



GOVERNANCE



EQUITABLE GROWTH, FINANCE & INSTITUTIONS INSIGHT

Country-Level Institutional Assessment and Review (CLIAR) Benchmarking

Methodological Note

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1818 H Street NW
Washington DC 20433
Telephone: 202-473-1000
Internet: www.worldbank.org

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Acknowledgments

This Country Level Institutional Assessment and Review (CLIAR) Methodological Note is the result of a collective effort of the Public Institutions Data and Analytics Governance team, in close collaboration with sector experts and colleagues across the World Bank network. The core team, led by Rita Ramalho, Laura Zoratto, and Eric Arias, includes Verena Fritz, Galileu Kim, Stuart Russell, Awais Ahmed, Kannan Venkataraman, Shelmith Kariuki, and Gabriel De Souza.

Many colleagues and experts contributed to the preparation of this document in a strong collaborative fashion through multiple rounds of substantive inputs, participation in consultations, advice, and feedback. Peer reviewers Tracey Marie Lane, Alberto Leyton, Deborah Isser, Kai Kaiser, and Daniel Rogger provided valuable comments and guidance during the CLIAR Concept Note Review Meeting (May 2023) and the Decision Review Meeting (December 2023). Special thanks for additional comments and guidance received from Aart Kraay, Jana Kunicova, Edouard Al-Dahdah, Davide Zucchini, and James Brumby.

The team wishes to thank colleagues from the EFIGS unit, Ramin Aliyev and Pechiyappan Muthukumar, and from the Development Impact Evaluation (DIME) Group, Tony Fujs, for the great partnership and for the technical support they provided in the design and development of the CLIAR Dashboard.

Special thanks also to the following colleagues across the Bank and sector experts who provided valuable comments and guidance during the validation process for the selection of indicators as part of the Data Expert Group: Zahid Hasnain, Turkan Mustafa Qizi Mukhtarova, Ayesha Khurshid, Faisal Ali Baig, Erik Feyen, Henri Fortin, Imanuel Steinhilper, David Bernstein, Erica Bosio, Klaus Decker, Francesca Recanatini, Cem Dener, Julia Clark, Patrick Barron, Jose Cuesta, Aly Rahim, Dusko Vasiljevic, Philip Grinsted, Graciela Miralles Murciego, Elena Gasol, Mesfin Girma Bezawagaw, Oleksii Balabushko, Mathieu Cloutier, Majed El-Bayya, Hunt La Cascia, Gael Raballand, Jia Li, Kimberly Jones, Peter Kusek, Sylvia Solf, Tania Ghossein, Priyanka Kher, Umar Serajuddin, Jonathan Stöterau, Sahar Hussain, Jigyasa Sharma, Halsey Rogers, Srinivas Gurazada, Silvia Lubenova Kirova, and Mona El-Chami.

Last but not least, the team wishes to thank Greg Larson and Cyrel San Gabriel for editing the Note and Maria Louella B. Lopez for the graphic design.

Overall technical oversight and guidance was provided by Chiara Bronchi and Arturo Herrera Gutierrez.



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Abbreviations

ASPIRE	Atlas of Social Protection Indicators of Resilience and Equity
BTI	Bertelsmann Transformation Index
CLIAR	Country Level Institutional Assessment and Review
CTF	Closeness to Frontier
CPIA	Country Policy and Institutional Assessment
CPF	Country Partnership Framework
GFDB	Global Financial Database
GSD	Global State of Democracy
GTMI	GovTech Maturity Index
IBRD	International Bank for Reconstruction and Development
IDA	International Development Association of the World Bank Group
OECD	Organisation for Economic Co-operation and Development
PEFA	Public Expenditure and Financial Accountability
PMR	Product Market Regulation (OECD Database)
RISE	Regulatory Indicators for Sustainable Energy
SCD	Systematic Country Diagnostic
SGI	Sustainable Governance Indicators
SOE	State-Owned Enterprise
SPI	Statistical Performance Indicators
V-DEM	Varieties of Democracy Database
WDR	World Development Reports
WBL	Women, Business and the Law
WDI	World Development Indicators
WGI	World Governance Indicators
WJP	World Justice Project
WWBI	Worldwide Bureaucracy Indicators



What is CLIAR?

