
84. Does the Competition Authority organize workshops or webinars to disseminate competition policy to firms? (Y/N)
85. Does the Competition Authority publish all antitrust and merger control decisions online? (Y/N)
86. Is the [exclusion] decision published in practice? (Y/N)
87. Does the regulatory framework require this decision to be published online? (Y/N)

88. In practice, can firms file notification of a transaction subject to merger control regulations electronically to the Competition Authority? (Y/N)

2.1 COMPETITION AUTHORITY			
2.1.1 Institutional Framework			
Indicators	FFP	SBP	Total Points
Competition Authority is Operationally Independent (69)	1	1	2
Competition Authority has a Clear and Nonoverlapping Mandate (71)	1	1	2
Establishment of Procedure for Selection and Dismissal of Board Members (72 AND 73)	1	1	2
Term Limits for Board Members of the Competition Authority (74)	1	1	2
Mechanisms are Established for Competition Authorities to Cooperate with Foreign Competition Authorities (77)	1	1	2
Cooling off Periods After Term Limits for Board Members of the Competition Authority for Private Sector Jobs in Previously Investigated Companies (78)	1	1	2
Conflict of Interest Rules are Applied to Employees of the Competition Authority (79)	1	1	2
Competition Authority Issues Opinions on Policies and Regulations (80)	1	1	2
Competition Authority's Opinions are Binding (81)	1	1	2
Total Points	9	9	18
2.1.2 Advocacy and Transparency			
Indicators	FFP	SBP	Total Points
Issuance of Guidance Documents on Horizontal and Vertical Agreements	1	1	2
- Horizontal agreements (82a)	0.33	0.33	0.67
- Vertical agreements (82b)	0.33	0.33	0.67
- Cooperation agreements (82c)	0.33	0.33	0.67
Issuance of Guidance Documents on Abuse of Dominance (82d)	1	1	2
Issuance of Guidance Documents on Leniency Programs (82h)	1	1	2
Issuance of Guidance on Market Definition (82e)	1	1	2
Issuance of Guidance Documents on Competition-Related Issues in Digital Platforms (82f)	1	1	2
Issuance of Guidance on Merger Control (82g)	1	1	2
Issuance of Analytical Reports on Competition (83)	1	1	2
Organization of Workshops to Disseminate Competition Policy (84)	1	1	2
Online Publication of All Antitrust and Merger Control Decisions, and Exemptions	1	1	2
- Antitrust and merger control decisions (85)	0.5	0.5	1
- Exemption decisions (86)	0.5	0.5	1
Electronic Notification of Transaction for Merger Control (88)	1	1	2
Total Points	10	10	20

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

PILLAR III—IMPLEMENTATION OF KEY SERVICES PROMOTING MARKET COMPETITION

3.1 COMPETITION

The scores for Pillar III indicators are calculated using the Normal Cumulative Density Function (CDF) transformation method on a scale of 0 to 100, where 0 and 100 represent the lowest and highest possible scores, respectively. The best and worst performers are identified based on the 5th and 95th percentiles of the collected data.

3.1.1 Simplified Merger Review

Data for Pillar III on the Time to file, review and clear a simplified merger review and adequate use of the procedure are collected through expert consultation, using the following questions:

89. For the following three questions, please assume that in accordance with the regulatory framework a transaction between two firms must be notified to the Competition Authority as this transaction is within the scope of merger control regulations. This transaction does not include a market overlap: that is, firms are not operating in the same or related markets.

89a. In practice, in case of a transaction with the characteristics described above, would the transaction be reviewed under a simplified merger review procedure? (Y/N/There is not simplified merger review regime)

89b. In practice, what is the average time, in days, to prepare comply with documentary requirements and file a notification to the Competition Authority for a case similar to the one described above?

89c. In practice, what is the average time, in days, it takes for the Competition Authority to review and clear a transaction similar to the one described above?

90. In practice, have there been any overlapping interventions over the last year? (Y/N) *(not scored)*

91. Over the past year, has the Competition Authority applied a leniency program? (Y/N) *(not scored)*

92. Over the past year, has the Competition Authority used any incentives for firms in cases of voluntary compliance? (Y/N) *(not scored)*

93. In practice, does the Competition Authority respect procedural fairness for companies being investigated including the right to due process? (Y/N) *(not scored)*

94. In practice, does the Competition Agency have the necessary power and resources to enforce sanctions? (Y/N) *(not scored)*

95. Are all Competition Authority's antitrust decisions enforced in practice? (Y/N) *(not scored)*

96. Please provide examples of antitrust decisions that are NOT enforced in practice and explain why? *(not scored)*

97. Does the Competition Authority have the monetary means to investigate compliance with the remedies proposed? (Y/N) *(not scored)*

98. Does the regulatory framework require firms to pay a fee to notify and/or clear a transaction? (Y/N) *(not scored)*

99. In practice, are exceptions to the operational independence of the Competition Authority justified? *(not scored)*

100. Have there been any cases, over the past year, where the following types of independence of the Competition Authority was compromised? (Y/N) *(not scored)*

- 100a. Structural independence
- 100b. Operational or decision-making independence
- 100c. Organizational independence
- 100d. Financial Independence

- 101. Is the official office term of the head of the Competition Agency and its board members respected in practice? (Y/N) (not scored)**
- 102. Over the last year, have any board members continued their duties after expiration of their terms? (Y/N) (not scored)**
- 103. Has there been any dismissal of board members in the Competition Authority over the last year? (Y/N) (not scored)**
- 104. Have the dismissals of board members followed the due process? (Y/N) (not scored)**
- 105. Is the cooling-off period during which board members and staff of the Competition Authority cannot take jobs in previously investigated companies respected in practice? (Y/N) (not scored)**

3.1.2 Market Dynamism and Competitive Behaviors

Data for Pillar III on the Index on Market Dynamism and Competitive Behaviors are collected through firm-level surveys, using the following questions:

- 106. How many competitors did this establishment's main product [or service] face in this main market? (Numerical value)**
- 107. In fiscal year [Insert last complete fiscal year], what was the market share of your largest competitor, in terms of sales, in the market where this establishment sold its main product or offered its main service? (Numerical value)**
- 108. Over the last year, has the level of competition in the market where this establishment sold its main product or offered its main service changed? Less competition (0), no change (50), more competition (100)**
- 109. Considering the main market for this establishment's main product or service, can this establishment increase its prices more so than its competitors can without losing customers? (Y/N/Price is regulated by government; N – good practice (100))**
- 110. Using the responses on the card, please indicate how difficult it would be for this establishment to switch between internet providers. Unable to change (0); if some or little difficulty (50); if no difficulty (100)**
- 111. Are there any state-owned enterprises (SOEs) operating in this establishment's main market? (not scored)**
- 112. How does the presence of state-owned enterprises in this establishment's main market affect its ability to grow and expand? (not scored)** SOE has a negative impact; no impact but there is presence; if no presence, or positive impact

3.1 COMPETITION			
3.1.1 Simplified Merger Review			
Indicators	FFP	SBP	Total Points
Use of the Simplified Merger Review Procedure (89a)	100 (33.33%)	n/a	100 (33.33%)
Time to File a Simplified Merger Review (89b)	100 (33.33%)	n/a	100 (33.33%)
Time to Clear a Simplified Merger Review (89c)	100 (33.33%)	n/a	100 (33.33%)
Total Points	100	n/a	100
3.1.2 Market Dynamism and Competitive Behaviors			
Indicators	FFP	SBP	Total Points
Market Structure (Number of Firms that Compete in the Market) (106)	100 (16.67%)	n/a	100 (16.67%)
Market Concentration (Market Share of Largest Competitor) (107)	100 (16.67%)	n/a	100 (16.67%)
Changes in the Level of Competition (108)	100 (16.67%)	n/a	100 (16.67%)
Pricing Power (Ability to Change Prices without Losing Costumers) (109)	100 (16.67%)	n/a	100 (16.67%)
Easiness to Switch Internet Provider (110)	100 (16.67%)	n/a	100 (16.67%)
Government Intervention in Prices (109)	100 (16.67%)	n/a	100 (16.67%)
Total Points	100	n/a	100

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent).
FFP = Firm Flexibility Point; SBP = Social Benefits Point.

INNOVATION QUESTIONNAIRE

The tables below present all indicators (including their components, if applicable) under each pillar, with a reference to the corresponding question number in parenthesis. The questions are listed before each table for ease of reference.

For Y/N questions, the Y response accounts for the score and is considered as the good practice, unless otherwise indicated with the sign “Y/N; N – good practice”.

In the tables that follow, “AND” means all referenced questions must have a good practice response to obtain a score on the indicator.

In the tables that follow, “OR” means one or more referenced questions must have a good practice response to obtain a score on the indicator.

Certain questions are marked as “not scored,” which indicates that they do not impact the score in any way. The purpose of these questions is to further inform and refine the questions design for subsequent years of the rollout, as needed, as well as to substantiate and provide further information for the scored questions.

Note: Several indicators in Innovation are shared between three types of intellectual property: copyright, patent, and trademark. In those cases, the same question is asked for each area (copyright, patent, and trademark). However, the scoring on the indicator is shared among the three areas to avoid triple counting. Shared indicators are marked with *. For example, the indicator on “Licensing” scores 2 points (on FFP and SBP) and is shared between copyright, patent, and trademark. The questions corresponding to this indicator apply to all three types of IP protection and are asked in all three subsections of the questionnaire identically. In terms of the scoring, 2 points for this indicator feed into the overall Innovation score based on the information collected on three types of IP.

PILLAR I—QUALITY OF REGULATIONS THAT PROMOTE MARKET COMPETITION

1.2 INNOVATION AND TECHNOLOGY TRANSFER

1.2.1 Strength of Intellectual Property Rights Protection

- 1. Are there any legal provisions for the establishment of Collective Management Organizations (CMOs)? (Y/N)**
- 2. Does the regulatory framework explicitly define patentability requirements (novelty, inventive step, industrial applicability) for inventions? (Y/N)**
- 3. Please specify the duration of the patent protection in years in accordance with the regulatory framework. (*Numerical entry*)**
- 4. Please specify the duration of the trademark protection in years in accordance with the regulatory framework. (*Numerical entry*)**
- 5. Does the regulatory framework explicitly assure retroactive protection reaching back to the filing date in case patent registration is granted? (Y/N)**

- 6. Does the regulatory framework define any experimental use exception or research exemption for patents? (Y/N)**
- 7. According to the regulatory framework, what mechanisms for the opposition of the granting of patents are available? Please select all that apply. (Y/N)**
 - 7a. Pre-granting opposition rights.
 - 7b. Post-granting opposition rights.
 - 7c. None.
- 8. Does the regulatory framework provide for an Information Submission System in the form of a database where complementary information on a patent may be submitted by patent holders or affected third parties? (Y/N)**
- 9. According to the regulatory framework, is the public disclosure of patent required, voluntary, or undefined? Please select one.**
 - 9a. Required → 1 point if selected
 - 9b. Voluntary → 0.5 point if selected
 - 9c. Undefined
- 10. Does the regulatory framework provide for a trademark use obligation? (Y/N)**
- 11. Does the regulatory framework stipulate the grace period after trademark registration before the use obligation comes into effect? (Y/N)**
- 12. Does the regulatory framework provide protection for well-known marks? (Y/N)**
- 13. According to the regulatory framework, which trademark opposition procedures are available? Please select all that apply. (Y/N)**
 - 13a. Pre-registration opposition
 - 13b. Post-registration opposition
 - 13c. None
- 14. According to the regulatory framework, what actions or remedies can public authorities employ to enforce copyright protection? Please select all that apply. (Y/N)**
 - 14a. Civil or administrative procedures
 - 14b. Provisional measures
 - 14c. Criminal procedures
 - 14d. None of the above
- 15. According to the regulatory framework, what actions or remedies can public authorities employ to enforce patent rights protection? Please select all that apply. (Y/N)**
 - 15a. Civil or administrative procedures
 - 15b. Provisional measures
 - 15c. Criminal procedures
 - 15d. None of the above
- 16. According to the regulatory framework, what actions or remedies can public authorities employ to enforce trademark rights protection? Please select all that apply. (Y/N)**
 - 16a. Civil or administrative procedures
 - 16b. Provisional measures
 - 16c. Criminal procedures

16d. None of the above

- 17. Does the regulatory framework allow arbitrating copyright disputes, as long as they do not affect third party rights? (Y/N)
- 18. Does the regulatory framework allow arbitrating patent disputes, as long as they do not affect third party rights? (Y/N)
- 19. Does the regulatory framework allow arbitrating trademark disputes, as long as they do not affect third party rights? (Y/N)

1.2.2 Licensing and Technology Transfer

- 20. Does the regulatory framework include provisions on copyright licensing procedures? (Y/N)
- 21. Does the regulatory framework include provisions on patent licensing procedures? (Y/N)
- 22. Does the regulatory framework include provisions specifying procedures on trademark licensing agreements? (Y/N)
- 23. Are there any guidelines provided by a public agency for setting fair, reasonable, and non-discriminatory royalties? (Y/N)
- 24. In cases of patent ownership transfer, does the regulatory framework mandate to record a change of the patent owner? (Y/N)
- 25. Does the regulatory framework specify a timeframe during which a record of a change of the patent owner must be made? (Y/N)
- 26. Does the patent licensing regime allow patent holders to grant temporary licenses/waivers? (Y/N)
- 27. Does the regulatory framework require the disclosure of patent licensing agreements to the Intellectual Property Office? (Y/N)
- 28. Does the regulatory framework require disclosure of trademark licensing agreements to the Intellectual Property Office? (Y/N)

1.2.3 Fair Access to Innovation (includes environment)

- 29. Does the regulatory framework define open access content? (Y/N)
- 30. Does the regulatory framework define open-source content? (Y/N)
- 31. Does the regulatory framework define the scope of permissible open access research activities to prevent potential liability for copyright infringement? (Y/N)
- 32. Does the regulatory framework include provisions on intellectual property rights safeguarding public interest in sectors of vital importance to socioeconomic and technological development? (Y/N)

33. Does the regulatory framework include provisions on intellectual property-based financing? (Y/N)

34. Are there any legal provisions on intellectual property (IP) relevant for environmental sustainability policies? (Y/N)

1.2.4 University-Industry Collaboration

35. Does your economy have standard model research collaboration agreements or consortium agreements? (Y/N)

36. Does the regulatory framework include guidance on a grace period for the publication of research results that may compromise patentability prior to filing a patent application? (Y/N)

37. Does the regulatory framework establish rules and criteria on patent ownership developed within public research organizations? (Y/N)

38. Does the regulatory framework require that universities or public research organizations adopt their own institutional IP policies? (Y/N)

39. Does the regulatory framework provide conditions under which university spin-offs may be established for the commercialization of a new product or process? (Y/N)

40. Does the regulatory framework provide financial incentives for commercializing research through benefit or revenue-sharing in a royalty-bearing licensing deal? (Y/N)

1.2 INNOVATION AND TECHNOLOGY TRANSFER			
1.2.1 Strength of Intellectual Property Rights Protection			
Indicators	FFP	SBP	Total Points
Provisions for Establishment of Collective Management Organizations (1)	1	1	2
Patentability Requirements (Novelty, Inventive Step, Industrial Applicability) for Inventions and Experimental Use Exception or Research Exemption for Patents	1	1	2
- Patentability requirements (novelty, inventive step, industrial applicability) for inventions (2)	0.5	0.5	1
- Experimental use exception or research exemption for patents (6)	0.5	0.5	1
Patent Protection Reaching Back to the Filing Date (5)	1	1	2
Duration of Patent and Trademark Protection	1	1	2
- Duration of patent protection (3)	0.5	0.5	1
- Duration of trademark protection (4)	0.5	0.5	1
Opposition Mechanisms for Patents and Trademarks (7 AND 13)	1	1	2
Provisions for Information Submission System for Patents (8)	1	1	2
Public Disclosure of Patent (9B)	1	1	2
Trademark Use Obligation and Related Grace Period	1	1	2
- Trademark use obligation (10)	0.5	0.5	1
- Grace period after trademark registration before the use obligation comes into effect (11)	0.5	0.5	1
Protection for Well-Known Marks (12)	1	1	2
Actions or Remedies to Enforce Copyright, Patent, and Trademark Protection* (14 AND 15 AND 16)	1	1	2
Arbitration of Copyright, Patent, and Trademark Disputes* (17 AND 18 AND 19)	1	1	2

Total Points	11	11	22
1.2.2 Licensing and Technology Transfer			
Indicators	FFP	SBP	Total Points
Provisions on Copyright, Patent, Trademark Licensing Procedures* (20 AND 21 AND 22)	1	1	2
Guidelines for Setting Fair and Non-Discriminatory Royalties (23)	1	1	2
Recordal of Change of Patent Owner and Related Timeframe	1	1	2
- Recordal of change of patent owner (24)	0.5	0.5	1
- Timeframe for recordal of change of patent owner (25)	0.5	0.5	1
Temporary Licenses/Waivers for Patents (26)	1	1	2
Disclosure of Patent and Trademark Licensing Agreements to IPO (27 AND 28)	1	1	2
Total Points	5	5	10
1.2.3 Fair Access to Innovation (includes environment)			
Indicators	FFP	SBP	Total Points
Open Access and Open-Source Definition	1	1	2
- Open access definition (29)	0.5	0.5	1
- Open-source definition (30)	0.5	0.5	1
Scope of Permissible Open Access Research Activities (31)	1	1	2
Provisions Safeguarding Public Interest (32)	1	1	2
Guidelines for IP-Based Financing (33)	1	1	2
Provisions on IP Relevant for Environmental Sustainability (34)	1	1	2
Total Points	5	5	10
1.2.4 University-Industry Collaboration			
Indicators	FFP	SBP	Total Points
Standard Model Research Collaboration Agreements (35)	1	1	2
Grace Period for Publishing Research Results without Compromising Patentability (36)	1	1	2
Patent Ownership Developed within Public Research Organizations (37)	1	1	2
Institutional IP Policies of Public Research Organizations (38)	1	1	2
University Spin-offs (39)	1	1	2
Financial Incentives for Commercializing Research (40)	1	1	2
Total Points	6	6	12

Note: FFP = Firm Flexibility Point; IP = Intellectual Property; SBP = Social Benefits Point.

*Shared indicator between copyright, patent, and trademark.

PILLAR II—PUBLIC SERVICES THAT PROMOTE MARKET COMPETITION

2.2 INNOVATION IN FIRMS

2.2.1 Institutional Framework to Support Innovation

41. In practice, does the Intellectual Property Office (IPO) offer pro-bono or low-cost legal assistance to potential IP licensees? (Y/N)

42. In practice, is there a functioning database, such as Information Submission System, where complementary information on a patent may be submitted by patent holders or affected third parties? (Y/N)
43. Do government agencies conduct public consultations when developing IP laws and regulations? (Y/N)
44. Is there a public body responsible for facilitating and coordinating participation of domestic firms in the development of technical standards? (Y/N)

2.2.2 Digitalization of Intellectual Property Services

45. Is there an electronic platform, such as a license of rights database, connecting potential buyers and sellers of IP rights? (Y/N)
46. Does the Intellectual Property Office (IPO) have a publicly accessible electronic database (available online) to identify locally registered intellectual property rights, their content, ownership, and filing date? (Y/N)
47. Does the IPO have an online platform allowing IP holders to manage the details of their rights electronically? (Y/N)
48. Does the IPO online platform provide any of the following features? Please select all that apply: (Y/N)
- 48a. IPR registration application
 - 48b. Registration (or notification) of IP licensing agreements
 - 48c. Renewal request
 - 48d. Change of ownership information
 - 48e. E-payment for fees
 - 48f. Revocation or cancellation of IPR
49. Does the IPO publish online an updated list of qualified IP professionals, including registered patent attorneys? (Y/N)

2.2.3 Innovation Systems (includes gender)

50. Does the economy have technology transfer offices responsible for process of commercializing research that takes place in universities and/or public research organizations? (Y/N)
51. Are any of the following regulatory approaches used in your economy to enable technology generation? Please select one:
- 51a. Wait-and-see approach
 - 51b. Test-and-learn approach
 - 51c. Innovation facilitators: Regulatory sandboxes → 1 point if selected
52. Are there any innovation incubators in your economy? (Y/N)
53. Are there any innovation accelerators in your economy? (Y/N)
54. Do government agencies provide financial assistance to private sector led innovation incubators and/or accelerators? (Y/N)

55. Do public research organizations provide technical assistance to private sector led innovation incubators and/or accelerators? (Y/N)

56. Are there incubators and/or accelerators that specifically target women entrepreneurs and women-founded businesses in your economy? (Y/N)

57. Are there any science and technology parks in your economy? (Y/N)

58. Are there any innovation clusters in your economy? (Y/N)

2.2 INNOVATION IN FIRMS			
2.2.1 Institutional Framework to Support Innovation			
Indicators	FFP	SBP	Total Points
Pro-Bono or Low-Cost Legal Assistance Offered by IPO to IP Licensees (41)	1	1	2
Availability of Information Submission System in Practice (42)	1	1	2
Public Consultations on IP Laws and Regulations (43)	1	1	2
Public Body Responsible for Participation of Firms in Development of Technical Standards (44)	1	1	2
Total Points	4	4	8
2.2.2 Digitalization of Intellectual Property Services			
Indicators	FFP	SBP	Total Points
Availability of License of Rights Database (45)	1	1	2
Availability of Electronic Database on Locally Registered IPR (46)	1	1	2
Availability of Online Platform for IP Holders to Manage IPR Electronically and Scope of its Features	1	1	2
- Availability of online platform for IP holders to manage IPR electronically (47)	0.5	0.5	1
- Scope of electronic management features available through online platform (48)	0.5	0.5	1
Online Publication of List of Qualified IP Professionals by the IPO (49)	1	1	2
Total Points	4	4	8
2.2.3 Innovation Systems (includes gender)			
Indicators	FFP	SBP	Total Points
Availability of Technology Transfer Offices (50)	1	1	2
Type of Regulatory Approaches to Enable Technology Generation (51c)	1	1	2
Availability of Innovation Incubators (52)	1	1	2
Availability of Innovation Accelerators (53)	1	1	2
Government Financial Assistance to Private Incubators/Accelerators (54)	1	1	2
Public Research Organizations Technical Assistance to Private Incubators/Accelerators (55)	1	1	2
Availability of Incubators/Accelerators that Target Women Entrepreneurs (56)	1	1	2
Availability of Science and Technology Parks (57)	1	1	2
Availability of Innovation Clusters (58)	1	1	2
Total Points	9	9	18

Note: FFP = Firm Flexibility Point; IP = Intellectual Property; IPO = Intellectual Property Office; SBP = Social Benefits Point.