The Country Level Institutional Assessment and Review (CLIAR) is a methodological framework to make the World Bank's institutional diagnostic work and policy dialogue at the country level more integrated and data driven. The aim of CLIAR's institutional analysis is to support the World Bank's policy dialogue with counterparts and help identify entry points and priorities for institutional reform. CLIAR is composed of two different but complementary products: the CLIAR Dashboard and the CLIAR Country Deep-Dive. This methodological note is focused on the former.

The CLIAR Dashboard is a quick and accessible data-driven analytical tool and web-based platform that benchmarks the strengths and weaknesses of a country's institutional dimensions against a set of comparator countries.¹ The benchmarking methodology underlying the CLIAR Dashboard is designed as both an analytical and a filtering tool. As an analytical tool, it helps task teams undertake a fast yet comprehensive benchmarking exercise of a country's institutional profile to identify and map its main institutional strengths and weaknesses. As a filtering tool, it can help teams identify and select institutional themes as priority areas that most require reforms and in-depth analysis.²

The CLIAR Dashboard curates publicly available institutional indicators and creates two datasets that users can access through the online platform. The first dataset contains 138 indicators aggregated into 13 institutional clusters: (1) political institutions, (2) social institutions, (3) absence of corruption, (4) transparency and accountability institutions, (5) justice institutions, (6) public finance institutions, (7) public sector human resources management (HRM), (8) digital government and data institutions, (9) business environment institutions, (10) labor and social protection institutions, (11) state-owned enterprise (SOE) corporate governance institutions, (12) service delivery institutions, and (13) climate change institutions. Because this dataset is used in the benchmarking exercise described in section 3, we refer to it as CLIAR Benchmarking Data. A second dataset comprises 298 additional indicators that complement and enhance the institutional analysis but are not part of the benchmarking exercise.

The CLIAR Dashboard is a starting point for institutional analysis and is not intended as an exhaustive analysis of the institutional constraints of each country. While CLIAR provides a data-driven base to generate hypotheses and guide the selection of issues for in-depth investigation, its benchmarking exercise is not a comprehensive analysis of a country's institutional constraints. Its results are driven by data availability and coverage, which can be quite limited in many countries. Likewise, though CLIAR adds granularity to any assessment of a country's institutions, the resulting analysis is still only a "bird's eye view" of that country's institutional context. For more detailed assessments, the CLIAR Country Deep-Dive draws on the Dashboard but provides a more detailed country-level narrative and more granular institutional assessment at the sector level that can be used for generating actionable recommendations. In particular, the Country Deep-Dive tool develops an analysis of long-term political and macro/fiscal trends, and uses country-specific data and novel data collection when warranted, to shed light on policy action items at the sector/institutional level.

This methodological note explains how the CLIAR Dashboard was developed, what it covers, what its features are, and how to use it.

1.1 What Is the Rationale for CLIAR Dashboard?

The Bank recognizes institutional strengthening as essential for development (e.g., Kaufmann, Kraay and

Mastruzzi 2010). The classic theoretical argument for the importance of institutions goes back to Adam Smith and was prominent in the work of many 19th century scholars, such as John Stuart Mill – with a focus mainly on economic institutions, such as the enforcement of property rights for creating incentives to invest, innovate, and take part in economic activity. More recently, spurred by intense academic debates and the availability of more data and evidence starting in the 1990s, a broad consensus has emerged that poor-quality institutions are detrimental to economic development. Empirical studies have highlighted specific institutional features that are associated with strong long-term national economic performance, including rational legal bureaucracies (Evans and Rauch 1999), judicial independence (Feld and Voigt 2003), protection of property rights (Knack and Keefer 1995), and governments' credibility in attracting investment (Brunetti et al. 1997).

Despite consensus around the fundamental role institutions play for achieving and enhancing economic development, key gaps remain in our understanding of the underlying mechanisms (cf. Boese-Schlosser and Eberhardt 2022). The political and economic institutions that drive the public institutions-development nexus, and the features of those institutions that are most essential, have still not been properly identified – making it difficult to derive tangible policy implications for individual countries (Durlauf 2020). This is largely due to methodological challenges, such as the direction of causality (e.g., Acemoglu, Johnson, and Robinson 2005; Cavalcanti and Novo 2005; Easterly 2008). In other words, do high-quality institutions lead to development or does development enable the emergence of high-quality institutions? The literature offers varied perspectives. For example, analysis of several countries' experience has shown that growth was initially stimulated by a small number of institutional and policy changes, despite an otherwise unfavorable governance environment (Rodrik 2007). Yet history also highlights that growth acceleration can and did happen under a variety of institutional trajectories.³ This emphasizes the complexity of institutional development, as well as the ability of institutions to adapt to changing economic contexts (Fukuyama 2014). A corollary of such analyses is that relatively more nuanced and context-specific institutional reforms are more effective to promote change and unlock development than traditional "best practice" approaches (Levy 2014).

Another methodological challenge revolves around measurement. The baseline econometric literature on institutions relies on a wide range of proxies for institutional capital, quantified through aggregated as well as

disaggregated measures. Because institutional capital is a multi-dimensional concept, there exists a large industry around the construction and measurement of diverse indicators to capture different aspects of institutional quality. However, using diverse indicators in a single regression framework can present statistical limitations and the risk of multicollinearity, where multiple indicators might be strongly correlated with the outcome of interest (Moers 1999). As a result, it is also standard in the literature to use indicators of institutional quality separately across multiple equations (e.g., Acemoglu et al. 2001). Alternatively, various studies have attempted to aggregate different indicators by means of simple averages, which has the advantage of canceling out source-specific measurement error (Langbein and Knack 2010). The literature acknowledges that aggregate indicators could be more reliable than individual indicators as they organize and summarize large and disparate information in very concise way (e.g., Kaufmann et al. 2010, Van de Walle 2006). However, the gain in reliability from aggregation comes with a loss in specificity and conceptual precision (e.g., Knack and Manning 2000, Kaufmann et al. 2010).

To date, overarching analytical tools or frameworks for addressing these challenges, conducting in-depth reviews of national institutions, and contributing to the design of country engagements are still limited in number and features. Existing tools or frameworks include the World Bank Country Policy and Institutional Assessment (CPIA) and the World Governance Indicators (WGI). The CPIA provides a useful structure for country diagnostics based on 16 institutional and policy dimensions, including five dimensions on public sector management and institutions (CPIA cluster D).⁴ However, its design and process (including the confidentiality of its results for IBRD countries) limits its use for engagement purposes, and it tends to have a descriptive focus, reflecting the tight timeframes and limited resources dedicated to the exercise. The WGI provides a good (and public) overview of countries' institutional quality but is also somewhat limited in scope, with only six composite and cross-cutting indexes. Both the CPIA and WGI provide an excellent overview of general trends, but they may fall short in providing the level of detail that teams need to analyze governance reforms – in part due to their level of aggregation (Kaufmann et al. 2010).

To overcome these limitations, in 2021 the Governance Global Practice (GGP) developed the CLIAR and successfully piloted the first (beta) iteration of the CLIAR Dashboard. CLIAR Dashboard 1.0 applications have been included in over 50 Bank reports and have generated demand for further in-depth applications. It was used and applied in several Systematic Country Diagnostic (SCD) updates across

regions, including the updates for Bulgaria, Colombia, Costa Rica, El Salvador, Guatemala, Haiti, Honduras, Jordan, Lebanon, and Uruguay. CLIAR Dashboard analyses were also applied to the FY22 Croatia Country Economic Memorandum (CEM), the Country Climate and Development Report (CCDR) and Climate Change Institutional Assessment (CCIA) for Mozambique, the FY22 Mauritius Public Expenditure Review (PER), and various programmatic Advisory Services and Analytics (ASAs) in Armenia, Azerbaijan, Brazil, Georgia, Malaysia, and Türkiye, among others. In these cases, CLIAR contributed to shaping the overall narrative and focus of the Bank's country engagement on institutions, identifying and prioritizing institutional weaknesses, guiding the in-depth analysis, and advancing the dialogue on institutional strengthening. The current version, CLIAR Dashboard 2.0, builds on its previous version and incorporates features and lessons from these early pilots, introducing the substantial improvements and extensions described in this note.⁵