PILLAR III—IMPLEMENTATION OF KEY SERVICES PROMOTING MARKET COMPETITION

3.2 INNOVATION

The scores for Pillar III indicators are calculated using the Normal Cumulative Density Function (CDF) transformation method on a scale of 0 to 100, where 0 and 100 represent the lowest and highest possible scores, respectively. The best and worst performers are identified based on the 5th and 95th percentiles of the collected data.

The data for Pillar III on the Innovation are collected through firm-level surveys, using the following questions:

3.2.1 Proportion of Highly Innovative Firms

59. Super innovative firms:

59a. During the last three years, has this establishment introduced new or improved products or services?

59b. During the last three years, has this establishment introduced any new or improved process?

59c. During fiscal year, did this establishment spend on research and development activities, either in-house or contracted with other companies, excluding market research surveys?

3.2.2 Use of International Quality Certificated

60. Does this establishment have an internationally recognized quality certification?

3.2 INNOVATION			
3.2.1 Proportion of Highly Innovative Firms			
Indicators	FFP	SBP	Total Points
Percentage of Firms that Have Introduced New Improved Products, Processes, and have Spent in R&D (59a AND 59b AND 59c)	100	n/a	100
3.2.2 Use of International Quality Certifications			
Percentage of Firms with International Quality Certifications (60)	100	n/a	100
Total Points	100	n/a	100

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent). FFP = Firm Flexibility Point; SBP = Social Benefits Point.

PROCUREMENT QUESTIONNAIRE

The tables that follow present all indicators (including their components, if applicable) under each pillar, with a reference to the corresponding question number in parenthesis. The questions are listed before each table for ease of reference.

For Y/N questions, the Y response accounts for the score and is considered as the good practice, unless otherwise indicated with the sign “Y/N; N – good practice”.

In the tables that follow, “AND” means all referenced questions must have a good practice response to obtain a score on the indicator.

In the tables that follow, “OR” means one or more referenced questions must have a good practice response to obtain a score on the indicator.

Certain questions are marked as “not scored,” which indicates that they do not affect the score in any way. The purpose of these questions is to further inform and refine the questions design for subsequent years of the rollout, as needed, as well as to substantiate and provide further information for the scored questions.

PILLAR I–QUALITY OF REGULATIONS THAT PROMOTE MARKET COMPETITION	
Parameters	
Procuring Entity	<p>Procurement procedures and the legal framework that governs a procurement process can vary depending on which institution is undertaking the procurement. This parameter affects both de jure and de facto indicators.</p> <p>Indicators that fall within the category of public procurement are benchmarked as applicable to the three largest procuring entities based on the volume of tenders (number of tenders) they have procured over the last three years. The procuring entities are identified by the private sector experts who respond the market competition questionnaire based on their experience and knowledge or based on reliable publicly available data.</p>

Note: Sector - to be considered where a procurement category (e.g., for goods, works, or services - including both consulting and non-consulting services) determines the procurement process or the applicable regulatory framework. Defense procurement, concessions and PPPs are excluded from the scope of this analysis.

Value - to be considered where a value of a proposed contract determines a procurement process or an applicable regulatory framework. Legally established thresholds usually distinguish between tenders that should be carried out under an open and competitive procedure (defined as “high-value” for the purposes of this questionnaire) and restricted, selective, or limited procurement (defined as “low-value” for the purposes of this questionnaire). Contracts that are not covered under the public procurement regulatory framework (for example, very small values) fall outside the scope of the topic.

1.3 BIDDING FOR PUBLIC CONTRACTS

1. **What are the three central/federal government entities that have conducted the largest procurements by volume in your economy during in the last three years? Please, list the three procuring entities in the order of importance. (not scored)**
 - 1a. Name of the procuring entity (largest):
 - 1b. Name of the procuring entity (second largest)
 - 1c. Name of the procuring entity (third largest)

2. **Please identify the most common sector purchased by the procuring entity 1:** *(not scored)*
 - 2a. Goods
 - 2b. Services
 - 2c. Works
3. **Please identify the most common sector purchased by the procuring entity 2:** *(not scored)*
 - 3a. Goods
 - 3b. Services
 - 3c. Works
4. **Please identify the most common sector purchased by the procuring entity 3:** *(not scored)*
 - 4a. Goods
 - 4b. Services
 - 4c. Works
5. **Is any of the three procuring entities that you have selected a state-owned enterprise or an Independent Authority?** (Y/N) *(not scored)*
6. **Does any of these SOEs or Independent Authorities have a specific public procurement regulatory framework compared to the other centralized/federal procuring entities?** (Y/N) *(not scored)*
7. **Please provide a list of laws, regulations, and other binding materials (including guidelines and manuals) that regulate public procurement in your economy.** *(not scored)*
 - 7a. General procurement regulatory framework:
 - 7b. Please provide website links for each item listed above:
 - 7c. Specific instruments applicable to a sector (goods, services or works):
 - 7d. Please provide website links for each item listed above:
8. **Does the regulatory framework establish value thresholds for determining procedural or regulatory aspects of the procurement process?** *(not scored)*

1.3.1 Access and Firm's Participation (includes gender)

9. **Does the regulatory framework establish open procurement as a default method for tendering a contract?**
 - 9a. Yes, without exception → 1 point if selected
 - 9b. Yes, with exception → 1 point if selected → proceed to the next question.
 - 9c. No
10. **Please, identify in the list below in which circumstances exceptions to the general rule of using open procurement are provided in the regulatory framework. Select all that apply:** *(not scored)*
 - 10a. Based on the value of procurement
 - 10b. Based on the entity conducting the procurement
11. **Does the regulatory framework impose any participation or award restrictions on foreign firms?**

N - good practice

 - 11a. Yes, in all public tenders
 - 11b. Yes, in some public tenders → proceed to the next question.
 - 11c. No → 1 point if selected

- 12. If the restrictions apply only in some public tenders, please identify in the list below the parameter in which these restrictions are applicable: *(not scored)***
- 12a. Sector
 - 12b. Procuring Entity
 - 12c. Value
 - 12d. Other (specify)
- 13. Does the regulatory framework require foreign firms to have partnerships with domestic firms to be eligible to participate in a tender? N - good practice**
- 13a. Yes, in all public tenders
 - 13b. Yes, in some public tenders based on: → proceed to the next question.
 - 13c. No → 1 point if selected
- 14. If the restrictions apply only in some public tenders, please identify in the list below the parameter in which these restrictions are applicable: *(not scored)***
- 14a. Sector
 - 14b. Procuring Entity
 - 14c. Value
 - 14d. Other (specify)
- 15. Does the regulatory framework require foreign firms to own (fully or partially) subsidiaries in the domestic economy to be eligible to participate in a tender? N - good practice**
- 15a. Yes, in all public tenders
 - 15b. Yes, in some public tenders → proceed to the next question.
 - 15c. No → 1 point if selected
- 16. If the restrictions apply only in some public tenders, please identify in the list below the parameter in which these restrictions are applicable: *(not scored)***
- 16a. Sector
 - 16b. Procuring Entity
 - 16c. Value
 - 16d. Other (specify)
- 17. Which of the following small and medium-sized enterprise preferential treatment approaches are included in the regulatory framework? Select all that apply. (Y/N)**
- 17a. Award quotas
 - 17b. Shorter payment deadlines
 - 17c. Designation by threshold
 - 17d. Reserved products
 - 17e. Lots
 - 17f. Set-asides
 - 17g. Financial guarantee exemptions
 - 17h. Subcontracting requirements or incentives
 - 17i. None of the above
- 18. For each small and medium-sized enterprise preferential treatment approach that you selected, please indicate whether it is applicable to all procurement sectors. *(not scored)***
- 18a. Yes, applicable to all sectors
 - 18b. No, applicable to some
 - 18c. Other (specify):

- 19. Does the regulatory framework, applicable to the Procuring Entities you selected, establish a timeframe with in which a Procuring Entity must process a payment once an invoice is received?**
 19a. Yes, for all contracts → 1 point if selected
 19b. Yes, but only in some contracts → 1 point if selected
 19c. No
- 20. Does the regulatory framework allow firms to claim interest on late payments (or any similar contractual penalty) if the government does not pay within the legally established timeframe? *(not scored)***
 20a. Yes
 20b. The regulatory framework does not provide for late payment interest (or any similar contractual penalty)
- 21. Does the regulatory framework outline a designated procedure for awarding contracts based on a framework agreement where contracts are awarded following a competitive two-stage process? Select all that apply.**
 21a. Yes, for all types of procurement → 1 point if selected
 21b. Yes, but only for procurements above a certain value → 1 point if selected
 21c. Yes, but only for procurement procedures in a specific sector → 1 point if selected
 21d. No, only one stage is competitive
 21e. No, the regulatory framework does not regulate framework agreements
- 22. Does the regulatory framework include gender-specific provisions that promote gender equality in public procurement? (Y/N)**

1.3.2 Best Value for Money (includes gender and environment)

- 23. Does the regulatory framework establish criteria for identifying abnormally low bids?**
 23a. Yes, for all procurement procedures → 1 point if selected
 23b. Yes, but only in some procurement procedures → 1 point if selected
 23c. No
- 24. Does the regulatory framework designate specific tendering procedures for innovation procurement? (Y/N)**
- 25. Does the regulatory framework require procuring entities to use standard bidding/tender documents when preparing a tender? *(not scored)***
 25a. Yes, without exception
 25b. Yes, but with some exception
 25c. No
- 26. Do the standard bidding documents contain sustainability clauses?**
 26a. Yes, in all model documents → 1 point if selected
 26b. No, only in some model documents → 1 point if selected
 26c. None of the model documents contain sustainability clauses
- 27. Does the regulatory framework provide incentives for preparing bids with environmentally friendly components? (Y/N)**
- 28. Are the following environmentally friendly incentives included in the regulatory framework? *(not scored)***
 28a. Environmental experience/competence in qualification criteria (such as eco tags, ratings, etc.)

- 28b. Environmental experience/competence in award criteria
- 28c. Specification standards
- 28d. General environmental targets
- 28e. Other (specify):

29. Please select which type of gender-specific provisions are available in the regulatory framework:

Select all that apply: (Y/N)

- 29a. Needs assessment should include gender analysis
- 29b. Firms are required to show that they adhere to the principle of equal pay
- 29c. Firms are required to show that they adhere to gender non-discrimination
- 29d. Exclusion grounds for firms that have violated gender equality obligations
- 29e. Award criteria with gender dimension
- 29f. Other (specify) *(not scored)*

30. According to the regulatory framework, which of the following tools must be used when a Procuring Entity you identified prepares to estimate-the contract value of the new procurement opportunity? Select all that apply:

- 30a. Market analysis → 1 point if selected
- 30b. Feasibility study → 1 point if selected
- 30c. Historical data from similar projects or tenders → 1 point if selected
- 30d. Regulations are silent on this matter
- 30e. None of the above
- 30f. Other (specify)

31. Is this requirement applicable to all procurement procedures conducted by the procuring entities you listed? Select all that apply. *(not scored)*

- 31a. Yes, to all procurement procedures
- 31b. No, only for procurement above a certain value
- 31c. No, only for procurement in specific sectors
- 31d. No, other exceptions apply (specify)

32. According to the regulatory framework, which of the following award criteria must be used in bid evaluations for high value procurement? Select all that apply.

- 32a. Lowest price → proceed to the next question.
- 32b. Project life cycle cost → proceed to the next question.
- 32c. Total cost of ownership → proceed to the next question.
- 32d. Value for money → proceed to the next question.
- 32e. Most economically advantageous tender → proceed to the next question.
- 32f. Sustainability → proceed to the next question.
- 32g. None of the above → proceed to the next question.

For each award criterion that you selected, please indicate whether it must be used for all procurement sectors. *(not scored)*

33. Does the regulatory framework explicitly recommend the preference to use Most Economically Advantageous Tender criteria over lowest price criteria?

- 33a. Yes, for all procurement procedures → 1 point if selected
- 33b. Yes, but only in some procurement procedures
- 33c. No

- 34. According to the regulatory framework, should the procuring entity provide a reference price in tender documents? *(not scored)***
34a. Yes, for all sectors
34b. Yes, but for some sectors only
34c. No

1.3.3 Fairness of the Procurement Process

- 35. Is there a mandatory standstill period between the public notice of award and contract signing to allow unsuccessful bidders challenge the decision?**
35a. Yes, for all public procurement procedures → 1 point if selected
35b. Yes, but only in some public procurement procedures
35c. No
- 36. Does the regulatory framework set a minimum timeframe between advertisement of a tender notice and a submission deadline?**
36a. Yes, for all procurement procedures → 1 point if selected
36b. Yes, but only in some procurement procedures
36c. No
- 37. Does the regulatory framework prohibit splitting contracts for the purpose of circumventing thresholds for open tendering? (Y/N)**
- 38. Does the regulatory framework mandate communication of an award decision?**
38a. Yes, to all bidders → 1 point if selected → proceed to the next question.
38b. Yes, to the awarded bidder only → proceed to the next question.
38c. No, only the name of the awardee is provided
38d. The regulatory framework does not require communication
- 39. Is the requirement to communicate an award decision applicable to all procurements conducted by the procuring entities listed? Select all the apply:**
39a. Yes, applicable to all procurement procedures → 1 point if selected
39b. No, only for procurements above a certain value
39c. No, only for procurement procedures in a specific sector
39d. No, other exceptions apply (specify)
- 40. According to the regulatory framework, how should clarification requests from potential bidders be communicated?**
40a. Required to communicate answers to all bidders → 1 point if selected
40b. Required to communicate answers only to inquiring bidder
40c. Not specified by law
- 41. Is the process of addressing bidders' clarification requests applicable to all procurement procedures conducted by the procuring entities that you listed? Select all that apply. *(not scored)***
41a. Yes, applicable to all procurement procedures
41b. No, only for procurements above a certain value
41c. No, only for procurement procedures in a specific sector
41d. No, other exceptions apply (specify)
- 42. Does the regulatory framework designate a specialized and independent authority to receive procurement challenges filed by firms on decisions issued by the Procuring Entities you specified?**

- 42a. Yes, specialized and independent → 1 point if selected
 42b. Yes, specialized
 42c. Yes, independent
 42d. No

43. Does an aggrieved bidder have the right to appeal decisions on challenges made by the authority that receives procurement challenges? (Y/N)

44. Are there any legally binding time limits to resolve a procurement challenge?

- 44a. Yes, for all types of challenges → 1 point if selected
 44b. Yes, but only in some types of challenges
 44c. No

45. Is there a legal recourse for an aggrieved bidder experiencing delays in either challenge or review processes?

- 45a. Yes, for all types of challenges → 1 point if selected
 45b. Yes, but only in some type of challenges
 45c. No

1.3.4 Transparency of Key Procurement Documents

46. According to the regulatory framework, which of the following documents needs to be made publicly available? (Yes, for all contracts/Yes, except for low value contracts/N)

- 46a. Procurement plans
 46b. Tender notices
 46c. Tender documents (project specific)
 46d. Award decisions
 46e. Contracts
 46f. Contract amendments
 46g. Subcontractors (*not scored*)

1 point if Yes, for all contracts or Yes, except for low value contracts is selected

1.3 BIDDING FOR PUBLIC CONTRACTS			
1.3.1 Access and Firm's Participation (includes gender)			
Indicators	FFP	SBP	Total Points
Open and Competitive Procurement as the Default (9)	1	1	2
Restrictions to Foreign Firms to Participate in Public Procurement (11 AND 13 AND 15)	1	1	2
Ability to Divide Contracts into Lots (17e)	1	1	2
Legal Deadline for Procuring Entities to Process Payments to the Contractor is Established (19)	1	1	2
Procurement Procedures for Framework Agreements are Established (21)	1	1	2
Promoting Gender Equality in Public Procurement (22)	1	1	2
Tender and Contractual Mechanisms to Promote SME Participation	1	1	2
- Tender mechanisms: (17a OR 17c OR 17d OR 17f)	0.5	0.5	1
- Contractual mechanisms: (17b OR 17g OR 17h)	0.5	0.5	1
Total Points	7	7	14

1.3.2 Best Value for Money (includes gender and environment)			
Indicators	FFP	SBP	Total Points
Criteria for Identifying Abnormally Low Bids are Established (23)	1	1	2
Designation of Specialized Tendering Methods for Innovation procurement (24)	1	1	2
Incorporation of Sustainability Clauses in Standard Bidding Documents (26)	1	1	2
Incentives to Include Environmental Considerations in Tenders (27)	1	1	2
Mechanisms to Introduce Gender-Responsive Public Procurement	1	1	2
- Needs assessment should include gender analysis (29a)	0.2	0.2	0.4
- Firms show that they adhere to the principle of equal pay (29 b)	0.2	0.2	0.4
- Firms show that they adhere to gender non-discrimination (29 c)	0.2	0.2	0.4
- Exclusion grounds for infringement of gender rules (29 d)	0.2	0.2	0.4
- Award criteria with gender dimension (29e)	0.2	0.2	0.4
Market-Based Tools to Estimate Contract Value (30)	1	1	2
Total Cost of Ownership and Life Cycle Cost Considerations are used in Bid Evaluation	1	1	2
- Total cost of ownership (32c)	0.5	0.5	1
- Life cycle costing (32b)	0.5	0.5	1
Most Economically Advantageous Tender Considerations are used in Bid Evaluation (32d OR 32e AND33)	1	1	2
Total Points	8	8	16
1.3.3 Fairness of the Procurement Process			
Indicators	FFP	SBP	Total Points
Standstill Period between Contract Award Notice and Contract Signing to Allow Aggrieved Bidders to Challenge the Decision (35)	1	1	2
Minimum Duration between Publication of Tender Notice and Submission Deadline is Clearly Defined (36)	1	1	2
Prohibition of Dividing Contracts to Circumvent Open Tendering Thresholds (37)	1	1	2
Obligation to Notify Firms of Procurement Decisions and Legal Framework Establishes How Clarification Requests from Potential Bidders should be addressed (38 AND 39 AND 40)	1	1	2
Availability of Specialized Procurement Tribunals and the Right to Appeal its Decisions (42 AND 43)	1	1	2
Time Limits to Resolve Appeals and Legal Recourse for Delays in Resolving Appeals (44 AND 45)	1	1	2
Total Points	6	6	12
1.3.4 Transparency of Key Procurement Documents			
Indicators	FFP	SBP	Total Points
Publication of Procurement Plans, Notices, Tender Documents and Award Decisions (46a AND 46b AND 46c AND 46d)	1	1	2
Publication of Contracts and Contract Amendments	1	1	2
- Contracts (46e)	0.5	0.5	1
- Contract amendments (46f)	0.5	0.5	1
Total Points	2	2	4

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

PILLAR II–PUBLIC SERVICES THAT PROMOTE MARKET COMPETITION	
Parameters	
Procuring Entity	<p>Procurement procedures and the legal framework that governs a procurement process can vary depending on which institution is undertaking the procurement. This parameter impacts both de jure and de facto indicators.</p> <p>Indicators that fall within the category of public procurement are benchmarked as applicable to the three largest procuring entities based on the volume of tenders (number of tenders) they have procured over the last three years. The procuring entities are identified by the private sector experts who respond the market competition questionnaire based on their experience and knowledge or based on reliable publicly available data.</p>

2.3 E-PROCUREMENT

2.3.1 Digitalization of Procurement Procedures (includes environment)

47. Is there an operational central electronic public procurement (e-procurement) portal in your economy? (Y/N)

48. Is the central e-procurement portal used by all the procuring entities that you listed at the beginning of the questionnaire? (not scored)

49. Please complete the table below based on the features available in the centralized procurement portal. (Yes, fully digitized/Yes, but hard copy documents must be submitted/No)

- 49a. Registering as a vendor
- 49b. Accessing notices on procurement opportunities
- 49c. Accessing bidding documents
- 49d. Asking a procuring entity for clarifications
- 49e. Submitting tenders
- 49f. Submitting bid security with electronic validation
- 49g. Bid opening
- 49h. Virtual workspace to manage tender procedures (including operative tools for members of the evaluation committee)
- 49i. Notification of decisions (clarifications, awards, contract signing, etc.)
- 49j. Accessing award decisions (including their rationale)
- 49k. Submitting performance guarantee with electronic validation
- 49l. Contract signing
- 49m. Accessing contracts
- 49n. Accessing contract amendments
- 49o. Submitting invoices to the procuring entity
- 49p. Module for framework agreement management
- 49q. e-catalogue of approved suppliers
- 49r. Green catalogue
- 49s. e-reverse auction module
- 49t. e-contract management and implementation module
- 49u. Receiving payments from the procuring entity
- 49v. Applying for vendor eco-certifications/eco-labels

49w. Access to specifications, standards, or criteria for eco-labels and environmentally preferable goods and services

1 point if Yes, fully digitized is selected

Note: Items b, c, j, m, n and w are under Subcategory Transparency of Key Procurement Documents.

50. Are the features supported by the central e-procurement portal available for procurements of goods, works, and services? (not scored)

51. In the absence of a central procurement portal, please provide the link to any other e-procurement portals or websites which are used by the procuring entities: (non-scored)

52. Please complete the table below based on the features available in the most sophisticated non-centralized procurement portal. (Yes, fully digitized/Yes, but hard copy documents must be submitted/No)

52a. Registering as a vendor

52b. Accessing notices on procurement opportunities

52c. Accessing bidding documents

52d. Asking a procuring entity for clarifications

52e. Submitting tenders

52f. Submitting bid security with electronic validation

52g. Bid opening

52h. Virtual workspace to manage tender procedures (including operative tools for members of the evaluation committee)

52i. Notification of decisions (clarifications, awards, contract signing, etc.)

52j. Accessing award decisions (including their rationale)

52k. Submitting performance guarantee with electronic validation

52l. Contract signing

52m. Accessing contracts

52n. Accessing contract amendments

52o. Submitting invoices to the procuring entity

52p. Module for framework agreement management

52q. e-catalogue of approved suppliers

52r. Green catalogue

52s. e-reverse auction module

52t. e-contract management and implementation module

52u. Receiving payments from the procuring entity

52v. Applying for vendor eco-certifications/eco-labels

52w. Access to specifications, standards, or criteria for eco-labels and environmentally preferable goods and services

1 point if Yes, fully digitized is selected

Note: Items b, c, j, m, n and w are under Subcategory Transparency of Key Procurement Documents.

2.3.2 Transparency of Key Procurement Documents (includes gender)

53. For the following types of data, please select whether there is a data portal that provides open access to such information in machine readable format:

53a. Data on tenders (including description, dates, category of spending, estimated value, contracting authority, and identification of bidders) (Y/N)

53b. Data on suppliers (Y/N)

54. Are there any main procuring entities for which data on contracts and tenders is not published on the open access data portal? (not scored)

55. Are sex-disaggregated data on firms that have participated in tenders collected by the central e-procurement portal? (not scored)

55a. Yes, for all firms

55b. Yes, but only for the firm that has been awarded the contract

55c. No

56. Are these data available for the most recent calendar year (2022)? (Y/N)

57. Are these data anonymized? (not scored)

58. Are these data publicly available online? (Y/N)

59. Is the data of suppliers' sex-disaggregated (Y/N)

60. Is the data of subcontractors' sex-disaggregated? (Y/N)

2.3 E-PROCUREMENT			
2.3.1 Digitalization of Procurement Procedures (includes environment)			
Indicators	FFP	SBP	Total Points
Registering as a Vendor (49a OR 52a)	1	1	2
Asking a Procuring Entity for Clarifications and Notification of Decisions Electronically	1	1	2
- Clarifications (49d OR 52d)	0.5	0.5	1
- Notifications (49i OR 52i)	0.5	0.5	1
Submitting Tenders Electronically (49e OR 52e)	1	1	2
Open Bids Electronically and Virtual Workspace to Manage the Tender procedure	1	1	2
- Open bids (49g OR 52g)	0.5	0.5	1
- Virtual workspace (49h OR 52h)	0.5	0.5	1
Submitting Bid Security Electronically and Performance Guarantee with Electronic Validation	1	1	2
- Bid security (49f OR 52f)	0.5	0.5	1
- Performance guarantee (49k OR 52k)	0.5	0.5	1
Contract Signing Electronically (49l OR 52l)	1	1	2
E-Contract Management and Implementation Module (49t OR 52t)	1	1	2
Submitting Invoices to the Procuring Entity (49o OR 52o)	1	1	2
Receiving Payments from the Procuring Entity (49u OR 52u)	1	1	2
Module for Framework Agreement Management (49p OR 52p)	1	1	2
E-Reverse Auction Module (49s OR 52s)	1	1	2
E-Catalogue of Approved Suppliers (49q OR 52q)	1	1	2
Electronic Green Catalogues (49r OR 52r)	1	1	2
Applying for Vendor Eco-Certifications/Eco-Labels (49v OR 52v)	1	1	2
Availability of Central E-Procurement Portal (47)	1	1	2
Total Points	15	15	30

2.3.2 Transparency of Key Procurement Documents (includes gender)			
Indicators	FFP	SBP	Total Points
Accessing Notices on Procurement Opportunities Electronically (49b OR 52b)	1	1	2
Accessing Bidding Documents Electronically (49c OR 52c)	1	1	2
Accessing Award Decisions (Including their Rationale) Electronically (49j OR 52j)	1	1	2
Accessing Contracts and Contract Amendments Electronically	1	1	2
- Contracts (49m OR 52m)	0.5	0.5	1
- Contract amendments (49n OR 52n)	0.5	0.5	1
Access to Specifications, Standards, or Criteria for Eco-Labels and Environmentally Preferable Goods and Services Electronically (49w OR 52w)	1	1	2
Publication of Open Data in Machine Readable Format on Suppliers Contracts and Tenders	1	1	2
- Tenders (53a)	0.5	0.5	1
- Suppliers (53b)	0.5	0.5	1
Gender -- Publication of Open Data on Tenders and Contracts Disaggregated by Sex (56 AND 58 AND 59 AND 60)	1	1	2
Total Points	7	7	14

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

PILLAR III—IMPLEMENTATION OF KEY SERVICES PROMOTING MARKET COMPETITION

3.3 PUBLIC PROCUREMENT

The scores for Pillar III indicators are calculated using the Normal Cumulative Density Function (CDF) transformation method on a scale of 0 to 100, where 0 and 100 represent the lowest and highest possible scores, respectively. The best and worst performers are identified based on the 5th and 95th percentiles of the collected data, except for Gender Gap in Government suppliers where the upper threshold is fixed at 50% which signals gender equality.

3.3.1 Time to Award Public Contracts

Data for Pillar III indicators for the Time to Award Public Contracts are collected through expert questionnaires using the following questions:

61. In practice, how many days would usually pass between bid opening, and contract signing (i.e., the time in which all tenderers, participants and relevant parties are notified of the award decision and the awardee can start implementing the contract) for the following scenarios?

- 61a. Days to complete a procurement of works contract procured in an open procedure valued above the threshold for international procurement
- 61b. Days to complete the procurement of a services contract procured in a restricted procedure with limited competition, valued below the threshold for international procurement.
- 61c. Days to complete the prequalification of supplier: This scenario considers the timeframe between publication of the tender notice and the moment when all bidders are informed of the prequalification decision
- 61d. Days to complete an electronic auction
- 61e. Days to complete a framework agreement with a competitive second stage

3.3.2 Time to Receive a Payment from a Government Contract

The data for Pillar III on the Time to Receive a Payment from a Government Contract are collected through firm-level surveys, using the following question:

- 62. Approximately, how many days does it take for this establishment to receive payment under a government contract after it has delivered an invoice to the relevant authority? If this establishment has received multiple payments or contracts, please provide the time of the largest payment. (numerical)**

3.3.3 Firm's Perceptions on the Ease of Bidding

The data for Pillar III on the Firm's Perceptions on the Ease of Bidding are collected through firm-level surveys, using the following question:

- 63. How difficult does this establishment find the administrative requirements to participate in a public tender? Please consider the time and resources that the establishment used in order to prepare a bid.** → used to compute the differences between the scores of this question between men-owned firms and women-owned firms (proximity to frontier approach, capped at 50%).

63a. Very difficult → 0 points

63b. Moderately difficult → 33 points

63c. Somewhat difficult → 66 points

63d. Not difficult at all → 100 points

- 64. Over the last year, has this establishment secured or attempted to secure a government contract? (Y/N) (non scored)**

3.3.4 Gender Gap in Government Suppliers

The data for Pillar III on Gender Gap in Government Suppliers are collected through firm-level surveys, using the following questions:

- 65. Over the last three years, has this establishment held a government contract? (Y/N)** → used to compute the % of women-owned firms that hold a government contract, where the highest percentage scores better (capped at 50%).

3.3 PUBLIC PROCUREMENT			
3.3.1 Time to Award Public Contracts			
Indicators	FFP	SBP	Total Points
Time to Award a Large Works Contract in Open Competitive Bidding (61a)	100 (20%)	n/a	100 (20%)
Time to Award a Small Services Contract in Selective Bidding (61b)	100 (20%)	n/a	100 (20%)
Time to Prequalify Suppliers (61c)	100 (20%)	n/a	100 (20%)
Time to Award a Contract through Electronic Auction (61d)	100 (20%)	n/a	100 (20%)
Time to Award a Contract in a Framework Agreement (61e)	100 (20%)	n/a	100 (20%)
Total Points	100	n/a	100
3.3.2 Time to Receive a Payment from a Government Contract			
Indicators	FFP	SBP	Total Points

Time to Receive Payment from a Government Contract (62)	100	n/a	100
Total Points	100	n/a	100
3.3.3 Firm's Perceptions on the Ease of Bidding			
Indicators	FFP	SBP	Total Points
Firms' Perceptions on the Difficulty to Meet the Administrative Requirements to Participate in Tenders (63)	100	n/a	100
Total Points	100	n/a	100
3.3.4 Gender Gap in Government Suppliers			
Indicators	FFP	SBP	Total Points
Gender Gap in Government Suppliers (65)	100	n/a	100
Total Points	100	n/a	100

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent).
FFP = Firm Flexibility Point; SBP = Social Benefits Point.

CHAPTER 11. BUSINESS INSOLVENCY–METHODOLOGY NOTE

I. MOTIVATION

The efficient and rapid exit of nonviable firms plays an important cyclical role in renewing the economy by removing firms that are not productive and making way for more productive ones. The purpose of an efficient insolvency framework is to ensure that nonviable firms are swiftly liquidated, and viable firms are effectively restructured in a sustainable way. When insolvency regimes do not have the adequate tools to handle the restructuring and liquidation of companies in a timely and effective manner these companies' economic distress is amplified, jeopardizing the stability of the financial system.¹ In economies where creditor recovery rates are high and resolution times are quicker, restructuring within the formal bankruptcy process fulfills its cyclical role during economic downturns by keeping companies afloat.²

Research shows that efficient insolvency systems play a role in enhancing new firm creation, increasing the size of the private sector, and encouraging greater entrepreneurial activity.³ This is achieved through the availability of appropriate legal mechanisms that enable the cyclical role of insolvency proceedings to be accomplished: anticipatory early warning tools to avert financial distress; active participation of all parties involved, including the debtor, creditors, and other agents; adequate protection of creditors within the insolvency processes; and effective management of the debtor's assets.⁴ Efficient insolvency systems can boost job creation and growth, including by spurring the reallocation of productivity-enhancing capital through the exit of nonviable firms.⁵ Economies with less efficient bankruptcy procedures tend to have lower aggregate productivity because their bankruptcy procedures induce lenders to allocate funds to less productive firms and prevent the management of risk by commercial stakeholders, thus putting pressure on the financial system.⁶

Despite the crucial role played by efficient insolvency regimes, large-scale and updated comparable data about how well those regimes are operating around the world are scarce. The B-READY project aims to fill this void.

II. INDICATORS

The Business Insolvency topic measures key features of insolvency systems on a regulatory level. It also assesses the institutional and operational infrastructure associated with insolvency proceedings (judicial services), as well as the operational efficiency of insolvency proceedings across three different dimensions, here referred to as pillars. The first pillar assesses the quality of regulation pertaining to judicial insolvency proceedings, covering de jure features of a regulatory framework that are necessary for structured debt resolution processes and effective creditor and debtor regimes. The second pillar measures the quality of institutional and operational infrastructure for judicial insolvency proceedings, thus assessing the de facto aspects of insolvency resolution mechanisms and the infrastructure required to implement the legal framework on insolvency. The third pillar measures the time and cost required to resolve in-court liquidation and reorganization proceedings. Each pillar is divided into categories—defined by common features that inform the grouping into a particular category—and each category is further divided into subcategories. Each subcategory consists of several indicators, each of which may, in turn, have several components. Relevant points are assigned to each indicator and subsequently aggregated to obtain the number of points for each subcategory, category, and pillar. Table 1 summarizes all three pillars and their respective categories.

Table 1. Summary Table of all Three Pillars for the Business Insolvency Topic

Pillar I—Quality of Regulations for Judicial Insolvency Proceedings (29 indicators)	
1.1	Legal and Procedural Standards in Insolvency Proceedings (10 indicators)
1.1.1	Pre-Commencement and Commencement Standards in Liquidation and Reorganization (5 indicators)
1.1.2	Post-Commencement Standards in Liquidation and Reorganization (5 indicators)
1.2	Debtor's Assets and Creditor's Participation in Insolvency Proceedings (14 indicators)
1.2.1	Treatment and Protection of Debtor's Assets during Liquidation and Reorganization (includes environment) (6 indicators)
1.2.2	Creditor's Rights in Liquidation and Reorganization (includes environment) (5 indicators)
1.2.3	Selection and Dismissal of the Insolvency Administrator (3 indicators)
1.3	Specialized Insolvency Proceedings and International Insolvency (5 indicators)
1.3.1	Specialized Insolvency Proceedings for Micro and Small Enterprises (MSEs) (3 indicators)
1.3.2	Cross-Border Insolvency (2 indicators)
Pillar II—Quality of Institutional and Operational Infrastructure for Judicial Insolvency Proceedings (17 indicators)	
2.1	Digital Services (e-Courts) in Insolvency Proceedings (7 indicators)
2.1.1	Electronic Services in Liquidation and Reorganization (4 indicators)
2.1.2	Electronic Case Management Systems in Liquidation and Reorganization (3 indicators)
2.2	Interoperability in Insolvency Proceedings (2 indicators)
2.2.1	Digital Services Connectivity with External Systems in Liquidation and Reorganization (1 indicator)
2.2.2	Interconnection Between e-Case Management System and e-Filing Systems in Liquidation and Reorganization (1 indicator)
2.3	Public Information on Insolvency Proceedings and Registry of Insolvency Practitioners (5 indicators)
2.3.1	Public Information on the Number and Length of Liquidation and Reorganization, and Insolvency Judgments (3 indicators)
2.3.2	Availability of a Public Registry of Insolvency Practitioners (2 indicators)
2.4	Public Officials and Insolvency Administrator (3 indicators)
2.4.1	Specialization of Courts with Jurisdiction on Reorganization and Liquidation Proceedings (2 indicators)
2.4.2	Insolvency Administrator's Expertise in Practice (1 indicator)
Pillar III—Operational Efficiency of Resolving Judicial Insolvency Proceedings (4 indicators)	
3.1	Liquidation Proceedings (2 indicators)
3.1.1	Time to Resolve a Liquidation Proceeding (1 indicator)
3.1.2	Cost to Resolve a Liquidation Proceeding (1 indicator)
3.2	Reorganization Proceedings (2 indicators)
3.2.1	Time to Resolve a Reorganization Proceeding (1 indicator)
3.2.2	Cost to Resolve a Reorganization Proceeding (1 indicator)

1. PILLAR I. QUALITY OF REGULATIONS FOR JUDICIAL INSOLVENCY PROCEEDINGS

Table 2 shows the structure for Pillar I, Quality of Regulations for Judicial Insolvency Proceedings. Each of this pillar's categories and subcategories will be discussed in more detail in the order shown in the table.

Table 2. Pillar I—Quality of Regulations for Judicial Insolvency Proceedings

1.1	Legal and Procedural Standards in Insolvency Proceedings
1.1.1	Pre-Commencement and Commencement Standards in Liquidation and Reorganization
1.1.2	Post-Commencement Standards in Liquidation and Reorganization
1.2	Debtor's Assets and Creditor's Participation in Insolvency Proceedings
1.2.1	Treatment and Protection of Debtor's Assets during Liquidation and Reorganization (includes environment)
1.2.2	Creditor's Rights in Liquidation and Reorganization (includes environment)
1.2.3	Selection and Dismissal of the Insolvency Administrator
1.3	Specialized Insolvency Proceedings and International Insolvency
1.3.1	Specialized Insolvency Proceedings for Micro and Small Enterprises (MSEs)
1.3.2	Cross-Border Insolvency

1.1 Legal and Procedural Standards in Insolvency Proceedings

Category 1.1 is divided into two subcategories consisting of several indicators, each of which may, in turn, have several components.

1.1.1 Pre-Commencement and Commencement Standards in Liquidation and Reorganization

A comprehensive legal framework would ensure that when a company is facing imminent insolvency, clear obligations are imposed upon management to protect the legitimate interests of creditors and other stakeholders, and to provide incentives for timely action to minimize the effects of financial distress experienced by the company.⁷ At the same time, it would minimize any regulatory impediments to voluntary negotiations between debtors and creditors outside the court system for restructuring purposes (out-of-court restructuring mechanisms).⁸ Good international practices suggest that the law should clearly define a concrete mechanism that identifies parties which can apply for the insolvency procedure and establish a formal process for submitting the application as well as the timing of the application.⁹ Therefore, Subcategory 1.1.1–Pre-Commencement and Commencement Standards in Liquidation and Reorganization comprises five indicators (table 3).

Table 3. Subcategory 1.1.1–Pre-Commencement and Commencement Standards in Liquidation and Reorganization

	Indicators	Components
1	Obligations of the Company's Management during Pre-Insolvency	Obligations of the management of a debtor company to take reasonable steps to avoid insolvency when possible and minimize its extent if unavoidable
2	Out-of-Court Restructuring Mechanisms	Absence of any impediments to mechanisms allowing to resolve insolvency outside formal judicial proceedings
3	Commencement of Formal Liquidation Proceedings	Filing for liquidation by debtors and creditors
4	Commencement of Formal Reorganization Proceedings	Filing for reorganization by debtors and creditors
5	Basis for Commencement of Formal Insolvency Proceedings	Existence of a standard to initiate insolvency such as the liquidity test or balance sheet test

1.1.2 Post-Commencement Standards in Liquidation and Reorganization

In the resolution of insolvency, legal systems should provide adequate legal mechanisms to address the collective satisfaction of the ongoing claims held against the debtor. To achieve this, a balance needs to be found within the insolvency law between liquidation and reorganization, where the advantages of near-term debt collection through liquidation is balanced against the preservation of the value of the debtor's business through reorganization.¹⁰ The insolvency framework should consider the actors present within the formal insolvency proceedings, ensuring the correct procedures most appropriate to the resolution of the debtor's financial difficulties are available, and allowing parties to be able to anticipate how their legal rights are affected during the proceedings.¹¹ Therefore, Subcategory 1.1.2–Post-commencement Standards in Liquidation and Reorganization comprises five indicators (table 4).

Table 4. Subcategory 1.1.2–Post-Commencement Standards in Liquidation and Reorganization

	Indicators	Components
1	Creditors Notification Requiring to Submit Claims	Existence of safeguards for creditors to ensure that the insolvency administrator provides notice of the reasons for decisions upon the admission or rejection of claims during liquidation proceedings
2	How the Reorganization Plan is voted	Existence of a comprehensive framework for reorganization that includes key features on voting arrangements
3	Means of Voting on the Reorganization Plan	Existence of a comprehensive framework for reorganization that includes key features on means of voting

4	Protection of Dissenting Creditors in Reorganization	Existence of a comprehensive framework for reorganization that includes key features on protection of dissenting creditors by assuring that they would obtain in return at least as much as they would obtain in liquidation
5	Conversion from Reorganization to Liquidation	Existence of a legal avenue allowing the conversion of unsuccessful reorganization proceedings into liquidation proceedings, granting the insolvent company the opportunity to have an efficient exit from the market

1.2 Debtor's Assets and Creditor's Participation in Insolvency Proceedings

Category 1.2 is divided into three subcategories consisting of several indicators, each of which may, in turn, have several components.

1.2.1 Treatment and Protection of Debtor's Assets during Liquidation and Reorganization (includes environment)

The main objective of insolvency proceedings is the maximization of the debtor's assets.¹² Thus, provisions that enable such maximization are key to the good functioning of a well-designed insolvency legal framework. Robust insolvency frameworks address any ongoing activities to preserve the insolvency estate and allow for equal distribution to creditors upon discharge of either liquidation or reorganization proceedings.¹³ Provisions should therefore prevent the premature collection of individual debts by creditors, as well as provide the necessary mechanisms for the continued operation or survival of the business of the debtor or the preservation on the enhancement of the value of the estate.¹⁴ To do this, the insolvency framework should provide for resolution of ongoing actions or claims, as well as contracts that have not yet been fully performed and any necessary post-commencement finance.¹⁵ Implementing efficient and transparent regulatory mechanisms for the management of the debtor's assets during insolvency proceedings may improve the likelihood of high recovery.¹⁶ Therefore, Subcategory 1.2.1–Treatment and Protection of Debtor's Assets during Liquidation and Reorganization (includes environment) comprises six indicators (table 5).

Table 5. Subcategory 1.2.1–Treatment and Protection of Debtor's Assets during Liquidation and Reorganization (includes environment)

	Indicators	Components
1	Automatic Stay of Proceedings	Key features of a comprehensive regime for the stay of proceedings, including time limit
2	Exceptions and Relief to Automatic Stay of Proceedings	Key features of a comprehensive regime for the stay of proceedings, including exceptions for perishable assets or for public policy interests
3	Continuation of Existing Essential Contracts	Existence of the provision that contracts that are essential to the debtor's business can be continued during the insolvency proceedings
4	Rejection of Existing Burdensome Contracts and Assets	Existence of the provision that contracts that are burdensome to the firm can be rejected in insolvency proceedings
5	Voidance of Preferential and Undervalued Transactions	Existence of the provision that preferential and undervalued transactions can be voided
6	Post-Commencement Credit Availability and Priority	Existence of a mechanism that allows prospective debtors access to credit after the commencement of formal insolvency proceedings, in addition to predefined priority associated to such post-commencement credit over unsecured claims

1.2.2 Creditor's Rights in Liquidation and Reorganization (includes environment)

Creditors have significant interest in the debtor's business and assets.¹⁷ It is therefore important that a balance is struck between the creditor's rights and interests that are well defined and safeguarded on the one hand and ensuring that the creditor representation mechanism remains efficient and cost-effective on the other.¹⁸ The greater balance in this relationship, the more successful the insolvency proceedings will be due to the greater likelihood that creditors will cooperate, providing a check against possible abuse of the

insolvency proceedings and facilitating their implementation.¹⁹ The ranking of creditors, as well as their treatment and the necessary representation within the proceedings, are therefore an integral component of this creditor representation mechanism. Furthermore, the prioritization of specific types of unsecured creditors, such as claims related to the environment or workers, and the existence of a special regime for labor claims has long been recognized as a fundamental component in insolvency proceedings.²⁰ The indicators measure whether creditors participate in important decisions during insolvency proceedings, such as the existence of a creditor representation. Therefore, Subcategory 1.2.2–Creditor's Rights in Liquidation and Reorganization (includes environment) comprises five indicators (table 6).

Table 6. Subcategory 1.2.2–Creditor's Rights in Liquidation and Reorganization (includes environment)

	Indicators	Components
1	Creditor Representation	Existence of a creditors committee or other creditor representation during insolvency proceedings
2	Request of Information by Creditors	Existence of provisions providing for the right of creditors, either individually or through the creditors' committee to request up-to-date information on the debtor's business and financial affairs
3	Priority of Secured Claims	Availability of a ranking of creditors' claims among unsecured creditors, in addition to the ranking of specific unsecured creditors in the context of public interest such as environmental or labor claims
4	Priority of Labor and Environmental Claims	
5	Special Regime for Labor Claims	Existence of a special regime for labor standards in insolvency proceedings

1.2.3 Selection and Dismissal of the Insolvency Administrator

An effective insolvency framework should ensure that the criteria as to who may be an insolvency administrator is objectively and clearly established. It is essential that the insolvency administrator be appropriately qualified and possess the knowledge, experience, and personal qualities (such as impartiality) that will ensure not only the effective and efficient conduct of the proceedings but also the trustworthiness of the insolvency regime itself.²¹ The insolvency representative plays a central role in the effective and efficient implementation of the insolvency law, with certain powers over debtors and their assets and a duty to protect those assets and their value. The insolvency administrator must objectively take into account the interests of creditors and employees and ensure that the law is applied effectively and impartially. Therefore, Subcategory 1.2.3–Selection and Dismissal of the Insolvency Administrator comprises three indicators (table 7).