1.2 What Is CLIAR's Value-Added?

The CLIAR Dashboard was developed to offer an overarching analytical tool to review national institutions, with three core value-added propositions: (1) curation and validation of institutional indicators into a single platform, (2) development of a methodology that allows benchmarking of countries' institutional indicators at a more disaggregated level, and (3) creation of a user-friendly platform to facilitate data analysis and benchmarking. On the analytical side, as noted, the CLIAR Dashboard complements existing institutional assessments like the CPIA and WGI by including new dimensions and breaking down its institutional analysis with more granularity. On the practical side, the CLIAR Dashboard facilitates greater take-up and use of institutional analysis by offering a web-based, user-friendly, intuitive, and code-free interface – while also making the source code and data available to users who want to customize or conduct their own analytics.

The methodology underlying the CLIAR Dashboard adds granularity to institutional assessments by distinguishing 13 institutional clusters. The effort to distinguish between several institutional dimensions acknowledges the fact that countries vary in institutional quality across different sectors. This approach is supported by findings from several World Development Reports (WDRs). The 2016 WDR on Digital Dividends, for example, highlights how the regulation of businesses and government accountability institutions can improve the return on investment for digital technologies.

Such analyses have moved the policy debate from forming a general understanding of institutional development (Gill, Kharas, and Bhattacharya 2007) to identifying concrete and specific institutional reforms within specific public institutions that countries can pursue to achieve specific development outcomes.

The CLIAR Dashboard offers a platform upon which a curated and expert-validated dataset and code-free analysis are made available for users. This curation and data validation (further described in section 2.1.1) represents an important value-added in and of itself: by validating the data with global experts, the Dashboard relieves users from major concerns around indicator selection, and by compiling and curating the most relevant data from various types of institutions, the tool allows users to analyze and understand how institutions perform vis-à-vis others. Unlike most datasets that focus on a specific public institution or on features that are common across institutions, the CLIAR Dashboard provides a comprehensive view by combining data from multiple sources, allowing a holistic understanding of how institutions perform. By offering its tools through a user-friendly interface that can perform different types of descriptive and benchmarking analysis with the click-of-a-button, the Dashboard also relieves users from spending time in coding or data management. In addition to providing its analysis instantaneously, the Dashboard's design standardizes the analytical approach, thus increasing consistency across implementations.

The CLIAR Dashboard helps address certain data and analytical needs of the World Bank's work on governance and institutions. It fills the knowledge gap identified during the Bank's SCD Stocktaking. Around 92 percent of SCDs identified public sector and institutional capability as a key priority for development, with 90 percent identifying the area as a key constraint. However, more than half identified knowledge gaps in the area of political economy (e.g., governance, conflict and fragility) – more than any other area of analysis or concern highlighted in the stocktaking.⁶

The CLIAR Dashboard contributes to the Bank's analytical toolbox, including but not limited to key corporate products and processes, by facilitating a nuanced and data-driven country narrative. The CLIAR Dashboard can inform and facilitate new theoretical insights, offering new data to analyze the causes and consequences of institutional strengths and weaknesses – both within and across countries. Results from the analysis can standardize and facilitate country-level and regional governance briefings. CLIAR can also be used to inform and strengthen CPIA write-ups and ratings;⁷ and it can inform and shape important corporate products, such as Country Partnership Frameworks (CPFs), as well as other key processes, such as IBRD's income "graduation" process.⁸



What Is Covered in CLIAR?

CLIAR covers a wide range of institutions that shape key government functions, focusing on public institutions. We define public institutions as government and public organizations that structure public affairs, deliver services, and implement regulations, as well as the rules that govern these organizations. Under this definition, we adopt an expansive understanding of public institutions – including political and social institutions that, while not necessarily governmental, are public in the sense that they influence the public sector. While we refer to “institutions” throughout the note, it should be clear that it is shorthand for “public institutions” as defined here. It is important to note that our definition of public institutions differs from the traditional academic definition of institutions, where institutions are seen as the rules of the game (North 1990). Our definition focuses on organizations instead of the rules they are implementing or enforcing. Given the diversity of public institutions, however, it is important to be precise on what types of public institutions we analyze.