Table 7. Subcategory 1.2.3–Selection and Dismissal of the Insolvency Administrator

	Indicators	Components
1	Insolvency Administrators Qualification Requirements in the Law	Existence in the regulatory framework of predefined qualification requirements for insolvency administrators
2	Conditions for Disqualification	Existence in the regulatory framework of predefined conditions for disqualification of insolvency administrators
3	Mechanism for Selection and Dismissal	Existence in the regulatory framework of mechanism for selection and dismissal of insolvency administrators

1.3 Specialized Insolvency Proceedings and International Insolvency

Category 1.3 is divided into two subcategories consisting of several indicators, each of which may, in turn, have several components.

1.3.1 Specialized Insolvency Proceedings for Micro and Small Enterprises (MSEs)

The lack of an attractive exit for MSEs may prevent many entrepreneurs from even starting a business. By the time the MSE debtor initiates insolvency proceedings, the firm is no longer viable, which results in loss

of value, compromising the preservation of the company at the expense of legal procedural certainty.²² Therefore, an inefficient insolvency framework can also be harmful for entrepreneurship.²³ Good practices advocate for promoting specialized or simplified proceedings for micro and small enterprises (MSEs).²⁴ Therefore, Subcategory 1.3.1–Specialized Insolvency Proceedings for Micro and Small Enterprises (MSEs) comprises three indicators (table 8).

Table 8. Subcategory 1.3.1–Specialized Insolvency Proceedings for Micro and Small Enterprises (MSEs)

	Indicators	Components
1	Availability and Eligibility	Existence within the insolvency law of a simplified insolvency regime for MSEs, establishing the criteria that debtors must meet to be eligible for simplified liquidation or reorganization proceedings, and specifying under what conditions creditors of the eligible debtors may also apply for commencement of simplified proceedings: that is, applying at an early stage of financial distress and without the need to prove insolvency
2	Conversion of Proceedings	Existence of a mechanism providing for the possibility that, at any point during a simplified reorganization proceeding, the proceeding be discontinued and converted to a liquidation, if the competent authority determines that the debtor is insolvent and that there is no prospect for a viable reorganization
3	Debt Discharge	Existence of provisions providing that the conditions attached to the discharge of the MSE’s debt are kept to a minimum, in addition to specifying the criteria for denying a discharge

1.3.2 Cross-Border Insolvency

A comprehensive cross-border insolvency framework is key to promoting objectives such as greater legal certainty for trade and investment, maximization of the value of the debtor’s assets, and facilitation of the rescue of financially troubled businesses, thereby protecting investment and preserving employment.²⁵ The indicator measures whether a legal framework for cross-border insolvencies is established, with the recognition of foreign proceedings. Therefore, Subcategory 1.3.2–Cross-Border Insolvency comprises two indicators (table 9).

Table 9. Subcategory 1.3.2–Cross-Border Insolvency

	Indicators	Components
1	Existence of Framework and Recognition of Foreign Insolvency Proceedings	Existence of a mechanism to recognize foreign insolvency proceedings
2	Legal Framework for Cooperation with Foreign Courts and Representatives	Existence of a legal system aimed at facilitating cooperation with foreign courts and representatives

2. PILLAR II. QUALITY OF INSTITUTIONAL AND OPERATIONAL INFRASTRUCTURE FOR JUDICIAL INSOLVENCY PROCEEDINGS

Table 10 shows the structure for Pillar II, Quality of Institutional and Operational Infrastructure for Judicial Insolvency Proceedings. Each of this pillar’s categories and subcategories will be discussed in more detail in the order shown in the table.

Table 10. Pillar II–Quality of Institutional and Operational Infrastructure for Judicial Insolvency Proceedings

2.1	Digital Services (e-Courts) in Insolvency Proceedings
2.1.1	Electronic Services in Liquidation and Reorganization
2.1.2	Electronic Case Management Systems in Liquidation and Reorganization
2.2	Interoperability in Insolvency Proceedings
2.2.1	Digital Services Connectivity with External Systems in Liquidation and Reorganization
2.2.2	Interconnection Between e-Case Management System and e-Filing Systems in Liquidation and Reorganization

2.3	Public Information on Insolvency Proceedings and Registry of Insolvency Practitioners
2.3.1	Public Information on the Number and Length of Liquidation and Reorganization, and Insolvency Judgments
2.3.2	Availability of a Public Registry of Insolvency Practitioners
2.4	Public Officials and Insolvency Administrator
2.4.1	Specialization of Courts with Jurisdiction on Reorganization and Liquidation Proceedings
2.4.2	Insolvency Administrator's Expertise in Practice

2.1 Digital Services (e-Courts) in Insolvency Proceedings

Category 2.1 is divided into two subcategories consisting of several indicators, each of which may, in turn, have several components.

2.1.1 Electronic Services in Liquidation and Reorganization

As court automation increases efficiency and transparency while reducing administrative costs, the rapid development of information and communication technologies (ICT) opens new opportunities to significantly improve the administration of justice. The availability of web services, the use of electronic filing, the electronic exchange of legal documents, and the possibility of online legislation and case law are only some examples that are spurring judicial administrations around the world to rethink their current functions and activities.²⁶ ICT can be used to enhance efficiency, access, timeliness, transparency, and accountability, thus helping judiciaries to provide adequate services.²⁷ In addition, the use of electronic auctions has the potential of increasing the number of bidders, thus potentially increasing the recovery rate on the value of the estate.²⁸ Therefore, Subcategory 2.1.1–Electronic Services in Liquidation and Reorganization comprises four indicators (table 11).

Table 11. Subcategory 2.1.1–Electronic Services in Liquidation and Reorganization

	Indicators	Components
1	Electronic Filing	Existence of fully operational e-filing system
2	Electronic Payment of Court Fees	Existence of e-payment systems, in addition to a functional case management system for judges, lawyers, and insolvency administrators
3	Electronic Auction	Possibility to conduct auctions virtually
4	Virtual Hearing	Possibility to conduct hearings virtually

2.1.2 Electronic Case Management Systems in Liquidation and Reorganization

Electronic case management refers to the distribution of cases in the court in an electronic manner, through a digital system platform, using a software that assures a random selection of judges. Cases in court can be followed through a platform providing information about related dates, experts call, documents filing, and any court announcements, including final judgments. The electronic case management system also includes performance reports.²⁹ Court automation includes electronic case management by judges and lawyers, as well as by insolvency administrators, in a way that they can track the status of the case, dates of hearings, expert consultations, if any, and final judgments. Therefore, Subcategory 2.1.2–Electronic Management Systems in Liquidation and Reorganization comprises three indicators (table 12).

Table 12. Subcategory 2.1.2–Electronic Case Management Systems in Liquidation and Reorganization

	Indicators	Components
1	Electronic Case Management for Judges and Lawyers	Existence of case management features implemented in insolvency proceedings for the practitioners and judges, which allow for instance send and receive notifications electronically, manage file procedures electronically, view court orders and decisions electronically
2	Electronic Case Management for Insolvency Administrators	Existence of case management features implemented in insolvency proceedings for the insolvency administrators

3	Electronic Monitoring of the status of insolvency proceedings	Possibility for the parties to the process to electronically track the status of the case
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2.2 Interoperability in Insolvency Proceedings

Category 2.2 is divided into two subcategories consisting of several indicators each of which may, in turn, have several components.

2.2.1 Digital Services Connectivity with External Systems in Liquidation and Reorganization

Public sector interoperability saves time and costs for businesses by improving their interactions with administrations. It is important to ensure that different information technology systems, devices, or software applications can communicate, exchange data with each other seamlessly and use the information that has been exchanged.³⁰ For instance, judges should be able to verify companies' registry, debt registries, land titles, etc., while evaluating the financial and corporate situation of a company filing for insolvency, be it either liquidation or reorganization. The subcategory measures the inclusion of insolvency proceedings within e-government services and their interconnectedness with other agencies (including commercial/business registries and law enforcement agencies) and stakeholders involved in insolvency proceedings. Therefore, Subcategory 2.2.1–Digital Services Connectivity with External Systems in Liquidation and Reorganization comprises one indicator (table 13).

Table 13. Subcategory 2.2.1–Digital Services Connectivity with External Systems in Liquidation and Reorganization

	Indicators	Components
1	Interoperability with External Systems	Exchange of data with other authorities that enhances the efficiency of the administration of justice

2.2.2 Interconnection Between e-Case Management System and e-Filing Systems in Liquidation and Reorganization

The Business Insolvency topic measures whether the key aspects of a functioning e-Case Management for insolvency lawyers, insolvency judges and insolvency administrators are in place and are functionable. The interconnectedness of e-Case management systems is also measured, so that the systems can inform aspects of the insolvency proceedings and transfer data that might not be included in one isolated system. This type of interconnection promotes a more efficient administration of justice.³¹ Therefore, Subcategory 2.2.2–Interconnection Between e-Case Management System and e-Filing Systems in Liquidation and Reorganization comprises one indicator (table 14).

Table 14. Subcategory 2.2.2–Interconnection Between e-Case Management System and e-Filing Systems in Liquidation and Reorganization

	Indicators	Components
1	Interconnection Between Case Management System and e-Filing Systems	Exchange or transfer of data between case management systems so that they communicate in a coordinated way, without effort from the end user

2.3 Public Information on Insolvency Proceedings and Registry of Insolvency Practitioners

Category 2.3 is divided into two subcategories consisting of several indicators, each of which may, in turn, have several components.

2.3.1 Public Information on the Number and Length of Liquidation and Reorganization, and Insolvency Judgments

Data on insolvency proceedings related to the number, length and the type of proceedings is a key benchmark for economies to introduce reform and inform public policy design. It is also a recognized international good practice to publish judgments at all levels of court proceedings.³² In insolvency cases, such judgments could provide legal guidance, as the law is still quite new. Publishing judgments will also increase transparency and credibility. The creation of this body of data is likely to further contribute to the growth of expertise among judges and lawyers. Having a bulk of relevant case law at hand helps interested parties understand the specifics of this area of law, trace current trends as well as determine possible risks and solutions for how to avoid them.³³ Therefore Subcategory 2.3.1–Public Information on the Number and Length of Liquidation and Reorganization, and Insolvency Judgments comprises three indicators (table 15).

Table 15. Subcategory 2.3.1–Public Information on the Number and Length of Liquidation and Reorganization, and Insolvency Judgments

	Indicators	Components
1	Publication of Judgments in Insolvency Procedures	Whether judgments concerning insolvency proceedings are publicly available
2	Publication of Data on the Number and Type of Insolvency Procedures	Whether the data on number and types of insolvency proceedings in the economy per year is publicly available
3	Publication of Data on the Average Length of Insolvency Procedures	Whether the data on the average length of insolvency proceedings is publicly available

2.3.2 Availability of a Public Registry of Insolvency Practitioners

The existence of an insolvency register that will record information on all ongoing insolvency procedures, including, among others, information about the debtor, the stage of the proceedings, and information about the insolvency practitioner, plays a central role in making this information publicly available to interested parties in the proceedings.³⁴ Therefore Subcategory 2.3.2–Availability of a Public Registry of Insolvency Practitioners comprises two indicators (table 16).

Table 16. Subcategory 2.3.2–Availability of a Public Registry of Insolvency Practitioners

	Indicators	Components
1	Availability of a Register of Insolvency Practitioners	Whether there is a register of insolvency practitioners and/or firms qualified to offer insolvency services and whether the register is available to the public through publication in an official gazette, newspapers, or court websites
2	Publication of Register of Insolvency Practitioners	Whether the register of insolvency practitioners is publicly available

2.4 Public Officials and Insolvency Administrator

Category 2.4 is divided into two subcategories consisting of several indicators, each of which may, in turn, have several components.

2.4.1 Specialization of Courts with Jurisdiction on Reorganization and Liquidation Proceedings

Creating specialized courts helps the handling of complex legal issues in the areas of commercial law, insolvency law, securities law, or intellectual property law because such courts focus on specific and complex procedures. Bankruptcy cases are particularly complicated due to the demanding interests of the many stakeholders involved, including a large number and diverse type of creditors, insolvency representatives, practitioners, and the debtor facing financial difficulties. Judges that deal with these types of cases require specific skills (such as financial and accounting skills). To successfully carry out a reorganization proceeding, for example, a judge must demonstrate sound accounting and financial skills; therefore, insolvency judges should be designated on their merit and ability to fully understand the financial

situation of the debtor—a skill that is not characteristic of an ordinary commercial judge. Specialized courts can also enhance bank funding decisions and lead to faster resolution of the proceedings and more reliable decision making.³⁵ Therefore, Subcategory 2.4.1–Specialization of Courts with Jurisdiction on Reorganization and Liquidation proceedings comprises two indicators (table 17).

Table 17. Subcategory 2.4.1–Specialization of Courts with Jurisdiction on Reorganization and Liquidation Proceedings

	Indicators	Components
1	Specialized Bankruptcy Courts	Existence of an operational specialized bankruptcy court or a judge/division/bench in a commercial court to which all bankruptcy matters or cases are assigned, in the largest business city of the economy
2	Operability of Bankruptcy Courts	The specialized bankruptcy court or a judge/division/bench in a commercial court is operational if all bankruptcy matters are assigned accordingly. A specialized bankruptcy court or judge/division and bench does not entail an exclusive insolvency jurisdiction, other commercial cases can also be assigned to the same court or judge/division

2.4.2 Insolvency Administrator’s Expertise in Practice

The complexity of many insolvency proceedings makes it highly desirable for the insolvency representative to be appropriately qualified, with knowledge of the law (not only insolvency law, but also relevant commercial, finance, and business law), as well as adequate experience in commercial and financial matters, including accounting.³⁶ Therefore, Subcategory 2.4.2–Insolvency Administrator’s Expertise in Practice comprises one indicator (table 18).

Table 18. Subcategory 2.4.2–Insolvency Administrator’s Expertise in Practice

	Indicators	Components
1	Insolvency Administrator Qualification Requirements in Practice	Application of the special qualifications for insolvency administrators to be appointed

3. PILLAR III. OPERATIONAL EFFICIENCY OF RESOLVING JUDICIAL INSOLVENCY PROCEEDINGS

Table 19 shows the structure for Pillar III, the Operational Efficiency of Resolving Judicial Insolvency Proceedings. Each of this pillar’s categories and subcategories will be discussed in more detail in the order shown in the table.

Table 19. Pillar III–Operational Efficiency of Resolving Judicial Insolvency Proceedings

3.1	Liquidation Proceedings
3.1.1	Time to Resolve a Liquidation Proceeding
3.1.2	Cost to Resolve a Liquidation Proceeding
3.2	Reorganization Proceedings
3.2.1	Time to Resolve a Reorganization Proceeding
3.2.2	Cost to Resolve a Reorganization Proceeding

3.1 Liquidation Proceedings

Cost-effective insolvency proceedings can encourage inefficient firms to exit and embolden greater entrepreneurial activity and new firm creation.³⁷ This measure on cost compliance serves as a suitable proxy for the operational efficiency of the judicial proceedings on insolvency. Therefore, Category 3.1–Liquidation Proceedings comprises two subcategories (tables 20 and 21).

Table 20. Subcategory 3.1.1–Time to Resolve a Liquidation Proceeding

	Indicators	Components
1	Time to Resolve an In-Court Liquidation Proceeding	The time to resolve liquidation proceedings is presented in calendar months from the date of filing until the payment of some or all the money owed to creditors

Table 21. Subcategory 3.1.2–Cost to Resolve a Liquidation Proceeding

	Indicators	Components
1	Cost to Resolve an In-Court Liquidation Proceeding	The overall cost of the proceedings (costs incurred by both the creditors and the borrower) is recorded as a percentage of the value of the defined company and includes court fees, attorney fees, and insolvency representative fees, in addition to other fees (auctioneer, accountant, and other miscellaneous fees)

3.2 Reorganization Proceedings

Excessive length of restructuring and business discharge is key in triggering loss of value for the enterprise.³⁸ Therefore, Category 3.2–Reorganization Proceedings comprises two subcategories (tables 22 and 23).

Table 22. Subcategory 3.2.1–Time to Resolve a Reorganization Proceeding

	Indicators	Components
1	Time to Resolve an In-Court Reorganization Proceeding	The time to resolve the proceedings is presented in calendar months from the date of filing until the approval of the reorganization plan

Table 23. Subcategory 3.2.2–Cost to Resolve a Reorganization Proceeding

	Indicators	Components
1	Cost to Resolve an In-Court Reorganization Proceeding	The overall cost of the proceedings (costs incurred by both the creditors and the borrower) is recorded as a percentage of the value of the defined company and includes court fees, attorney fees, and insolvency representative fees, in addition to other fees (auctioneer, accountant, and other miscellaneous fees)

III. DATA SOURCES

4.1 Data Collection Sources

The data for Pillar I, Pillar II, and Pillar III are collected through consultations with private sector experts. Private sector experts include insolvency practitioners and lawyers specialized in corporate law or commercial law, with practical experience in corporate insolvency proceedings and relevant knowledge of the insolvency framework in each economy.

4.2 Screening and Selection of Experts

In order to select potential experts to participate in the questionnaire, a screener questionnaire has been developed (table 24).

Table 24. Screener Questionnaire and Respondent Criteria

Relevant Experts' Professions
Lawyer, judge, and other associated professions, including, among others, clerk, official receiver, insolvency administrator, bankruptcy commission official
Relevant Areas of Specialization
Corporate insolvency, corporate law, commercial law, procedural law
Assessment of the Experts' Knowledge or Experience Related to Commercial Insolvency

Experience in formal judicial proceedings, either liquidation or reorganization, involving corporate debtors or creditors in the last three years based on closed and/or in current ongoing cases, particularly with domestic micro and small enterprises (MSEs). Encouraged to have experience or knowledge in the basic framework of the UNCITRAL Legislative Guide on Insolvency Law, and the World Bank's Principles for Effective Insolvency and Creditor/Debtor Regime. Encouraged to have knowledge or experience in dealing with environmental obligations within the area of bankruptcy. Encouraged to be an active user of the online court services and platforms available in the specific jurisdiction, assuming these features are in place and are fully operational.

Thus, the information provided in the screener questionnaires allows the team to better understand the experts' profession, areas of specializations, and experts' knowledge or experience related to corporate insolvency legal regime and practice. Ultimately, this will allow the team to select the experts to respond to the questionnaire.

IV. PARAMETERS

To ensure comparability of the data from expert consultations across economies, the Business Insolvency topic uses specific parameters. A parameter refers to an assumption that is made about specific characteristics of the insolvency law and the insolvency practice. Parameters specific to the Business Insolvency topic are also necessary to ensure that measurements specific to the competent court and its location (the court with jurisdiction to adjudicate insolvency cases in the largest business city) and the debtor (the type of company, size, financial situation, and the number of creditors) are comparable across economies.

5.1 Specific Parameters

5.1.1 Competent Court and Its Location

Justification:

Defining the competent court is key in ensuring comparability across different economies because it establishes the same level of jurisdiction over the commencement and conduct of insolvency proceedings. The competent court of primary or first instance is the most comparable among jurisdictions worldwide: the jurisdiction of the second-instance court generally depends on the nature of the legal framework and the jurisdiction in question, which does not allow for a comprehensive view and coherence in the data analysis. In addition, because within each economy there might be a variety of subnational levels of jurisdiction over insolvency procedures, the competent court assumed here is based in the largest business city of the economy as the main criteria for territorial jurisdiction.

Application:

This parameter is applicable to all indicators in Pillars II and III. For example, an assumption of the competent court with jurisdiction to resolve insolvency disputes establishes the institution providing the public services as measured in Pillar II. The most relevant institution that provide these public services must be identified in as consistent and uniform a way as possible across economies to allow comparability in indicators related to e-courts or measurements such as the specialized bankruptcy court or a judge/division/bench in a commercial court. In addition, an assumption related to the competent court specifically located in the largest business city applies in estimating the efficiency of the in-court liquidation and reorganization proceedings as measured in Pillar III, because it allows standardization at the procedural level to calculate the time and cost of such proceedings.

5.1.2 Debtor Company

Justification:

The limited liability company (LLC) is the most prevalent legal form of company adopted worldwide to conduct business. LLCs can also shield the personal assets of its members from legal claims related to the business. In other types of firm arrangements, the members and/or partners are held personally liable, which

would entail individual and/or personal insolvency—which falls outside the ambit of corporate insolvency examined in the B-READY project. Focusing solely on limited liability companies allows the relationship between creditors and debtor to be examined within the insolvency framework alone without other forms of liability arising.

Application:

The Business Insolvency topic assumes that the debtor is a domestic LLC operating in the largest business city in each economy. The size of the company’s assets is determined by the company’s market value in each economy, which is set based on a range from 150 to 200 times the gross national income (GNI) per capita, considered a medium-size enterprise. The LLC defaults on its debt obligations toward its secured and unsecured creditors as they mature, or the value of the debtor’s liabilities exceeds the value of its assets. Establishing a standardized debtor company, with very specific characteristics, is the only way to preserve comparability in measuring the time and cost of insolvency proceedings. The assumption establishing the debtor firms’ characteristics is only used in Pillar III. For example, the assumption is used in estimating the length and cost of insolvency proceedings of liquidation and reorganization, respectively. On a similar vein, an assumption setting the value of the company plays a central role in calculating the cost because the related question is expressed as a percentage of the value of the company.

V. TOPIC SCORING

The Business Insolvency topic has three pillars: Pillar I–Quality of Regulations for Judicial Insolvency Proceedings; Pillar II–Quality of Institutional and Operational Infrastructure for Judicial Insolvency Proceedings; and Pillar III–Operational Efficiency of Resolving Judicial Insolvency Proceedings. The total points for each pillar are further rescaled to values from 0 to 100, and subsequently aggregated into the total topic score. Each pillar contributes one-third to the total topic score. Table 25 shows the scoring for the Business Insolvency topic. The scores distinguish between benefits to the firm (captured as firm flexibility points) and benefits to society’s broader interests (captured as social benefits points). For further scoring details, please see Annex A, which complements this section.

Table 25. Aggregate Scoring Overview

Pillar number	Pillars	Number of Indicators	Score			Rescaled Points (0–100)	Weight
			Firm Flexibility Points	Social Benefits Points	Total Points		
I	Quality of Regulations for Judicial Insolvency Proceedings	29	28	25	53	100.00	0.33
II	Quality of Institutional and Operational Infrastructure for Judicial Insolvency Proceedings	17	17	17	34	100.00	0.33
III	Operational Efficiency of Resolving Judicial Insolvency Proceedings	4	400	n/a	400	100.00	0.33

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent).

6.1 Pillar I–Quality of Regulations for Judicial Insolvency Proceedings

Pillar I covers 29 indicators with a total score of 53 points (28 points on firm flexibility and 25 points on social benefits) (table 26). The scoring for each category under this pillar is as follows:

- 6.1.1** *Legal and Procedural Standards in Insolvency Proceedings* has 10 indicators with a total maximum score of 20 points (10 points on firm flexibility and 10 points in social benefits). Specifically, the

Pre-Commencement and Commencement Standards in Liquidation and Reorganization Subcategory has 5 indicators, and *Post-commencement Standards in Liquidation and Reorganization* comprises another 5. Comprehensive insolvency standards addressing key issues predating the filing for formal proceedings, defining clear standard for commencing formal insolvency proceedings, and ensuring the right balance is struck between liquidation and reorganization proceedings, with all processes being clearly defined, benefits both firms (firm flexibility) and society (social benefits).

- 6.1.2** *Debtor's Assets and Creditor's Participation in Insolvency Proceedings* has 14 indicators with a total maximum score of 25 points (13 points on firm flexibility and 12 points in social benefits). Specifically, the *Treatment and Protection of Debtor's Assets during Liquidation and Reorganization (includes environment)* Subcategory has 6 indicators, the *Creditor Rights in Liquidation and Reorganization* Subcategory has 5 indicators, and the *Selection and Dismissal of the Insolvency Administrator* comprises another 3 indicators. Under this category, the score for the most part is allocated equally between firm flexibility and social benefits, except for the *Automatic Stay of Proceedings* and the *Rejection of Existing Burdensome Contracts and Assets* indicators, which do not extend to socially desirable outcomes, and thus is scored only on firm flexibility. In addition, the *Special Regime for Labor Claims* indicator scores on social benefits only. An insolvency regulatory framework that promotes the maximization of the debtor's estate during insolvency proceedings and at the same time provides safeguards to all stakeholders in the proceedings with diverse interests in the assets of the firm benefits to firms and society as a whole.
- 6.1.3** *Specialized Insolvency Proceedings and International Insolvency* has 5 indicators with a total maximum score of 8 points (5 points on firm flexibility and 3 points on social benefits). The *Specialized Insolvency Proceedings for Micro and Small Enterprises (MSEs)* Subcategory has 3 indicators, and the *Cross-Border Insolvency* Subcategory has 2. Under this category, the score for the *Specialized Insolvency Proceedings for Micro and Small Enterprises (MSEs)* is allocated equally between firm flexibility and social benefits because such a specialized regime would ensure expeditious and low-cost insolvency proceedings for firms (firm flexibility) and increase judicial efficiency in terms of caseload by providing another legal avenue for MSEs (social benefit).

Table 26. Aggregate Scoring Pillar I

Pillar I—Quality of Regulations for Judicial Insolvency Proceedings		No. of Indicators	FFP	SBP	Total Points	Rescaled Points
1.1	Legal and Procedural Standards in Insolvency Proceedings	10	10	10	20	30.00
1.1.1	Pre-Commencement and Commencement Standards in Liquidation and Reorganization	5	5	5	10	15.00
1.1.2	Post-Commencement Standards in Liquidation and Reorganization	5	5	5	10	15.00
1.2	Debtor's Assets and Creditor's Participation in Insolvency Proceedings	14	13	12	25	50.00
1.2.1	Treatment and Protection of Debtor's Assets during Liquidation and Reorganization (includes environment)	6	6	4	10	20.00
1.2.2	Creditor's Rights in Liquidation and Reorganization (includes environment)	5	4	5	9	20.00
1.2.3	Selection and Dismissal of the Insolvency Administrator	3	3	3	6	10.00
1.3	Specialized Insolvency Proceedings and International Insolvency	5	5	3	8	20.00
1.3.1	Specialized Insolvency Proceedings for Micro and Small Enterprises (MSEs)	3	3	3	6	10.00
1.3.2	Cross-Border Insolvency	2	2	n/a	2	10.00
Total		29	28	25	53	100.00

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

6.2 Pillar II—Quality of Institutional and Operational Infrastructure for Judicial Insolvency Proceedings

Pillar II includes 17 indicators with a total score of 34 points (17 points on firm flexibility and 17 points on social benefits) (table 27). The scoring for each category under the pillar is as follows:

- 6.2.1** *Digital Services (e-Courts) in Insolvency Proceedings* has 7 indicators with a total maximum score of 14 points (7 points on firm flexibility and 7 points on social benefits). Specifically, the *Electronic Services in Liquidation and Reorganization* Subcategory has 4 indicators, and the *Electronic Case Management Systems in Liquidation and Reorganization* Subcategory has 3. Under this category, the score is allocated equally between firm flexibility and social benefits.
- 6.2.2** *Interoperability in Insolvency Proceedings* has 2 indicators with a total maximum score of 4 points (2 on firm flexibility and 2 points on social benefits). Specifically, *Digital Services Connectivity with External Systems in Liquidation and Reorganization* Subcategory has 1 indicator, and *Interconnection Between e-Case Management System and e-Filing Systems in Liquidation and Reorganization* Subcategory has another indicator.
- 6.2.3** *Public Information on Insolvency Proceedings and Registry of Insolvency Practitioners* has 5 indicators with a total maximum score of 10 points (5 on firm flexibility and 5 on social benefits). Specifically, the *Public Information on the Number and Length of Liquidation and Reorganization, and Insolvency Judgments* Subcategory has 3 indicators, and the *Availability of a Public Registry of Insolvency Practitioners* Subcategory covers 2 indicators.
- 6.2.4** *Public Officials and Insolvency Administrator* has 3 indicators with a total maximum score of 6 points (3 points on firm flexibility and 3 points on social benefits). Specifically, the *Specialization of Courts with Jurisdiction on Reorganization and Liquidation Proceedings* Subcategory comprises 2 indicators and the *Insolvency Administrator's Expertise in Practice* Subcategory 1 indicator, respectively. A specialized bankruptcy court and the observance of the qualification requirements of the administrator in practice both benefits firms (firm flexibility) and advances the broader public interest (social benefits). Therefore, equal scores are assigned to both subcategories.

Table 27. Aggregate Scoring Pillar II

Pillar II—Quality of Institutional and Operational Infrastructure for Judicial Insolvency Proceedings		No. of Indicators	FFP	SBP	Total Points	Rescaled Points
2.1	Digital Services (e-Courts) in Insolvency Proceedings	7	7	7	14	40.00
2.1.1	Electronic Services in Liquidation and Reorganization	4	4	4	8	20.00
2.1.2	Electronic Case Management Systems in Liquidation and Reorganization	3	3	3	6	20.00
2.2	Interoperability in Insolvency Proceedings	2	2	2	4	20.00
2.2.1	Digital Services Connectivity with External Systems in Liquidation and Reorganization	1	1	1	2	10.00
2.2.2	Interconnection Between e-Case Management System and e-Filing Systems in Liquidation and Reorganization	1	1	1	2	10.00
2.3	Public Information on Insolvency Proceedings and Registry of Insolvency Practitioners	5	5	5	10	20.00
2.3.1	Public Information on the Number and Length of Liquidation and Reorganization, and Insolvency Judgments	3	3	3	6	10.00

2.3.2	Availability of a Public Registry of Insolvency Practitioners	2	2	2	4	10.00
2.4	Public Officials and Insolvency Administrator	3	3	3	6	20.00
2.4.1	Specialization of Courts with Jurisdiction on Reorganization and Liquidation Proceedings	2	2	2	4	10.00
2.4.2	Insolvency Administrator's Expertise in Practice	1	1	1	2	10.00
	Total	17	17	17	34	100.00

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

6.3 Pillar III—Operational Efficiency of Resolving Judicial Insolvency Proceedings

Pillar III comprises 4 categories with scores ranging from 0 to 100. The scores on indicators under this pillar are assigned to firm flexibility only, because the indicators measure the time and cost to resolve in-court liquidation and reorganization proceedings for firms. For example, high fees and long times to resolve liquidation proceedings have adverse impacts on firms, thus hampering firm flexibility.

If an economy had zero completed (closed) cases of judicial reorganization or judicial liquidation proceedings involving corporate debtors over the past three years, the economy receives a “no practice” mark and zero score on the time and cost indicators for the specific proceeding.

6.3.1 *Liquidation Proceedings* has 2 indicators with a maximum score of 50 points. Specifically, the *Time to Resolve a Liquidation Proceeding* Subcategory has 1 indicator, and the *Cost to Resolve a Liquidation Proceeding* Subcategory has 1 indicator.

6.3.2 *Reorganization Proceedings* has 2 indicators with a maximum score of 50 points. Specifically, the *Time to Resolve a Reorganization Proceeding* Subcategory has 1 indicator, and the *Cost to Resolve a Reorganization Proceeding* Subcategory has 1 indicator.

Table 28. Aggregate Scoring Pillar III

Pillar III—Operational Efficiency of Resolving Judicial Insolvency Proceedings		No. of Indicators	Rescaled Points
3.1	Liquidation Proceedings	2	50.00
3.1.1	Time to Resolve a Liquidation Proceeding	1	25.00
3.1.2	Cost to Resolve a Liquidation Proceeding	1	25.00
3.2	Reorganization Proceedings	2	50.00
3.2.1	Time to Resolve a Reorganization Proceeding	1	25.00
3.2.2	Cost to Resolve a Reorganization Proceeding	1	25.00
	Total	4	100.00

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

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ANNEX A. BUSINESS INSOLVENCY–SCORING SHEET

This document outlines the scoring approach for the Business Insolvency topic. For every indicator, a Firm Flexibility Point (FFP) and/or a Social Benefits Point (SBP) are assigned, along with a clarification on the detailed scoring for each such indicator and a note on the relevant background literature.

PILLAR I–QUALITY OF REGULATIONS FOR JUDICIAL INSOLVENCY PROCEEDINGS					
1.1 LEGAL AND PROCEDURAL STANDARDS IN INSOLVENCY PROCEEDINGS					
1.1.1 Pre-Commencement and Commencement Standards in Liquidation and Reorganization					
Indicators	FFP	SBP	Total Points	Rescaled Points	Background Literature
Obligations of the Company's Management during Pre-Insolvency	1	1	2	3.00	Menezes, Mocheva, and Shankar (2020) Menezes et al. (2022); UNCITRAL (2021)
Out-of-Court Restructuring Mechanisms	1	1	2	3.00	Dancausa, Muro, and Uttamchandani (2020); Martinez (2018). Menezes et al. (2022); WB-ICR Task Force (2022)
Commencement of Formal Liquidation Proceedings	1	1	2	3.00	Faber et al. (2012); UNCITRAL (2005); World Bank Group (2021)
Commencement of Formal Reorganization Proceedings	1	1	2	3.00	Faber et al. (2012); UNCITRAL (2005); World Bank Group (2021)
Basis for Commencement of Formal Insolvency Proceedings	1	1	2	3.00	Faber et al. (2012); UNCITRAL (2005); World Bank Group (2021)
Total Points for Subcategory 1.1.1	5	5	10	15.00	
1.1.2 Post-Commencement Standards in Liquidation and Reorganization					
Creditors Notification Requiring to Submit Claims	1	1	2	3.00	Fletcher (2017); UNCITRAL (2005); World Bank Group (2021)
How the Reorganization Plan is voted	1	1	2	3.00	Fletcher (2017); UNCITRAL (2005); World Bank Group (2021)
Means of Voting the Reorganization Plan	1	1	2	3.00	Fletcher (2017); UNCITRAL (2005); World Bank Group (2021)
Protection of Dissenting Creditors in Reorganization	1	1	2	3.00	Fletcher (2017); UNCITRAL (2005) World Bank Group (2021)
Conversion from Reorganization to Liquidation	1	1	2	3.00	Fletcher (2017); UNCITRAL (2005) World Bank Group (2021)
Total Points for Subcategory 1.1.2	5	5	10	15.00	
Total Points for Category 1.1	10	10	20	30.00	

1.2 DEBTOR'S ASSETS AND CREDITOR'S PARTICIPATION IN INSOLVENCY PROCEEDINGS					
1.2.1 Treatment and Protection of Debtor's Assets during Liquidation and Reorganization (includes environment)					
Automatic Stay of Proceedings	1	n/a	1	2.00	Fletcher (2017); UNCITRAL (2005); World Bank Group (2021)
Exceptions and Relief to Automatic Stay of Proceedings	1	1	2	4.00	Fletcher (2017); UNCITRAL (2005); World Bank Group (2021)
Continuation of Existing Essential Contracts	1	1	2	4.00	Fletcher (2017); UNCITRAL (2005); World Bank Group (2021)
Rejection of Existing Burdensome Contracts and Assets	1	n/a	1	2.00	Fletcher (2017); UNCITRAL (2005); World Bank Group (2021)
Voidance of Preferential and Undervalued Transactions	1	1	2	4.00	Fletcher (2017); UNCITRAL (2005); World Bank Group (2021)
Post-Commencement Credit Availability and Priority	1	1	2	4.00	Clift (2011); UNCITRAL (2005); World Bank Group (2021)
Total Points for Subcategory 1.2.1	6	4	10	20.00	
1.2.2 Creditor's Rights in Liquidation and Reorganization (includes environment)					
Creditor Representation	1	1	2	4.44	Block-Lieb (2013); Tomasic (2007); UNCITRAL (2005); World Bank Group (2021)
Request of Information by Creditors	1	1	2	4.44	Block-Lieb (2013); Tomasic (2007); UNCITRAL (2005); World Bank Group (2021)
Priority of Secured Claims	1	1	2	4.44	Block-Lieb (2013); Tomasic (2007); UNCITRAL (2005); World Bank Group (2021)
Priority of Labor and Environmental Claims	1	1	2	4.44	ILO (2020); Inacio et al. (2020)
Special Regime for Labor Claims	n/a	1	1	2.22	ILO (2020)
Total Points for Subcategory 1.2.2	4	5	9	20.00	
1.2.3 Selection and Dismissal of the Insolvency Administrator					
Insolvency Administrators Qualification Requirements in the Law	1	1	2	3.33	Feiden and Wielenberg (2017); UNCITRAL (2005); World Bank Group (2021)
Conditions for Disqualification	1	1	2	3.33	Feiden and Wielenberg (2017); UNCITRAL (2005); World Bank Group (2021)
Mechanism for Selection and Dismissal	1	1	2	3.33	Feiden and Wielenberg (2017); UNCITRAL (2005); World Bank Group (2021)
Total Points for Subcategory 1.2.3	3	3	6	10.00	
Total Points for Category 1.2	13	12	25	50.00	

1.3 SPECIALIZED INSOLVENCY PROCEEDINGS AND INTERNATIONAL INSOLVENCY					
1.3.1 Specialized Insolvency Proceedings for Micro and Small Enterprises (MSEs)					
Availability and Eligibility	1	1	2	3.33	Gurrea-Martinez (2021); IMF (2021); UNCITRAL (2021, 2022a); World Bank Group (2021)
Conversion of Proceedings	1	1	2	3.33	Gurrea -Martinez (2021); IMF (2021); UNCITRAL (2021, 2022a); World Bank Group (2021)
Debt Discharge	1	1	2	3.33	Gurrea -Martinez (2021); IMF (2021); UNCITRAL (2021, 2022); World Bank Group (2021)
Total Points for Subcategory 1.3.1	3	3	6	10.00	
1.3.2 Cross-Border Insolvency					
Existence of Framework and Recognition of Foreign Insolvency Proceedings	1	n/a	1	5.00	UNCITRAL (2014); World Bank Group (2021)
Legal Framework for Cooperation with Foreign Courts and Representatives	1	n/a	1	5.00	UNCITRAL (2014); World Bank Group (2021)
Total Points for Subcategory 1.3.2	2	n/a	2	10.00	
Total Points for Category 1.3	5	3	8	20.00	
Total Points for Pillar I	28	25	53	100.00	

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent). FFP = Firm Flexibility Point; SBP = Social Benefits Point.

PILLAR II–QUALITY OF INSTITUTIONAL AND OPERATIONAL INFRASTRUCTURE FOR JUDICIAL INSOLVENCY PROCEEDINGS					
2.1 DIGITAL SERVICES (E-COURTS) IN INSOLVENCY PROCEEDINGS					
2.1.1 Electronic Services in Liquidation and Reorganization					
Indicators	FFP	SBP	Total Points	Rescaled Points	Background Literature
Electronic Filing	1	1	2	5.00	Cabral et al. (2012); CEPEJ (2021a, 2021b); Cordella et al. (2020); Frade et al. (2020); UNCITRAL (2021); World Bank Group (2021); Zorza (2013)
Electronic Payment of Court Fees	1	1	2	5.00	Cabral et al. (2012); CEPEJ (2021a, 2021b); Cordella et al. (2020); Frade et al. (2020); UNCITRAL (2021); World Bank Group (2021); Zorza (2013)
Electronic Auction	1	1	2	5.00	Cabral et al. (2012); CEPEJ (2021a, 2021b); Cordella et al. (2020); Frade et al. (2020); UNCITRAL (2021); World Bank Group (2021); Zorza (2013)
Virtual Hearing	1	1	2	5.00	Cabral et al. (2012); CEPEJ (2021a, 2021b); Cordella et al. (2020); Frade et al. (2020); UNCITRAL (2021); World Bank Group (2021); Zorza (2013)
Total Points for Subcategory 2.1.1	4	4	8	20.00	
2.1.2 Electronic Case Management Systems in Liquidation and Reorganization					
Electronic Case Management for Judges and Lawyers	1	1	2	6.66	CEPEJ (2021a, 2021b); Cordella et al. (2020); Frade et al. (2020); UNCITRAL (2021); World Bank Group (2021); Zorza (2013)
Electronic Case Management for Insolvency Administrators	1	1	2	6.66	CEPEJ (2021a, 2021b); Cordella et al. (2020); Frade et al. (2020); UNCITRAL (2021); World Bank Group (2021); Zorza (2013)
Electronic Monitoring of the Status of Insolvency Proceedings	1	1	2	6.66	CEPEJ (2021a, 2021b); Frade et al. (2020); INSOL International (2019); OECD (2020); UNCITRAL (2021); World Bank Group (2021)
Total Points for Subcategory 2.1.2	3	3	6	20.00	
Total Points for Category 2.1	7	7	14	40.00	

2.2 INTEROPERABILITY IN INSOLVENCY PROCEEDINGS					
2.2.1 Digital Services Connectivity with External Systems in Liquidation and Reorganization					
Interoperability with External Systems	1	1	2	10.00	Cordella (2019); World Bank Group (2022)
Total Points for Subcategory 2.2.1	1	1	2	10.00	
2.2.2 Interconnection Between e-Case Management System and e-Filing Systems in Liquidation and Reorganization					
Interconnection Between Case Management System and e-Filing Systems	1	1	2	10.00	Cordella (2019); World Bank Group (2022)
Total Points for Subcategory 2.2.2	1	1	2	10.00	
Total Points for Category 2.2	2	2	4	20.00	
2.3 PUBLIC INFORMATION ON INSOLVENCY PROCEEDINGS AND REGISTRY OF INSOLVENCY PRACTITIONERS					
2.3.1 Public Information on the Number and Length of Liquidation and Reorganization, and Insolvency Judgments					
Publication of Judgments in Insolvency Procedures	1	1	2	3.33	Byfield (2011); CEPEJ (2021a, 2021b); Garrido (2019). INSOL International (2019); OECD (2020); UNCITRAL (2021); World Bank Group (2021)
Publication of Data on the number and type of Insolvency Procedures	1	1	2	3.33	Garrido (2019); INSOL International (2019); OECD (2020); UNCITRAL (2021); World Bank Group (2021)
Publication of Data on the Average Length of Insolvency Procedures	1	1	2	3.33	Garrido (2019). UNCITRAL (2021); World Bank Group (2021)
Total Points for Subcategory 2.3.1	3	3	6	10.00	
2.3.2 Availability of a Public Registry of Insolvency Practitioners					
Availability of a Register of Insolvency Practitioners	1	1	2	5.00	Loubser (2007); UNCITRAL (2021); World Bank Group (2021)
Publication of Register of Insolvency Practitioners	1	1	2	5.00	Loubser (2007); UNCITRAL (2021); World Bank Group (2021)
Total Points for Subcategory 2.3.2	2	2	4	10.00	
Total Points for Category 2.3	5	5	10	20.00	
2.4 PUBLIC OFFICIALS AND INSOLVENCY ADMINISTRATOR					
2.4.1 Specialization of Courts with Jurisdiction on Reorganization and Liquidation Proceedings					
Specialized Bankruptcy Courts	1	1	2	5.00	Anderson, Bernstein, and Gray (2005); Detotto, Serra, and Vannini (2019); Iverson et al. (2018);

					Rodano, Serrano-Velarde, and Tarantino (2016); Visaria (2009)
Operability of Bankruptcy Courts	1	1	2	5.00	World Bank (2022)
Total Points for Subcategory 2.4.1	2	2	4	10.00	
2.4.2 Insolvency Administrator's Expertise in Practice					
Insolvency Administrator Qualification Requirements in Practice	1	1	2	10.00	Fieden and Wielenberg (2017); UNCITRAL (2021); World Bank Group (2021)
Total Points for Subcategory 2.4.2	1	1	2	10.00	
Total Points for Category 2.4	3	3	6	20.00	
Total Points for Pillar II	17	17	34	100.00	

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent). FFP = Firm Flexibility Point; SBP = Social Benefits Point.

PILLAR III—OPERATIONAL EFFICIENCY OF RESOLVING A JUDICIAL INSOLVENCY PROCEEDINGS					
3.1 LIQUIDATION PROCEEDINGS					
3.1.1 Time to Resolve a Liquidation Proceeding					
Indicators	FFP	SBP	Total Points	Rescaled Points	Background Literature
Time to Resolve an In-Court Liquidation Proceeding	50	n/a	50	25.00	Cirmizi, Klapper, and Uttanchandani (2012); Kruczalak-Jankowska, Maśnicka, and Machnikowska (2020)
3.1.2 Cost to Resolve a Liquidation Proceeding					
Cost to Resolve an In-Court Liquidation Proceeding	50	n/a	50	25.00	Cirmizi, Klapper, and Uttanchandani (2012); Kruczalak-Jankowska, Maśnicka, and Machnikowska (2020)
Total Points for Category 3.1	100	n/a	100	50.00	
3.2 REORGANIZATION PROCEEDINGS					
3.2.1 Time to Resolve a Reorganization Proceeding					
Time to Resolve an In-Court Reorganization Proceeding	50	n/a	50	25.00	Kruczalak-Jankowska, Maśnicka, and Machnikowska (2020); World Bank Group (2010)
3.2.2 Cost to Resolve a Reorganization Proceeding					
Cost to Resolve an In-Court Reorganization Proceeding	50	n/a	50	25.00	Kruczalak-Jankowska, Maśnicka, and Machnikowska (2020); World Bank Group (2010)
Total Points for Category 3.2	100	n/a	100	50.00	
Total Points for Pillar III	100	n/a	100	100.00	

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent). FFP = Firm Flexibility Point; SBP = Social Benefits Point. If an economy had zero completed (closed) cases of judicial reorganization or judicial liquidation proceedings over the past three years involving corporate debtors, the economy receives a “no practice” mark and no score on the time, and cost indicators for the specific proceeding.