CLIAR is organized around a typology of institutional clusters to guide its institutional assessment. A diverse set of institutional indicators are grouped into 13 clusters: (1) political institutions, (2) social institutions, (3) absence of corruption, (4) transparency and accountability institutions, (5) justice institutions, (6) public finance institutions, (7) public sector human resource management (HRM), (8) digital government and data institutions, (9) business environment institutions, (10) labor and social protection institutions, (11) SOE corporate governance institutions, (12) service delivery institutions, and (13) climate change institutions (figure 1).⁹

Each institutional cluster aims to encompass a specific set of government functions that can be ascribed to a given public institution. The proposed institutional clusters are designed to capture key functions that different public institutions perform, drawing from various handbooks on public sector economics (Noll and Pizer 2016; Auerbach and Feldstein 1985; Baland and others 2020). The government functions covered in CLIAR include management of financial and human resources, systems, and processes; and delivery of selected public services such as justice. CLIAR also captures the degree of transparency and accountability with which functions are performed. Political and social institutions, albeit not government functions themselves, are included given their influence in how governments operate. For the same reason, different measures of perception of corruption

(absence of corruption) are included in a separate cluster. A cluster specific to climate change institutions is included in the current version of the dashboard given the increasing need for governments worldwide to address the challenges of the impacts of climate change.

This categorization process faces a trade-off between aggregation and specificity: the clusters must be broad enough to adequately capture indicators and policy spaces but specific enough to guide meaningful analysis. For instance, the lack of global data on fiscal or monetary institutions precludes the inclusion of a hypothetical cluster dedicated solely to fiscal or monetary institutions. Hence the few indicators related to these institutions are grouped under CLIAR's Public Finance cluster.

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FIGURE 1 - CLIAR Institutional Clusters



Source: World Bank Country Level Institutional Assessment and Review (CLIAR) Dashboard.

Note: HRM = human resource management, SOE = state-owned enterprise.

Each institutional cluster and their indicators are described in more detail in paras. 23–48. Section 2.1, table 1 presents a comprehensive list of indicators in each cluster. For some clusters, it was not possible to include indicators covering all areas of interest (e.g., tax administration or fiscal decentralization) due to the lack of global indicators with adequate coverage. The identified data gaps for social, public finance, SOE corporate governance, labor and social protection, and climate change and environment institutions are highlighted in that same section.

For each institutional cluster, protocols for the selection of indicators were developed and shared with thematic experts for consultation and validation. The CLIAR team conducted a quantitative and qualitative review of indicators. The quantitative filtering was based on (temporal and country) coverage criteria, with every decision and exception carefully documented. For the qualitative filtering and validation, the CLIAR team partnered with the Governance Data Experts Group. This collaborative approach, further described in section 2.1.1.1, improves the quality and relevance of the institutions measured – reducing and limiting any potential measurement error, increasing the tool’s credibility and sustainability, and ensuring that this exercise informs the operational needs of World Bank teams and their clients.

The definition of each institutional cluster was also informed by a review of the literature on how public institutions affect inclusive and sustainable growth.¹⁰ Emphasizing the distinction between public institutions and performance, each institutional cluster is complemented by a set of relevant outcome indicators – which, as described in paras. 49–51, are available on the CLIAR Dashboard but are not part of the actual benchmarking analysis.¹¹ For example, service delivery outcomes include educational performance, such as literacy rates.¹² While it is difficult to separate a policy from its implementation, given the data available, the aim with CLIAR is to focus on how implementation actually happens, rather than the mere presence or absence of a given policy.



1. Political Institutions

Political institutions matter for development, as they play a crucial role in shaping the economic, social, and institutional environment of a country (North 1990; Acemoglu, Johnson, and Robinson 2005; Burgess and others 2015; Hodler and Raschky 2014). Moreover, research indicates that political institutions that promote inclusivity and

participation in decision-making processes can lead to more effective and sustainable development outcomes (Fujiwara 2015; Björkman and Svensson 2009).

The Political Institutions cluster seeks to include indicators that reflect the political regimes and mechanisms that regulate relationships between different parts of the government in countries (e.g., electoral rules, political parties, and rules that delineate the functions of government). This includes institutions that facilitate participation of vulnerable groups, such as ethnic representation and gender quotas. The cluster comprises 11 indicators, which are presented in section 2.1, table 1. The indicators are used to assess the extent to which certain institutional functions and mechanisms are in place, with a focus on the following:

- **Functioning of the Executive Branch:** institutions related to constraints around executive power and the level of checks and balances.
- **Functioning of the Legislative Branch:** institutions related to the functioning of the legislature, including the level of checks and balances.