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ANNEX B. BUSINESS INSOLVENCY–ANNOTATED QUESTIONNAIRE

Annex B consists of a Glossary and Annotated Questionnaire for Business Insolvency. The Annotated Questionnaire provides the mapping between each indicator and the corresponding question(s).

Glossary

Corporate insolvency: The state in which a debtor company is generally unable to pay its debts as they mature and/or in which its liabilities exceed the value of its assets.

Debt discharge: The release of the liability of a debtor from debts that were, or could have been, addressed in the insolvency proceedings.

Insolvency administrator: A person or body (including one appointed on an interim basis) authorized in insolvency proceedings to administer, supervise, oversee, or monitor the reorganization or the liquidation of the insolvency estate.

Insolvency proceedings: Collective proceedings, subject to court supervision, either for reorganization or liquidation.

Legal framework: Rules, regulations, and laws that make up the totality of the legislation applicable to insolvency proceedings in a specific jurisdiction.

Liquidation: A process of assembling and selling the assets of an insolvent debtor to dissolve the company and distribute the proceeds to its creditors. Liquidation may include the piecemeal sale of the debtor's assets or the sale of all or most of the debtor's assets as a going concern. The term "liquidation" refers only to formal in-court insolvency proceedings and does not include the voluntary winding up of a company.

Out-of-court workout (OCW): An agreement made between a debtor and its creditors, with minimal or no court involvement, with the aim of easing the debtor's debt-servicing burden, so that it can maintain its business activities and value. Guidelines introduced by any administrative authority do not entail any expectation or requirements that workout participants commit in a legally binding manner to follow them.

Pre-insolvency proceedings: Public collective proceedings which take place under the supervision of a court or an administrative authority, and which give a debtor in financial distress the opportunity to rescue, adjust the repayment of debt, reorganize or liquidate at a pre-insolvency stage, to avoid the commencement of formal insolvency proceedings. The assets and business activities of a debtor could be subject to the control or supervision of a court. A temporary stay of proceedings may also be granted.

Post-commencement credit: New funding provided to an insolvent company after the start of insolvency proceedings by existing or new creditors to finance its company's ongoing operations during the insolvency process.

Ranking of claims: The order in which claims will be satisfied upon completion of the insolvency procedure.

Reorganization: Collective proceedings through which the financial well-being and viability of a debtor's business may be restored based on a reorganization plan, so that the business can continue to operate as a going concern, including debt forgiveness, debt rescheduling, debt equity conversions, and sale of the business (or parts of it). The term "reorganization" refers exclusively to formal in-court proceedings

available to all commercial debtors and does not include schemes of arrangement and out-of-court agreements with creditors.

Reorganization plan: A plan by which the financial well-being and viability of the debtor's business can be restored.

Secured claim: A claim assisted by a security interest taken as a guarantee for a debt enforceable in case of the debtor's default.

Stay of proceedings: A measure that prevents the commencement, or suspends the continuation, of judicial, administrative or other individual actions concerning the debtor's assets, rights, obligations, or liabilities, including actions to make security interests effective against third parties or to enforce a security interest. It also prevents execution against the assets of the insolvency estate; the termination of a contract with the debtor; and the transfer, encumbrance, or other disposition of any assets or rights of the insolvency estate.

BUSINESS INSOLVENCY QUESTIONNAIRE

The tables that follow present all indicators (including their components, if applicable) under each pillar, with a reference to the corresponding question number in parenthesis. The questions are listed before each table for ease of reference.

For Y/N questions, the Y response accounts for the score and is considered as the good practice, unless otherwise indicated with the sign “Y/N; N – good practice”.

In the tables that follow, “AND” means all referenced questions must have a good practice response to obtain a score on the indicator.

In the tables that follow, “OR” means one or more referenced questions must have a good practice response to obtain a score on the indicator.

Certain questions are marked as “not scored,” which indicates that they do not impact the score in any way. The purpose of these questions is to further inform and refine the questions design for subsequent years of the rollout, as needed, as well as to substantiate and provide further information for the scored questions.

PILLAR I—QUALITY OF REGULATIONS FOR JUDICIAL INSOLVENCY PROCEEDINGS

1.1 LEGAL AND PROCEDURAL STANDARDS IN INSOLVENCY PROCEEDINGS

1.1.1 Pre-Commencement and Commencement Standards in Liquidation and Reorganization

- 1. Which of the following mechanisms are available, under the legal framework, to a debtor company in financial distress? (Y/N)**
 - 1a. Mechanisms directly addressing the obligations of the management of a debtor company during the period approaching insolvency to avoid bankruptcy, or minimize its extent where insolvency is unavoidable
 - 1b. Mechanisms or procedures to implement, with no impediments or obstacles, a contractually based Out-of-Court Workout (OCW) to restructure the company’s debt with some or all its creditors, outside of the court system and/or outside formal judicial insolvency proceedings
- 2. Which of the following procedures are available, under the legal framework, to an insolvent debtor company? (Y/N)**
 - 2a. Commencement of in-court liquidation proceedings
 - 2b. Commencement of in-court reorganization proceedings
- 3. Which of the following procedures are available, under the legal framework, to an individual creditor of an insolvent debtor company? (Y/N)**
 - 3a. Commencement of in-court liquidation proceedings
 - 3b. Commencement of in-court reorganization proceeding
- 4. What basis for commencement of formal insolvency proceedings is allowed under the legal framework?**
 - 4a. Debtor is generally unable to pay its debts as they mature
 - 4b. The value of the debtor’s liabilities exceeds the value of its asset
 - 4c. Both 4a. and 4b

1.1.2 Post-Commencement Standards in Liquidation and Reorganization

5. Does the legal framework establish that, upon commencement of proceedings, each creditor shall receive a notification to submit his/her claim, specifying the basis and amount of the claim? (Y/N)
6. Which of the following conditions are required when creditors vote on the reorganization plan, under the legal framework? (Y/N)
 - 6a. Creditors entitled to vote are divided into classes based on similarity of interests or the value of their claim
 - 6b. Each class of creditors votes separately
 - 6c. Creditors within each class are treated equally
7. Does the legal framework allow creditors to vote electronically? (Y/N)
8. Does the legal framework explicitly require that the anticipated return to dissenting creditors specified within the reorganization plan will be at least equal to the return that they would obtain in a Liquidation? (Y/N)
9. Does the legal framework provide for conversion of reorganization proceedings to liquidation proceedings? (Y/N)

1.1 LEGAL AND PROCEDURAL STANDARDS IN INSOLVENCY PROCEEDINGS			
1.1.1 Pre-Commencement and Commencement Standards in Liquidation and Reorganization			
Indicators	FFP	SBP	Total Points
Obligations of the Company's Management during Pre-Insolvency (1a)	1	1	2
Out-of-Court Restructuring Mechanisms (1b)	1	1	2
Commencement of Formal Insolvency Proceedings by the debtor	1	1	2
- In-Court Liquidation (2a)	0.5	0.5	1
- In-Court Reorganization (2b)	0.5	0.5	1
Commencement of Formal Insolvency Proceedings by the creditor	1	1	2
- In-Court Liquidation (3a)	0.5	0.5	1
- In-Court Reorganization (3b)	0.5	0.5	1
Basis for Commencement of Formal Insolvency Proceedings <i>Points will be granted if the liquidity test (Debtor unable to pay its debts as they mature - 4a) is available in the law</i> <i>If only Balance Sheet is available, no scoring is assigned</i>	1	1	2
Total Points	5	5	10
1.1.2 Post-Commencement Standards in Liquidation and Reorganization			
Indicators	FFP	SBP	Total Points
Creditors Notification Requiring to Submit Claims (5)	1	1	2
How the Reorganization Plan is voted	1	1	2
- Creditors are separated into classes (6a)			
- Each class votes separately (6b)			
- Equal treatment of members of the same class (6c)			

<i>The full point is granted only if the answer is Y on all 3 features of voting process of the reorganization plan</i>			
Means of Voting on the Reorganization Plan (7)	1	1	2
Protection of Dissenting Creditors in Reorganization (8)	1	1	2
Conversion from Reorganization to Liquidation (9)	1	1	2
Total Points	5	5	10

Note: If the component is present, the corresponding score is assigned. For example, if 6a, 6b, and 6c are selected simultaneously, a score of 1 is assigned. FFP = Firm Flexibility Point; SBP = Social Benefits Point.

1.2 DEBTOR'S ASSETS AND CREDITOR'S PARTICIPATION IN INSOLVENCY PROCEEDINGS

1.2.1 Treatment and Protection of Debtor's Assets during Liquidation and Reorganization (includes environment)

10. Does the legal framework provide for an automatic stay of proceedings? Other terminology commonly used to refer to stay of proceedings includes moratorium or suspension of proceedings. (Y/N)

If Y → proceed to the remaining questions.

If N → 0 points on questions 10 to 13.

11. Does the legal framework specify the exact time of effect of the stay of proceedings (including the day it takes effect and the day it lapses)? (Y/N)

12. Does the legal framework provide for exceptions to a stay of proceedings on actions, claims or proceedings? (Y/N)

If Y → proceed to the remaining questions.

If N → 0 points on questions 13 and 14.

13. Do the exceptions to the stay of proceedings referred to above include exceptions based on public policy interests such as the restraint of environmental damage or other activities detrimental to public health and safety? (Y/N)

14. Do the exceptions to the stay of proceedings referred to above include any actions to prevent abuse, such as the use of insolvency proceedings as a shield for illegal activities? (Y/N)

15. Does the legal framework provide for the possibility that secured creditors may obtain relief to a stay of proceedings on actions, claims or proceedings in the following:

15a. Where the value of the encumbered asset is diminishing as a result of the commencement of insolvency proceedings (Y/N)

15b. Where the encumbered asset is not needed for the Reorganization or sale of the business as a going concern in Liquidation (Y/N)

16. Following the commencement of insolvency proceedings, does the legal framework explicitly allow for the continuation of existing contracts by the debtor company that are beneficial or essential to the debtor's ordinary course of business? (Y/N)

17. Following the commencement of insolvency proceedings, does the legal framework explicitly allow for burdensome contracts (where both parties have not fully performed their obligations)

be terminated where the cost of performance of such contracts is higher than the benefits to be received? (Y/N)

18. If yes, does the legal framework explicitly allow for burdensome assets to be relinquished or discharged when the cost of maintaining such assets is higher than the benefits to be received? (Y/N)
19. Does the legal framework explicitly provide for voiding (or invalidating/terminating) the following transactions concluded before the commencement of insolvency proceedings? (Y/N)
- 19a. Preferential transactions or contracts, which resulted in a creditor obtaining more than its pro rata share of the debtor's assets, which occurred when the debtor was already insolvent or resulted in the debtor becoming insolvent
 - 19b. Undervalued transactions, which were made at a price below market value or as a gift and which occurred when the debtor was already insolvent or resulted in the debtor becoming insolvent
20. Does the legal framework explicitly provide the possibility for debtors to obtain credit after the commencement of insolvency proceedings (post-commencement credit) to finance its on-going needs during the proceedings? (Y/N)
21. Does the legal framework assign priority to post-commencement credit over the following? (Y/N)
- 21a. Unsecured creditors only
 - 21b. Both secured and unsecured creditors
 - 21c. Legal framework does not stipulate such a priority

1.2.2 Creditor's Rights in Liquidation and Reorganization (includes environment)

22. Does the legal framework require a creditors committee or other creditor representation in Insolvency Proceedings? (Y/N)
23. Does the legal framework provide creditors, either individually or through the creditors' committee or another form of creditor representation, the right to request up-to-date information on the debtor's business and financial affairs? (Y/N)
24. Does the legal framework provide for the ranking of claims during an insolvency procedure? (Y/N)
- If Y → proceed to the remaining questions.
If N → 0 points on questions 25 to 27.
25. Are secured creditors given absolute priority with respect to the assets over which they hold security over all other creditors? (Y/N)
26. Are labor claims given priority over the following? (Y/N)
- 26a. Secured creditors
 - 26b. Ordinary unsecured creditors
 - 26c. No such priority
27. Are environmental claims given priority over the following? (Y/N)
- 27a. Secured creditors
 - 27b. Ordinary unsecured creditors
 - 27c. No such priority

28. Does the legal framework, either in insolvency law or labor law, contain a special regime to deal with the protection of workers and employees' claims in insolvency? (Y/N)

1.2.3 Selection and Dismissal of the Insolvency Administrator

29. Is the selection of the insolvency administrators regulated? (Y/N)

If Y → proceed to the remaining questions.

If N → 0 points on question 30 to 33.

30. What are the minimum qualification requirements established in the legal framework for an insolvency administrator to be assigned to a procedure? (Y/N)

30a. Minimum number of years of practical experience

30b. Holding a university degree in law (minimum of J.D. or LLB) or degree in accounting

30c. Holding a license

30d. Being a registered member of an association

30e. Passing a qualification exam

30f. Completion of specialized training

30g. No criminal record or record of financial wrongdoing

30e. Please explain

31. Does the legal framework set out cases in which the insolvency administrator may be disqualified from the case? (Y/N)

32. Does the legal framework establish a mechanism for the selection and appointment of an insolvency administrator? (Y/N)

33. Does the legal framework provide for a mechanism for the removal of the insolvency administrator that reflects the manner in which the insolvency administrator was appointed and provides a right for the insolvency administrator to be heard? (Y/N)

1.2 DEBTOR'S ASSETS AND CREDITOR'S PARTICIPATION IN INSOLVENCY PROCEEDINGS			
1.2.1 Treatment and Protection of Debtor's Assets during Liquidation and Reorganization (includes environment)			
Indicators	FFP	SBP	Total Points
Automatic Stay of Proceedings (10 AND 11)	1	n/a	1
Exceptions and Relief to Automatic Stay of Proceedings (12 AND 13 AND 14 AND 15) <i>The full point is granted if the answer is Y on at least 2 of questions 13, 14, 15a, or 15b</i>	1	1	2
Continuation of Existing Essential Contracts (16)	1	1	2
Rejection of Existing Burdensome Contracts and Assets	1	n/a	1
- Rejection of burdensome contracts (17)	0.5	n/a	0.5
- Relinquish burdensome assets (18)	0.5	n/a	0.5
Voidance of Preferential and Undervalued Transactions	1	1	2
- Preferential transactions (19a)	0.5	0.5	1
- Undervalued transactions (19b)	0.5	0.5	1
Post-Commencement Credit Availability and Priority	1	1	2
- Post-commencement credit availability (20)	0.5	0.5	1
- Post-commencement credit priority over ordinary unsecured creditors during distribution of assets (21a)	0.5	0.5	1

Total Points	6	4	10
1.2.2 Creditor's Rights in Liquidation and Reorganization (includes environment)			
Indicators	FFP	SBP	Total Points
Creditor Representation (22)	1	1	2
Request of Information by Creditors (23)	1	1	2
Priority of Secured Claims	1	1	2
- Ranking (24)	0.5	0.5	1
- Absolute priority, secured creditors (25)	0.5	0.5	1
Priority of Labor and Environmental Claims	1	1	2
- Priority of labor claims (26)	0.5	0.5	1
- Priority of environmental claims (27)	0.5	0.5	1
Special Regime for Labor Claims (28)	0	1	1
Total Points	4	5	9
1.2.3 Selection and Dismissal of the Insolvency Administrator			
Indicators	FFP	SBP	Total Points
Insolvency Administrators Qualification Requirements in the Law (30) <i>At least 3 of the listed requirements must be present to obtain a score</i>	1	1	2
Conditions for Disqualification (31)	1	1	2
Mechanism for Selection and Dismissal	1	1	2
- Existence of a mechanism (32)	0.5	0.5	1
- Removal (33)	0.5	0.5	1
Total Points	3	3	6

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

1.3 SPECIALIZED INSOLVENCY PROCEEDINGS AND INTERNATIONAL INSOLVENCY

1.3.1 Specialized Insolvency Proceedings for Micro and Small Enterprises (MSEs)

34. Does the legal framework provide for specialized proceedings for the liquidation of nonviable micro and small enterprises (MSEs), and reorganization of viable micro and small enterprises (MSEs)? (Y/N)

If Y → proceed to the remaining questions.

If N → 0 points on questions 35 to 37.

35. If yes, does the legal framework allow eligible debtors to apply for commencement of an insolvency proceeding at an early stage of financial distress without the need to prove insolvency? (Y/N)

36. Does the legal framework provide for the possibility of conversion of a simplified reorganization procedure to a liquidation procedure for micro and small enterprises (MSEs)? (Y/N)

37. Does the legal framework set forth conditions for debt discharge within insolvency proceedings for micro and small enterprises, and the criteria for denying a debt discharge? (Y/N)

1.3.2 Cross-Border Insolvency

38. Does the legal framework establish rules for cross-border insolvencies, with a clear process for obtaining recognition of foreign proceedings? (Y/N)

If Y → proceed to question 39.

If N → 0 points on question 38 and 39.

39. Does the legal framework provide for cooperation between courts and insolvency administrators in international Insolvency Proceedings? (Y/N)

1.3 SPECIALIZED INSOLVENCY PROCEEDINGS AND INTERNATIONAL INSOLVENCY			
1.3.1 Specialized Insolvency Proceedings for Micro and Small Enterprises (MSEs)			
Indicators	FFP	SBP	Total Points
Availability and Eligibility (34 AND 35)	1	1	2
Conversion of Proceedings (36)	1	1	2
Debt Discharge	1	1	2
- Conditions (37)	0.5	0.5	1
- Criteria for denial (37)	0.5	0.5	1
Total Points	3	3	6
1.3.2 Cross-Border Insolvency			
Indicators	FFP	SBP	Total Points
Existence of Framework and Recognition of Foreign Insolvency Proceedings (38)	1	n/a	2
Legal Framework for Cooperation with Foreign Courts and Representatives (39)	1	n/a	2
Total Points	2	n/a	2

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

PILLAR II—QUALITY OF INSTITUTIONAL AND OPERATIONAL INFRASTRUCTURE FOR JUDICIAL INSOLVENCY PROCEEDINGS	
Parameters	
Competent Court and Its Location	The largest (most populous city in the country). Geographical location determines the competent court with jurisdiction over the commencement and conduct of insolvency proceedings. The competent court is the court of primary or first instance in the largest business city with jurisdiction over liquidation or reorganization insolvency proceedings.

2.1 DIGITAL SERVICES (E-COURTS) IN INSOLVENCY PROCEEDINGS

2.1.1 Electronic Services in Liquidation and Reorganization

40. Has the insolvency judicial system been digitized and/or been included within the updated e-courts of [largest business city in the economy]? (Y/N)

41. Which of the following court automation features has been implemented in insolvency proceedings to the debtor and the creditors? (Y/N)

- 41a. Electronic filing for bankruptcy commencement
41b. Electronic payments of court fees

42. Does a hard copy have to be submitted along with the initial claim? (Y/N)

43. Is there in practice a physical interaction with the bank, the court, or the post office required to complete electronic payment? (Y/N)

44. Are electronic auctions conducted at the relevant court? (Y/N)

45. Which of the following practices occur during electronic auctions in insolvency procedures? (Y/N) (not scored)

- 45a. Physical/on-site auctions need to be conducted along with the electronic auction
45b. Requirement that bidders make a cash deposit

46. Can virtual hearings be held at the relevant court? (Y/N)

2.1.2 Electronic Case Management Systems in Liquidation and Reorganization

47. Is there a fully functional electronic case management system at the competent court? (Y/N)

If Y → proceed to the remaining questions.

If N → 0 points on questions 48 to 50.

48. Which of the following case management features have been implemented in insolvency proceedings for the following individuals? Please select all that apply:

48a. Judges

- Send and receive notifications electronically
- Manage and file procedural case documents electronically
- View and access court orders and decisions

48b. Insolvency lawyers

- Send and receive notifications electronically
- Manage and file procedural case documents electronically
- View and access court orders and decisions

48c. Insolvency administrators

- Send and receive notifications electronically
- Manage and file procedural case documents electronically
- View and access court orders and decisions

49. Can creditors and debtors electronically monitor the status of insolvency proceedings? (Y/N)

2.1 DIGITAL SERVICES (E-COURTS) IN INSOLVENCY PROCEEDINGS			
2.1.1 Electronic Services in Liquidation and Reorganization			
Indicators	FFP	SBP	Total Points
Electronic Filing (41a AND 42) <i>No score will be granted if the Electronic Filing service is not Functional.</i> <i>The service is not functional if the answer to question (42) is Y</i>	1	1	2
Electronic Payment of Court Fees (41b AND 43) <i>No score will be granted if the Electronic Payment service is not functional.</i> <i>The service is not functional if the answer to question (43) is Y</i>	1	1	2

Electronic Auction (44) <i>No score will be granted if an Electronic Auction service is not fully operational. The service is not operational if the answers to questions 45a and 45b are N</i>	1	1	2
Virtual Hearing (46)	1	1	2
Total Points	4	4	8
2.1.2 Electronic Case Management Systems in Liquidation and Reorganization			
Electronic Case Management for Judges and Lawyers - Platform is available and fully operational to judges (48a) - Platform is available and fully operational to lawyers (48b) <i>No score will be granted if the Case Management systems are not fully operational. The systems are fully operational if all 3 features listed in questions 48a and 48b are implemented in practice</i>	1 0.5 0.5	1 0.5 0.5	2 1 1
Electronic Case Management for Insolvency Administrators (48c) <i>No score will be granted if the Case Management system is not fully operational. The system is fully operational if all 3 features listed in questions 48c are implemented in practice</i>	1	1	2
Electronic Monitoring of the Status of Insolvency Proceedings (49)	1	1	2
Total Points	3	3	6

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

2.2 INTEROPERABILITY IN INSOLVENCY PROCEEDINGS

2.2.1 Digital Services Connectivity with External Systems in Liquidation and Reorganization

50. Is the electronic case management system for insolvency matters connected in practice to external systems, allowing an exchange of data with other authorities such as commercial/business registries and law enforcement agencies? (Y/N)

2.2.2 Interconnection Between e-Case Management System and e-Filing Systems in Liquidation and Reorganization

51. Are the case management system and e-filing systems interconnected? (Y/N)

2.2 INTEROPERABILITY IN INSOLVENCY PROCEEDINGS			
2.2.1 Digital Services Connectivity with External Systems in Liquidation and Reorganization			
Indicators	FFP	SBP	Total Points
Interoperability with External Systems (50)	1	1	2
Total Points	1	1	2
2.2.2 Interconnection Between e-Case Management System and e-Filing Systems in Liquidation and Reorganization			
Interconnection Between Case Management System and e-Filing Systems (51)	1	1	2
Total Points	1	1	2

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

2.3 PUBLIC INFORMATION ON INSOLVENCY PROCEEDINGS AND REGISTRY OF INSOLVENCY PRACTITIONERS

2.3.1 Public Information on the Number and Length of Liquidation and Reorganization, and Insolvency Judgments

52. On the publication of judgments and information on insolvency proceedings, is the following data and information available to the general public? (Y/N)

Note: Publication of such data and information can be done by any means, including through publication in official gazettes, in newspapers, on the internet, court websites or publicly available insolvency registries.

52a. Judgments concerning insolvency proceedings rendered at the competent court

52b. Data on the number and types of insolvency proceedings in the economy per year

52c. Data on the average length of insolvency proceedings

2.3.2 Availability of a Public Registry of Insolvency Practitioners

53. Is there a publicly available register of insolvency practitioners and/or firms qualified to offer insolvency services? (Y/N)

54. Is this register made available to the general public through publication in official gazettes, in newspapers or on the internet or court website? (Y/N)

2.3 PUBLIC INFORMATION ON INSOLVENCY PROCEEDINGS AND REGISTRY OF INSOLVENCY PRACTITIONERS			
2.3.1 Public Information on the Number and Length of Liquidation and Reorganization, and Insolvency Judgments			
Indicators	FFP	SBP	Total Points
Publication of Judgments in Insolvency Procedures (52a)	1	1	2
Publication of Data on the number and type of Insolvency Procedures (52b)	1	1	2
Publication of Data on the Average Length of Insolvency Procedures (52c)	1	1	2
Total Points	3	3	6
2.3.2 Availability of a Public Registry of Insolvency Practitioners			
Availability of a Register of Insolvency Practitioners (53)	1	1	2
Publication of Register of Insolvency Practitioners (54)	1	1	2
Total Points	2	2	4

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

2.4 PUBLIC OFFICIALS AND INSOLVENCY ADMINISTRATOR

2.4.1 Specialization of Courts with Jurisdiction on Reorganization and Liquidation Proceedings

55. In [largest business city in the economy], is there a specialized bankruptcy court or a judge/division/bench in a commercial court, to which all bankruptcy matters or cases are assigned? (Y/N)

If Y → proceed to questions 56, 57, and 58.

If N → 0 points on question 55.

56. What is the name of this court, division or bench or designation of the bankruptcy judge? (*not scored*)

57. Is [court name] fully operational in practice (requiring that all bankruptcy matters be assigned to them)? (Y/N)

58. In [largest business city], are all bankruptcy matters assigned to the existing commercial courts/bankruptcy courts/bankruptcy judges? (Y/N)

2.4.2 Insolvency Administrator's Expertise in Practice

59. Which of the following insolvency administrator qualifications/requirements are observed in practice? (Y/N)

59a. Minimum number of years of practical experience

59b. Holding a university degree in law (minimum of J.D. or LLB) or degree in accounting

59c. Holding a license

59d. Being a registered member of an association

59e. Passing a qualification exam

59f. Completion of specialized training

59g. No criminal record or record of financial wrongdoing

59h. Other, please explain

2.4 PUBLIC OFFICIALS AND INSOLVENCY ADMINISTRATOR			
2.4.1 Specialization of Courts with Jurisdiction on Reorganization and Liquidation proceedings			
Indicators	FFP	SBP	Total Points
Specialized Courts (55)	1	1	2
Operability of Bankruptcy Courts (57 AND 58)	1	1	2
Total Points	2	2	4
2.4.2 Insolvency Administrator's Expertise in Practice			
Indicators	FFP	SBP	Total Points
Insolvency Administrator Qualification Requirements in practice (59) <i>At least 3 of the listed requirements must be observed in practice to obtain a score</i>	1	1	2
Total Points	1	1	2

Note: FFP = Firm Flexibility Point; SBP = Social Benefits Point.

PILLAR III—OPERATIONAL EFFICIENCY OF RESOLVING JUDICIAL INSOLVENCY PROCEEDINGS	
Parameters	
Debtor Company	Business Insolvency assumes that the debtor is a domestic limited liability company (LLC) operating in the largest business city in each economy. The size of the company's assets is determined by the company's market value of each economy, which is set based on a range from 150 to 200 times the gross national income (GNI) per capita,

	considered a medium-sized enterprise. The LLC defaults on its debt obligations toward its secured and unsecured creditors as they mature, or the value of the debtor's liabilities exceeds the value of its assets. Establishing a standardized debtor company with very specific characteristics is the only way to preserve comparability in measuring the time and cost of insolvency proceedings.
Competent Court and Its Location	The largest (most populous city in the country). Geographical location determines the competent court with jurisdiction over the commencement and conduct of insolvency proceedings. The competent court is the court of primary or first instance in the largest business city with jurisdiction over liquidation or reorganization insolvency proceedings.

The scores for Pillar III indicators are calculated using the Normal Cumulative Density Function (CDF) transformation method on a scale of 0 to 100, where 0 and 100 represent the lowest and highest possible scores, respectively. The best and worst performers are identified based on the 5th and 95th percentiles of the collected data.

If an economy had zero completed (closed) cases of judicial reorganization or judicial liquidation proceedings over the past three years involving corporate debtors, the economy receives a “no practice” mark and zero score on the time, and cost indicators for the specific proceeding.

3.1 LIQUIDATION PROCEEDINGS

60. According to the practice in [the largest business city in the economy]:

- 60a. How long would it take for an insolvent company (as defined in the above instructions) to complete liquidation proceedings?
- 60b. How much would it cost for an insolvent company (as defined in the above instructions) to complete liquidation proceedings?

3.1 LIQUIDATION PROCEEDINGS			
3.1.1 Time to Resolve a Liquidation Proceeding			
Indicators	FFP	SBP	Total Points
Time to Resolve an In-Court Liquidation Proceeding (60a)	100 (50%)	n/a	100 (50%)
3.1.2 Cost to Resolve a Liquidation Proceeding			
Cost to Resolve an In-Court Liquidation Proceeding (60b)	100 (50%)	n/a	100 (50%)
Total Points	100	n/a	100

3.2 REORGANIZATION PROCEEDINGS

61. According to the practice in [the largest business city in the economy]:

- 61a. How long would it take for an insolvent company (as defined in the above instructions) to complete reorganization proceedings?
- 61b. How much would it cost for an insolvent company (as defined in the above instructions) to complete reorganization proceedings?

3.2 REORGANIZATION PROCEEDINGS			
3.2.1 Time to Resolve a Reorganization Proceeding			
Indicators	FFP	SBP	Total Points
Time to Resolve an In-Court Reorganization Proceeding (61a)	100 (50%)	n/a	100 (50%)
3.2.2 Cost to Resolve a Reorganization Proceeding			
Cost to Resolve an In-Court Reorganization Proceeding (61b)	100 (50%)	n/a	100 (50%)
Total Points	100	n/a	100

Note: n/a = not applicable (refers to the cases when the impact on firms or society is either ambiguous or nonexistent).
FFP = Firm Flexibility Point; SBP = Social Benefits Point.

ANNEXES

Annex A-City Selection Parameter

The approach taken to identify the business location for each economy under the B-READY project is based on population size rather than economic activity, since population is easier to measure, and population projections are made consistently based on growth patterns. The primary source of data applied here is the United Nations' Department of Economic and Social Affairs (UN DESA) which provides regular updates under its World Urbanization Prospects (WUP) online series, with the most recent revisions updated in 2018.¹

WUP publishes, among others, two datasets that have been taken into consideration in selecting an economy's largest urban center: firstly, population data for all agglomerations with a population above 300 thousand and covering the years from 1950 to 2035; and secondly, population data for all capital cities in 2018, the year of its most recent revisions.² For economies with cities below 300 thousand inhabitants, there are no systematically collected alternative data sources that would cover their largest cities in for the same year.³ Since capital cities may not always be the largest in terms of population, other datasets are used to confirm population size for all entries for cities below 300 thousand and are referenced accordingly.

WUP follows the definition of 'urban' as applied by national statistical offices and uses three different concepts: i) 'urban agglomeration', i.e. the contiguous territory inhabited at urban density levels in disregard of administrative boundaries, thus including adjacent suburban areas; ii) 'city proper', which refers to the administrative boundaries of a city; and iii) 'metropolitan area', which comprises the urban agglomeration plus surrounding areas at a lower settlement density, but with strong economic and social linkages to the central city. Where such concepts vary within an economy, additional considerations are taken into account, such as (a) the significance of the city's business activities and its representativeness for the whole economy; (b) whether the area defining the 'urban area' is governed by one local government, with similar regulations and public service rules; and (c) the feasibility of data collection, especially in fragile and conflict-affected states (FCS).

In addition to identifying the largest urban business center in a respective economy, the approach also sought to verify whether the selected city would remain the largest urban business center in the future. Using the population forecasts available for cities above 300 thousand, the selection of the largest city in 2023 was therefore compared to the largest city in 2035. All initial identifications remained valid in 2035, with no need for any additional changes.

For the first year of the rollout phase, the selection of the largest city for each economy is displayed in the table below.

Economy	Selected City	DB City
Bangladesh	Dhaka	Dhaka; Chittagong
Barbados	Bridgetown	Bridgetown
Bosnia and Herzegovina	Sarajevo	Sarajevo
Botswana	Gaborone	Gaborone
Bulgaria	Sofia	Sofia

¹ United Nations, Department of Economic and Social Affairs, Population Division (2018). World Urbanization Prospects: The 2018 Revision, Online Edition. <https://population.un.org/wup/Download/>.

² File 22: Annual Population of Urban Agglomerations with 300,000 Inhabitants or More in 2018, by country, 1950-2035 (thousands); File 13: Population of Capital Cities in 2018 (thousands).

³ For example, citypopulation.de reports data on urban centers based on the last census but does not estimate their population based on existing trends to generate a dataset with country observations for each year.

Cambodia	Phnom Penh	Phnom Penh
Central African Republic	Bangui	Bangui
Chad	N'Djamena	N'Djamena
Colombia	Bogotá	Bogotá
Costa Rica	San José	San José
Côte d'Ivoire	Abidjan	Abidjan
Croatia	Zagreb	Zagreb
El Salvador	San Salvador	San Salvador
Estonia	Tallinn	Tallinn
Gambia, The	Banjul	Banjul
Georgia	Tbilisi	Tbilisi
Ghana	Accra ¹	Accra
Greece	Athens	Athens
Hong Kong SAR, China	Hong Kong	Hong Kong
Hungary	Budapest	Budapest
Indonesia	Jakarta	Jakarta; Surabaya
Iraq	Baghdad	Baghdad
Kyrgyz Republic	Bishkek	Bishkek
Lesotho	Maseru	Maseru
Madagascar	Antananarivo	Antananarivo
Mauritius	Port Louis	Port Louis
Mexico	Mexico City	Mexico City; Monterrey
Montenegro	Podgorica	Podgorica
Morocco	Casablanca	Casablanca
Nepal	Kathmandu	Kathmandu
New Zealand	Auckland	Auckland
North Macedonia	Skopje	Skopje
Pakistan	Karachi	Karachi; Lahore
Paraguay	Asunción	Asunción
Peru	Lima	Lima
Philippines	Quezon City ²	Quezon city
Portugal	Lisbon	Lisbon
Romania	Bucharest	Bucharest
Rwanda	Kigali	Kigali
Samoa	Apia	Apia
Seychelles	Victoria	Victoria
Sierra Leone	Freetown	Freetown
Singapore	Singapore	Singapore
Slovak Republic	Bratislava	Bratislava
Tanzania	Dar es Salaam	Dar es Salaam
Timor-Leste	Dili	Dili
Togo	Lomé	Lomé
Vanuatu	Port Vila	Port Vila

Vietnam	Ho Chi Minh City	Ho Chi Minh City
West Bank and Gaza	Ramallah ³	Ramallah

Note:

- While Kumasi is the largest urban area reported by WUP, additional consultations with the World Bank Group Urban team working on Ghana reconfirmed Accra as the main Business City based on ongoing sector work, assessing city size and GDP in Ghana.
- While Manila is reported as the largest urban area by WUP, it covers the Metropolitan Area that includes Quezon City. When considering city-level data (<http://www.citypopulation.de/en/philippines/metromanila/admin/>), Quezon City is larger than City of Manila.
- While Gaza City is the largest urban area reported by WUP, it is also a conflict zone, where data collection may not be feasible. Ramallah is the administrative capital of the State of West Bank and Gaza and a city fully under the control of the authorities of West Bank and Gaza.

Annex B-Aggregation and Scoring of Economy-level Variables

Annex B outlines the current approach to aggregating expert responses to generate economy-level variables and their corresponding scores. It also details the scoring process for indicators derived from firm-level data in Enterprise Surveys (ES).

The first section of this note addresses the process of aggregating expert responses to form economy-level variables. This step is critical for transforming individual expert insights into a coherent, economy-wide perspective.

The second section discusses special cases that require specific attention during aggregation and scoring. These cases arise when economy-level variables cannot be scored directly multiplying the aggregate with score assigned by topic teams for any given indicator. In those cases, an economy-level indicator may require either bundling of questions (due to the use of logical operators) before scoring or application of special scoring rules defined by topic teams. It highlights the need for a nuanced approach in certain scenarios to ensure an accurate representation of the data.

The third section explains the methodology for scoring ES indicators and expert responses within Pillar 3. This includes the specific processes and considerations unique to this pillar, ensuring that the scoring reflects the comprehensive insights from both firm-level data and expert assessments.

This annex does not cover the overall distribution of weights for indicators, subcategories, and categories across different pillars. This information is presented in the previous topic chapters of this Methodology Handbook.

I. STANDARD AGGREGATION FOR ECONOMY INDICATORS

1. Binary Variables are Aggregated using the Median

Binary variables – yes/no questions – are the most straightforward for aggregation. Below are exhaustive examples of different scenarios that show how aggregation at the economy level is applied. If there is a tie between an even number of respondents, 0.5 (“Even split”) is applied to reflect the level of uncertainty with respect to the aggregated response.

	Scenario 1	Scenario 2	Scenario 3	Scenario 4
Respondent 1	1 (=yes)	1	1	0
Respondent 2	1	1	1	1
Respondent 3	0 (=no)	1	0	n/a
Respondent 4	0	0	0	n/a
Respondent 5	0	0	n/a	n/a
Economy Aggregate (Median)	0	1	0.5	0.5

Note: n/a (not available) because of either a skip pattern, missing responses, or a limited number of respondents.

2. Continuous Variables are Aggregated using the Median

Continuous variables refer to variables that can take an uncountable set of numeric values. All percentage variables are considered continuous, as they can take any value between integers. Continuous variables from expert questionnaires are aggregated using the median of all responses. For the aggregation of Enterprise Survey continuous variables, see Annex C.

	Scenario 1	Scenario 2	Scenario 3	Scenario 4
Respondent 1	10	10	10	10
Respondent 2	12	12	12	12
Respondent 3	15	15	15	n/a
Respondent 4	38	n/a	38	n/a
Respondent 5	75	75	n/a	n/a
Economy Aggregate (Median)	15	13.5	13.5	11

Note: n/a (not available) due to either a skip pattern, missing responses, or a limited number of respondents.

3. Multi-select Variables are Aggregated using the Median at the Option Level

A multi-select variable refers to question where respondent can select more than one answer option (as applicable) from more than two categorical answer options provided. Like binary variables, these questions seek a yes or no answer to each option. Therefore, multi-select variables are aggregated using the median at the option level. The simple aggregation is illustrated in the example below.

Options	Respondent 1	Respondent 2	Respondent 3	Economy Aggregate
A	1	0	0	0 – MEDIAN (0,0,1)
B	0	0	0	0 – MEDIAN (0,0,0)
C	1	1	0	1 – MEDIAN (0,1,1)
D	1	1	1	1 – MEDIAN (1,1,1)
E	1	0	1	1 – MEDIAN (0,1,1)

Missing answers are designated as “.a” in the raw dataset. Missing answers at the option level in multi-select questions are replaced with 0 (i.e., No) if at least one option for the same question has an answer (i.e., “yes” or “no”) by the respondent.

Options	Respondent 1	Respondent 2	Respondent 3	Economy Aggregate
A	.a (is recoded to 0)	0	.a (is not recoded to 0)	0 – MEDIAN (0,0) w/recoding
B	1	0	.a (is not recoded to 0)	0.5 – MEDIAN (0,1)
C	1	1	.a (is not recoded to 0)	1 – MEDIAN (1,1)
D	.a (is recoded to 0)	.a (is recoded to 0)	.a (is not recoded to 0)	0 – MEDIAN (0,0) w/recoding
E	0	0	.a (is not recoded to 0)	0 – MEDIAN (0,0)

4. Categorical Single-select Variables are Aggregated using the Mode

Categorical single-select variables (i.e., the respondent can select only one option when there are multiple options) are aggregated using the mode. The table below showcases the standard case where a single modal option emerges from the responses. However, the aggregation gets more complicated when no single mode emerges (e.g., cases where there is an even split between two options; or where there is no consensus among respondents). These special cases and their scoring are separately discussed in Section II.

	Respondent 1	Respondent 2	Respondent 3	Respondent 4
Question X	Option 1	Option 1	Option 2	Option 3
Economy aggregate	Option 1 → MODE (1,1,2,3)			

II. SPECIAL AGGREGATION AND SCORING RULES FOR ECONOMY INDICATORS

1. Questions Combined using Logical Operator to form an Indicator

Topics may form an indicator by combining questions using **AND/OR** operators. The combination can apply either to standalone binary questions or to options/features of multi-select questions. The aggregation occurs at the question level (or feature level for multi-select questions) by taking the median, then the bundle (of medians) is scored accordingly (see **scenarios 1 & 2**). When an indicator is formed by combining parent-child questions using an AND/OR operator, the aggregation remains at the question level before bundling happens (see **scenario 3**).

Scenario 1: standalone binary questions (or multi-select options) combined using the **AND operator**.

	Respondent 1	Respondent 2	Respondent 3	Respondent 4	Median by question
Q1	1	1	1	0	1 → MEDIAN (0,1,1,1)
Q2	0	0	1	0	0 → MEDIAN (0,0,0,1)
Economy aggregate (under AND operator)					0 (Q1=1; Q2=0)

Scenario 2: standalone binary questions (or multi-select options) combined using the **OR operator**.

	Respondent 1	Respondent 2	Respondent 3	Respondent 4	Median by question
Q1	1	1	1	0	1 → MEDIAN (0,1,1,1)
Q2	0	0	1	0	0 → MEDIAN (0,0,0,1)
Economy aggregate (under OR operator)					1 (Q1=1; Q2=0)

Scenario 3: Parent-child questions **combined using AND/OR operators**. In this scenario, the second question is triggered by the first one. Therefore, the second (“child”) question is aggregated based on only the respondents who have seen the question. For questions where only half of the respondents see the question (e.g., 2 out of 4 experts), the child question’s aggregate carries the structure of “Yes (No); 50% skip logic.”

	Respondent 1	Respondent 2	Respondent 3	Respondent 4	Median by question
Q1	1	1	1	0	1 → MEDIAN (0,1,1,1)
Q2	0	1	0	. (n/a)	0 → MEDIAN (0,0,1)
Economy aggregate (under AND operator)					0 (since Q2 ≠ 1)
Economy aggregate (under OR operator)					1 (since Q1 = 1)

Scoring Rules for Indicators formed using AND/OR Operators

Following the aggregation rules applicable to questions combined using AND/OR operators, the exact scoring rules for these indicators depend on the logical operator used and are presented below.

A) AND operator

- 1) An indicator gets a score of 0 if ANY component aggregates to a "No" (0) or "No; 50% skip logic" (in cases where the subsequent component is enabled by the first component).
- 2) An indicator gets a full score if ALL components aggregate to a "Yes" (1).
- 3) An indicator gets 50% of the full score for the remaining cases. In these cases, at least one aggregate response is “Even split,” “Yes; 50% skip logic”, or “Even split; 50% skip logic.”

B) OR operator

- 1) An indicator gets a score of 0 if ALL components aggregate to a "No" (0) or "No; 50% skip logic" (in cases where the subsequent component is enabled by the first component).
- 2) An indicator gets a full score if ANY component aggregates to a "Yes" (1).

- 3) An indicator gets 50% of the full score for the remaining cases. In these cases, at least one aggregate response is “Even split”, “Yes; 50% skip logic”, or “Even split; 50% skip logic.”

2. Questions Skipped by Enabling Conditions (skip logic)

Most questionnaires have introduced skip patterns to allow for follow-up questions if a certain condition holds true (parent-child question structure). A general rule is that when child questions are skipped by skip logic (i.e., denoted as “.” in the raw data, and appearing as “skip logic” in the aggregated dataset – meaning more than half of the respondents never saw the question), **they are not recoded as “NO” (0)**. The scenarios below showcase the general rules applicable to this type of question structure.

Scenario 1: Parent question aggregates to “Yes” (1) – subsequent child questions are assessed based on the median using only respondents selecting “Yes” (1) for the parent question.

	Respondent 1	Respondent 2	Respondent 3	Respondent 4	Median
Parent Q	1	1	1	0	1
Child Q1	1	0	0	.	0
Child Q2	1	1	0	.	1

Scenario 2: Parent question aggregates to “No” (0) – subsequent child questions are not applicable. Therefore, they aggregate to “Skip logic.”

	Respondent 1	Respondent 2	Respondent 3	Respondent 4	Median
Parent Q	1	0	0	0	0
Child Q1	0	.	.	.	Skip logic
Child Q2	1	.	.	.	Skip logic

Scenario 3: Parent question aggregates to “Even Split” (0.5) – subsequent child questions are assessed based on the median using only respondents selecting “Yes” (1) on the parent question. In this scenario, the aggregate result of child questions reflect that half of the respondents did not see the question (i.e., the aggregate answer is followed by “50% skip logic.”)

	Respondent 1	Respondent 2	Respondent 3	Respondent 4	Median
Parent Q	1	1	0	0	0.5
Child Q1	1	1	.	.	1 (50% skip logic)
Child Q2	1	0	.	.	0.5 (50% skip logic)

Scoring Rules for Even Splits and Skip Logic in Parent-child Question

For standalone binary and parent question(s) that are scored, 50% of the full score is assigned when the economy-level aggregate returns “even split.” The scoring of child questions when there is an even split on the parent question follows the rules below:

- 1) Assign 50% of the full score when the child question aggregates to “Yes; 50% skip logic.”
- 2) Assign 25% of the full score when the child question aggregates to “Even split; 50% skip logic.”
- 3) Assign a score of 0 when the child question aggregates to “No; 50% skip logic.”