Electoral Rules, Elections, and Representation: institutions related to the electoral process, including political competition, voting rights, and the functioning of elections; and the extent to which these institutions represent and distribute power across different groups.



2. Social Institutions

The protection and promotion of civil liberties and civic participation through social institutions is a fundamental aspect of respect for human rights and of the rule of law, and it has been shown to be strongly related to economic development (Ben-Yishay and Betancourt 2010). This is based on the belief that all people are entitled to certain fundamental rights, such as the protection from unjust or oppressive government action. These fundamental rights are intrinsically related to popular and well-studied concepts around “social capital” – the dense networks of associations in which people interact (Putnam 1995) – and the large complementary literature around social norms, trust (or lack thereof) in institutions, and interpersonal trust. Here, social capital and norms involve the extent to which social expectations and other beliefs (e.g., trust) are conducive to civic cooperation and participation – such as

the extent to which all relevant groups in society agree about citizenship, accept the nation state as legitimate, and trust in political institutions.

The Social Institutions cluster aims to capture government policies on fundamental rights and other societal attributes such as norms, beliefs, trust, and civic cooperation. These largely coincide with informal institutions and related concepts like social capital, civic engagement, and social networks. Comprising 16 indicators (see section 2.1, table 1), the cluster focuses on the following:

- **Fundamental Rights:** guarantees of equal social opportunities and protections under the law, regardless of group characteristics (e.g., freedom of speech, assembly, and belief).
- **State of Civil Society:** regulations and environment of civil society participation in the political process (e.g., space for CSO entry or CSO repression).

Data Gap: Several indicators related to social capital and norms are not included in the Social Institutions cluster, given their lack of global data, and harmonized and recent data.



3. Absence of Corruption

Corruption can harm economic development by reducing government revenue, distorting public investment, misallocating resources, and increasing government deficits and debt. It also erodes trust in institutions, discourages investment, and hampers overall economic growth (Olken 2007; Bobonis, Fuertes, and Schwabe 2016; Avis, Ferraz, and Finan 2018). Corruption is defined here as “the use of public office for private gain” (Rose-Ackerman 1997): it is crosscutting and affects other institutional clusters, such as the Public Finance Institutions and Business Environment Institutions clusters.

The Absence of Corruption cluster focuses on the absence of corruption in institutions as an outcome, measured generally as either public perceptions or experiences of corruption in public institutions. These measures capture the extent to which other institutional clusters are operating free of corruption. The cluster comprises five indicators (see section 2.1, table 1), focusing on the following:

- **Bribery and extortion:** elected and public officials exerting undue influence over businesses and citizens to extract rents.
- **Diversion of public funds:** elected and public officials misallocating resources from intended targets for private or political gain.
- **State capture:** elected and public officials accumulating power over discretionary transfers or capturing regulatory processes by strategically manipulating laws and regulations in their favor (World Bank 2019) – for example, political elites allocating distortionary funds to benefit their allies.



4. Transparency and Accountability Institutions

Transparency and accountability play an important role in identifying and preventing corruption in the public sector, ultimately improving government effectiveness (Myers and Bajpai 2020). Moreover, transparency and accountability contribute to economic development by fostering trust, improving governance, facilitating efficient resource allocation, and attracting investment.

The Transparency and Accountability Institutions cluster focuses on the organizations responsible for promoting transparency (e.g., disclosure of data on public accounts) and ensuring accountability for public officials, both elected and non-elected. Within the public sector, this includes institutions such as national accounts offices that publish on transparency portals, general accountability offices, and supreme auditing institutions (SAIs). Given greater data availability on PFM transparency and accountability, we recognize that many of our indicators emphasize specific PFM examples. Likewise, while NGOs and other civil society organizations play an important role in promoting transparency and accountability, they are not included in our scope since they are not in the public sector. The cluster comprises five indicators (see section 2.1, table 1), focusing on institutions that exercise the following:

- **Promote transparency in the public sector:** disclosure of data and information across the public sector (e.g., e-Government) and to citizens (e.g., Open Data Initiatives and access to information protocols).