3. Categorical Single-select Questions: Special Aggregation & Scoring

As discussed in Section I, categorical single-select questions are generally aggregated using the mode. The scenarios below present all possible aggregation outcomes (i.e., whether there is a single mode or when no singular modal option emerges), and how to score economy indicators accordingly.

Scenario 1: Single mode – the aggregation result returns a single mode. In this case, the indicator gets the score associated with the modal value.

	Respondent 1	Respondent 2	Respondent 3	Respondent 4
Question X	Option 2	Option 2	Option 2	Option 3
Economy aggregate	Option 2 → MODE (2,2,2,3)			
Indicator score	Score associated with Option 2			

Scenario 2: Single mode, 50% skip logic – the child question aggregates to a single mode (based only on responses from those who saw the question). In this case, the indicator gets 50% of the score associated with the modal value.

	Respondent 1	Respondent 2	Respondent 3	Respondent 4
Parent question	1	1	0	0
Child question	Option 3	Option 3	.	.
Economy aggregate	Single mode, 50% skip logic → value = Option 3, MODE (3/3/.)			
Indicator score	50% of score associated with Option 3			

Scenario 3: Multiple modes – this scenario covers cases where the mode is not unique. (i.e., it can be either responses return more than one mode or no mode). In this case, the indicator gets **the median of the scores associated with both/all options presented**.

	Respondent 1	Respondent 2	Respondent 3	Respondent 4
Question 1	Option 2	Option 2	Option 3	Option 3
Economy aggregate	Multiple modes → value = Options 2, 3 based on MODE (2/2/3/3)			
Indicator score	Median of scores associated with Option 2 and Option 3			

Scenario 4: Multiple modes, 50% skip logic – when a child question (based only on responses from those who saw the question) aggregates to the cases covered in Scenario 3. In such a case, the indicator gets **50% of the median of the scores associated with the options presented**.

	Respondent 1	Respondent 2	Respondent 3	Respondent 4
Parent question	1	1	0	0
Child question	Option 2	Option 3	.	.
Economy aggregate	Multiple modes, 50% skip logic → value = Options 2, 3 based on MODE (2/3/.)			
Indicator score	50% of median of scores associated with Option 2 and Option 3			

4. Multi-select Questions with an “AT LEAST” Scoring Approach

With aggregation for multi-select questions done at the option level (see Section I), each feature’s aggregation can return a 1 (“Yes”), 0 (“No”), or 0.5 (“Even split.”) When a topic’s methodology seeks to assess the presence of a minimum number of features, the scoring of these questions follows one of the two

multi-step processes presented below. The exact process is determined by whether a partial score is awarded when the minimum number is not met.

Scenario 1: NO partial score is awarded when the minimum number is not met

- 1) Count the number of Yes (1s) at economy-aggregate level: if the count of 1s is greater than or equal to the minimum (e.g., 3 features out of 6 options), an economy gets the full score.
- 2) Otherwise, count the number of Yes (1s) and Even Split (0.5s): if the count is greater than or equal to the minimum number, an economy gets 50% of the full score.
- 3) If the total count of Yes (1s) and Even Split (0.5s) does not meet the minimum, an economy gets a score of 0.

Example 1: for the following multi-select question, the scoring approach is that an economy scores full points if 3 out of 6 features are available. Otherwise, no score is awarded.

	Scenario 1	Scenario 2	Scenario 3
<i>Option 1</i>	1	1	1
<i>Option 2</i>	1	0.5	0.5
<i>Option 3</i>	1	0.5	0
<i>Option 4</i>	0	0	0
<i>Option 5</i>	0	0	0
<i>Option 6</i>	0	0	0
Count of 1s (A)	3	1	1
Count of 0.5s (B)	0	2	1
Total count (A+B)	3	3	2
Did it cross the threshold defined (≥ 3)?	Yes	Yes	No
Indicator score	Full score	50% of full score	0

Scenario 2: PARTIAL score is awarded when the threshold is not met

- 1) Count the number of Yes (1s) at economy-aggregate level: if the count of 1s is greater than or equal to the minimum, an economy gets the full score.
- 2) Otherwise, count the number of Yes (1s) and Even Split (0.5s): if the count is greater than or equal to the minimum, an economy gets 50% of the full score (i.e., partial score).
- 3) If the total count of Yes (1s) AND Even Split (0.5s) does not meet the minimum, check if there is at least one definitive YES (1) in all non-zero options. If yes, an economy gets 50% of the full score (i.e., partial score).
- 4) If not (i.e., no definitive Yes among all non-zero options), the economy gets 25% (i.e., apply an additional 50% on top of the partial score) of the full score.

Example 2: for the following multi-select question, the scoring method is that an economy scores full points if more than half of the features are available (i.e., 5 out of 8). Otherwise, an economy gets a partial score (50%) if at least one feature is available, and 0 if none is available.

	Scenario 1	Scenario 2	Scenario 3	Scenario 4
<i>Option 1</i>	1	1	1	0.5
<i>Option 2</i>	1	1	1	0.5
<i>Option 3</i>	1	0.5	0.5	0.5
<i>Option 4</i>	1	0.5	0.5	0
<i>Option 5</i>	1	0.5	0	0
<i>Option 6</i>	0	0	0	0
<i>Option 7</i>	0	0	0	0
<i>Option 8</i>	0	0	0	0
Count of 1s (A)	5	2	2	0
Count of 0.5s (B)	0	3	2	3
Total count (A+B)	5	5	4	3
Did it cross the threshold defined (≥ 5)?	Yes	Yes	No	No
Indicator score	Full score	50% of full score (since it crossed the threshold but did not have enough definitive YES)	50% of full score (though not meeting the defined threshold, it has at least one definitive YES, thus awarding a partial score)	25% of full score (since it did not cross the threshold and has zero definitive YES)

III. SCORING OF CONTINUOUS VARIABLES

1. Continuous Variables from Expert Questionnaire

The aggregation of continuous variables from expert questionnaires is done using the median (see Section I). Once an economy aggregate is obtained, the score for the indicator is produced by applying the normal CDF transformation method detailed below.

2. Continuous Variables from Enterprise Surveys

The aggregation of continuous variables from firm-level surveys is done through weighted means or medians. The means or medians are estimated using corresponding sample weights. For more details, see Annex C for documentation on the World Bank Enterprise Survey (WBES) indicators. All variables coming from WBES are considered continuous, even when binary questions were asked. This is because at the economy level, the aggregated response reflects the percentage of firms choosing any one binary option.

Consistent with the approach taken by WBES over the years, in most cases, the estimated mean is used to aggregate firm responses. This ensures that governments looking to improve their score in a particular indicator have equal incentives to improve the condition of any firm in the economy.

The one exception to the use of the mean is the case of unbounded time and cost variables. These variables tend to have larger ranges driven by outliers. Depending on the specific B-READY topic and indicator, the

aggregation of firm responses to such questions may be based on the mean or median of firm responses. For a list of variables aggregated with medians, see section 4 of Annex C. The median better represents what the typical firm in an economy experiences by removing distortions produced by outliers.

Like the continuous variables collected through expert questionnaires, the scores of the WBES indicators are produced by applying a normal CDF transformation to the economy aggregate, as detailed below.

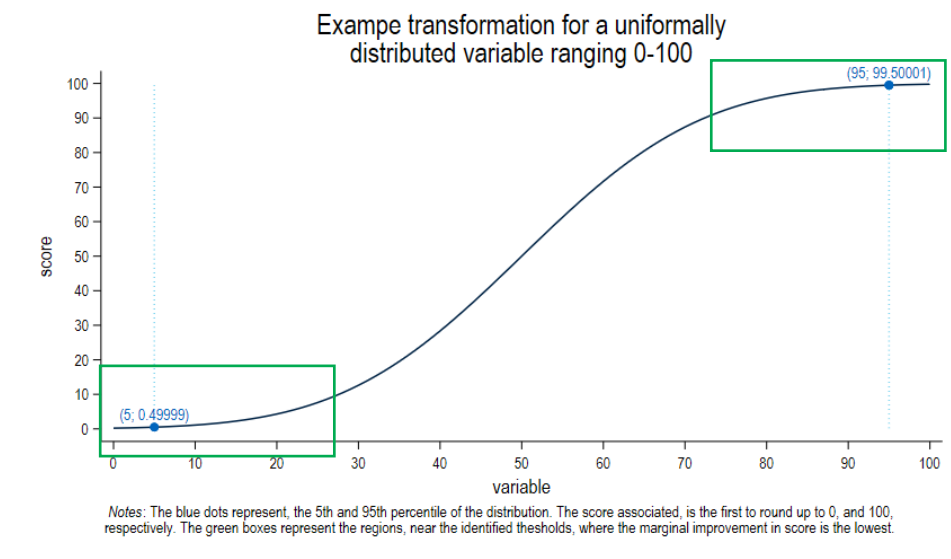
3. Scoring of the Continuous Variables

The task of scoring continuous, potentially unbounded variables into a bounded score with enough variance to incentivize reforms faces several challenges. The first is identifying a scoring range, i.e., the values before and after which an economy scores 0 or 100. It is desirable to have all indicators range from 0 to 100 so that a relative improvement with respect to the global best practice is comparable across indicators. The second related challenge is identifying a scoring function. The limitations deriving from the first challenge require the use of a scoring function that allows for a degree of uncertainty around the thresholds.

Ideally, the scoring range for an indicator is self-evident or well-defined in the literature. For instance, an economy evidently scores maximum points on our indicator on the share of female-managed firms that obtained a government contract once this reaches 50%. However, these cases are rare. For most B-READY indicators, there is no globally recognized worst-, or best-practice. This implies the need to define empirical scoring thresholds using the data collected in this first year of the rollout phase.

The sample of 50 economies for B-READY 2024 was selected to achieve representation of all regions and income groups. For comparability across the first three cycles of the reports, the threshold is fixed so that scores do not artificially change as new economies are included.

The next step in scoring is to choose a transformation. Given the empirical nature of the thresholds, B-READY uses a non-linear transformation: the normal CDF function. This transformation first ensures that all present and future scores can be calculated by inputting the indicator values, and that the resulting score ranges between 0 and 100. Secondly, it ensures that the change in score associated with the change in the variable is less prominent near the thresholds, and more prominent in the middle section. This helps to reduce the impact of the specific chosen threshold on the score.



Scoring Range:

The first step in identifying the scoring range for the variables where the range is not self-evident or well-defined in the literature is to remove “no practice” economies and outliers. For a given indicator, an economy would be considered as “no practice” in all instances in which the underlying public service (institution, procedure, function, or else) is missing according to B-READY experts’ response to topic questionnaires. Removing “no practice” economies avoids incentivizing the absence of a socially desirable public service. Once “no practice” economies are removed, all values further away than three standard deviations from the mean of all economies are considered outliers. Removing outliers ensures economies are not unduly penalized (or rewarded) due to overly large scoring ranges. The scoring range spans from the 5th to the 95th percentile of the remaining observations. All values below the 5th percentile obtain a score of 0, and all values above the 95th percentile obtain a score of 100. The opposite is true for indicators where the best practice is the lower bound.

Scoring Function:

To obtain the score with the nonlinear transformation outlined above, the first step is to define the midpoint between the two thresholds and the coefficient of dispersion of the curve. The midpoint is obtained by taking the average between the 5th and the 95th percentiles. As a second step, the coefficient of dispersion is obtained as follows:

$$coeff. of dispersion = \frac{5th\ percentile - midpoint}{inv.norm(0.0049999)}$$

where *inv.norm* denotes the inverse of the normal cumulative distribution function. The score associated with each economy observation is then obtained with the following formula:

$$score = 100 \cdot norm\left(\frac{var - midpoint}{coeff. of dispersion}\right)$$

where *norm* denotes the normal cumulative distribution function.

Low Observations in WBES:

Enterprise Surveys provides an economy level estimate, either mean or median, when they collect 6 observations or more for that economy (see Annex C). If they fail to collect this minimum number of observations, the indicator is considered missing. The weights of missing indicators are redistributed equally among all remaining indicators within the same subcategory.

If all indicators within a subcategory are missing, the weight of that subcategory is redistributed to the other subcategories contained in the same category in proportion to their initially assigned weights. Similarly, when all categories within a pillar are missing, its weights are redistributed to other categories.

Annex C-Documentation for WBES Indicators in B-READY

This note describes the data sources and transformations in the process of calculating economy-level indicators that enter into the B-READY scores. It follows the structure of the replication program provided in the Stata do-file form. The subsequent processes of transforming these indicators into individual scores, topic or economy-level scores are provided in Annex B of this Methodology Handbook.

1. Data

The data from the most recently completed 50 WBES (The World Bank Enterprise Surveys) is used.¹ In these surveys, questions specifically designed for the B-READY report were administered, in addition to the previously collected standard set of WBES questions. Each WBES is a firm-level survey of a representative sample of an economy's private sector, where top managers or owners are interviewed about a wide range of topics, such as access to finance, corruption, infrastructure, and performance, among others. Further information about the WBES can be found on their [website](#); the methodology is outlined in detail on their [methodology page](#), with [the WBES Manual and Guide](#) providing a general overview.

The firm-level WBES data are publicly available from [the WBES data portal](#), where users can create an account, free of charge, to gain access. The data can be accessed in multiple ways. First, each individual economy dataset can be accessed from the “data by economy” tab. Second, the cross-economy database that collects all WBES collected through the standardized methodology, including these 50 WBES can be downloaded from the “combined data” tab, the file called “StandardizedNew-2006-2023-core4.zip.” Note that this database gets continuously updated to include the newly published WBES.

2. Data Transformations

Before producing the WBES indicators at the firm level, the data undergo transformations to (i) handle surveys that were implemented in the format of a follow-up on the baseline WBES, (ii) clean data to remove substantial extreme values and fix some discrepancies with the survey codebook that were not detected during the survey implementation, and (iii) apply the outlier routine. Each of these components is described in detail below. Please see the replication do-file that made available for further details.

2.1 Handling of Follow-up Surveys

The surveys in five economies, namely Bangladesh, Iraq, Madagascar, Peru, and Timor-Leste, were implemented as a follow-up to the baseline WBES that were completed shortly before finalizing the questions that were necessary for the B-READY report. In these economies, the questions that were part of the pre-existing global WBES questionnaire were implemented during the baseline fieldwork. To administer the questions necessary for the B-READY report, the same survey implementation team re-contacted the same representative sample of firms that participated in the baseline WBES. The follow-up surveys were implemented on the phone. In this process of re-contacting, some of the original respondents were impossible to reach, or refused to answer the additional questions. To address this attrition and ensure that the surveys continue to capture the universe of firms covered by the standard WBES, the sampling weights were adjusted following the standard WBES methodology. The adjusted sampling weights apply only to the responses provided during the follow-up implementation, which are stored in variables that have names suffixed by `_BR`. Notably, the follow-up survey questionnaires varied slightly across the five

¹ In particular, these surveys are used: Bangladesh2022, Barbados2023, Bosnia and Herzegovina2023, Botswana2023, Bulgaria2023, Cambodia2023, Central African Republic2023, Chad2023, Colombia2023, Costa Rica2023, Cote d'Ivoire2023, Croatia2023, El Salvador2023, Estonia2023, Gambia2023, Georgia2023, Ghana2023, Greece2023, Hong Kong SAR China2023, Hungary2023, Indonesia2023, Iraq2022, Kyrgyz Republic2023, Lesotho2023, Madagascar2022, Mauritius2023, Mexico2023, Montenegro2023, Morocco2023, Nepal2023, New Zealand2023, North Macedonia2023, Pakistan2022, Paraguay2023, Peru2023, Philippines2023, Portugal2023, Romania2023, Rwanda2023, Samoa2023, Seychelles2023, Sierra Leone2023, Singapore2023, Slovak Republic2023, Tanzania2023, Timor-Leste2021, Togo2023, Vanuatu2023, Viet Nam2023, and West Bank And Gaza2023.

economies, since some questions were implemented as part of the baseline WBES in some of these economies, so including them in the follow-ups was no longer necessary.

In addition, the WBES in Indonesia features two versions of the questionnaire which are indicated with variable *q_version* in the dataset. Each firm had an equal probability of receiving either version of the questionnaire. The majority of questions were administered in both versions. The questions that appear only in one or the other version of the questionnaire are stored in variables with names suffixed by *_BR* and should use the corresponding sampling weights.

To properly handle the above six economies, the following steps were taken: (i) for each variable, the set of economies where this kind of special treatment was needed was identified; (ii) for each variable and economy, the responses were transferred from variables that store follow-up surveys or questionnaire versions into the corresponding main variables; and (iii) the variable-specific sampling weights were produced, taking into account the follow-up or questionnaire version structure.

Henceforth, the variables mentioned incorporate the above handling of the follow-up surveys.

2.2 Data Cleaning

Some responses provided by firms were extreme to the degree of needing removal before applying the outlier routine. The WBES team has a highly detailed data quality control routine, which produced flags regarding some of these values during the fieldwork, but some were omitted due to variables being new and previously untested. Extreme values were removed from the following variables:

- l36: How many weeks of salary was the typical severance payment for a dismissed permanent, full-time worker? Please include pay and benefits but exclude unpaid salaries for time already worked. Values of above 300 were removed, affecting 45 observations, with the remaining total of 4525 observations.
- n2a2: Of [the total annual cost of labor] total annual costs of social security payments and employment-based taxes, excluding employee taxes that were withheld. Values exceeding the total annual cost of labor were removed, affecting 39 observations, with the remaining total of 21213 observations.
- variables n2a n2b n2l n2k g33 k31 c38 (please see the questionnaire for details behind each): the responses of zero were removed, affecting respectively 12, 209, 1070, 1799, 99, 360, 304 observations, with the remaining total of 25862, 26485, 20482, 20505, 1158, 1806, and 3041 observations, respectively.²
- k35: How many days does it take on average from when payment is made until the money is received using [the e-payment method to receive a payment identified in K.34]?: the values above 30 were removed, affecting 174 observations, with the remaining total of 19721 observations.
- k36: As a percentage of a typical transaction, how much does it cost to accept payments, using [the e-payment method to receive a payment identified in K.34]?: the values above 50 were removed, affecting 39 observations, with the remaining total of 17563 observations.
- k40: As a percentage of a typical transaction, how much does it cost to make payments, using [most important e-payment method to make a payment (option identified in K.39)]?: the values above 50 were removed, affecting 57 observations, with the remaining total of 15947 observations.

² Note that the variables c31 and c38 are also included in this treatment on the replication do-file, though this does not affect any observations, and are there only for the purpose of completeness.

- c9b: Please estimate the losses that resulted from power outages either as a percentage of total annual sales or as total annual losses: the values above the total annual sales were removed affecting 10 observations, with the remaining total of 1452 observations.

Furthermore, the data was cleaned as follows:

- The Sierra Leone survey asked questions o3a and o3b, opinions regarding commercial disputes, to all firms instead of only the ones that did experience such disputes as in the rest of the surveys, so the extra responses were removed for the purposes of cross-economy comparability.
- During the Tanzania survey, a follow-up question about the reasons for not applying for a VAT refund (j40) when the firm had responded that they did apply for it (j38 response was yes) was mistakenly activated for some respondents. These were removed.
- The follow-up question on the hours it took to go through customs when the response of 0 days was provided (variable d40b) was not activated during the survey for the total of observations, the empty values were turned into “don’t know.”
- The question e1 (in fiscal year [last complete fiscal year], which of the following was the main market in which this establishment sold its main product [or offered its main service]) was not activated for 60 observations in total, so the corresponding values for this and the follow-up question on the number of competitors (e2b) that forms an indicator in combination with e1 were turned to “don’t know.”

2.3 Outliers

The following outlier routine is used. First, the variable is log-transformed after adding the value of 1. Then, at the economy level, the simple mean and standard deviation of the variable is calculated. Finally, the values that fall further than three standard deviations away from the mean are marked as extreme and removed from the calculations. All non-categorical variables are put through this routine, in particular the following list of variables: g3, k32, k33, k35, k36, k38, k40, the combination of d33a and d33b that calculate the duration in days, d34, the combination of d40a and d40b that calculates the duration in days, d41, l35, l36, l38, the ratio of n2a2 and n2a, e2b, j43, the combination of j35a and j35b that calculates hours spent on tax preparations, j33, j39, n11, c4, c7, the combination of c8a and c8b that calculates the duration in hours, the combination of c9a_c9b that calculates losses as a share in the total annual sales, c37, c13, and e31b. Please see the questionnaire for the meaning of each of these questions.

3. Indicators

The WBES indicators that are used in the B-READY scores are calculated at the firm level using the interview responses to the corresponding variables. There are four general types of indicators: (i) based on a Yes/No question, (ii) based on a categorical question with options other than Yes/No; (iii) responses with a wider range, such as percentages (varying from 0 to 100), or continuous unbounded variables, such as duration (in weeks, days, or hours), or a number; and (iv) ratio (share of social payments in the total labor cost, calculated by a response to one question divided by another). In all cases, the “don’t know” responses are removed from calculations. Please see the replication program made available in Stata do-file form for further details of these calculations.

4. Calculation of Economy-level Indicators

The means and medians at the economy level are estimated using the corresponding sampling weights. The majority of indicators are aggregated using means. The following subset of indicators from category (iii) in Section 3 are aggregated using medians: bus3, tax1, tax4, tax5, in3, in4, in1, in5, in22, tr18, and tr24. For all the WBES except the six surveys mentioned in Section 2.1, the sampling weights contained in variable

wmedian are used for all the indicators, which is the standard practice of calculations of the WBES indicators. For the remaining six WBES, some indicators use the sampling weights associated with the corresponding variable, as described in the subsection “2.1 Handling of Follow-up Surveys.”

The means and medians can be calculated using one of the following two methods. The first is through setting the dataset as a survey (in Stata, this means applying the command *svyset idstd [pw=wmedian], strata(strata_all) singleunit(scaled)*, where the variable *strata_all* is produced using the variable *strata* and *economy* to produce a code that is unique for *strata* and *economy*).³ After this, the weighted means and medians can be calculated (in Stata, this would be *svy: mean indicator, over(economy)* for means, and *epctile indicator, p(50) svy* for medians applied for each economy). The second method is through applying a simple weighted average through a command such as *collapse (mean) indicator or (p50) indicator [pw=wmedian], by(economy)*.

For further details about the WBES indicators as entered in the B-READY scores, please consult the replication package provided in a Stata do-file form.

³ As noted, for some indicators, this command would have sampling weight other than *wmedian*, but rather the corresponding question-specific sampling weight. See subsection “2.1 Handling of Follow-up Surveys” for further details.