- **Hold public officials accountable:** audits and investigations, prosecution, and complaints mechanisms.



5. Justice Institutions

Justice matters – not only for its intrinsic value, but also for its impact on development outcomes. Justice institutions play a significant role in economic development, particularly through their impact on credit markets and firm growth, the protection of vulnerable populations, their capacity to deter violence, and their influence over people's trust in formal institutions (Ramos-Maqueda and Chen 2021). Strengthening justice institutions through judicial reforms can enhance judicial effectiveness (Bosio 2023).

The Justice Institutions cluster focuses on the institutions that are central to resolving conflicts arising over alleged violations. These institutions are also central for reconciling different interpretations of the rules that society creates to govern individuals' behavior – and are thus critical for strengthening the normative frameworks (i.e., laws and rules) that shape public and private actions (Hammergreen, Reiling, and Di Giovanni 2007). Justice institutions address a vast range of issues, including property rights, enforcement of legislation, judicial system effectiveness and independence, and the impartial enforcement of laws by courts and other actors. They can also play a power-sharing and control role vis-à-vis the executive and legislative branches of government. The Justice Institutions cluster comprises 17 indicators (see section 2.1, table 1), focusing on the following:

- **Courts and Administration of Justice:** overall administration of justice and its functioning, and whether courts (at both low and high levels) are impartial and independent.
- **Prosecution:** institutions that ensure the application of the law where its breach carries a criminal sanction, including whether the criminal adjudication system is timely, effective, and impartial and whether the criminal investigation system is effective.
- **Rule of Law:** whether citizens enjoy secure and effective access to justice (disaggregated by gender) and key fundamental rights (e.g., due process, rights of the accused, and whether the government does not expropriate without lawful process and adequate compensation).



6. Public Finance Institutions

Scholars have long emphasized the role of public finance in shaping the modern state (e.g., Besley and Persson 2009). As advanced in the 1988 WDR, public finance shapes the course of development: it affects aggregate resource use and financing patterns and, together with monetary and exchange rate policies, influences the balance of payments; accumulation of foreign debt; and rates of inflation, interest, and exchange (World Bank 1988). Given how fundamental these functions are, the quality of public finance institutions is also fundamental.

The Public Finance Institutions cluster includes laws, policies, organizations, and systems that deal with the design, implementation, and enforcement of regulations that organize and guide state financial resource management – i.e., that enable sustainable, efficient, and effective management of public finances and investments. The cluster comprises 29 indicators (see section 2.1, table 1), focusing on the following:

- **Fiscal Rules and Procedures:** fiscal policy, budget processes, and debt management, with the implicit or explicit goals of fiscal responsibility and debt sustainability.
- **Public Procurement:** the regulatory framework (i.e., policies and procedures) that guides the work of contracting authorities to ensure efficiency and transparency, and its implementation.

Data Gap: Due to the lack of global indicators, the Public Finance Institutions cluster does not include indicators on tax administration (i.e., institutions that apply statutory tax laws and are responsible for revenue collection, monitoring, and anti-money laundering) and fiscal decentralization (i.e., the extent to which revenue and expenditure functions of the general government are carried on by subnational governments).



7. Public Human Resource Management (HRM) Institutions

Human resource management is a core function of government. A competent and meritocratically recruited civil service is foundational for a number of developmental

outcomes, namely sustained economic growth (Evans and Rauch 1999; Besley and others 2022) and service delivery (Pepinsky, Pierskalla, and Sacks 2017). All public institutions depend on their staff to design, coordinate, and deliver on policy mandates.

The HRM Institutions cluster comprises organizations responsible for managing human resources in the public sector, including staffing and payroll. Examples include civil service offices or agency-level human resource departments. Since every ministry, department, or agency in government has human resources, and therefore performs an HRM function, the HRM Institutions cluster reflects the overall quality of these institutions across government. The cluster comprises five indicators (see section 2.1, table 1), focusing on the following:

- **Career:** recruitment, promotion, and dismissal of public sector employees, including career tracks (e.g., specialized roles such as accountants) and civil service systems (e.g., tenure) – with meritocratic selection, promotion, and termination as a guiding principle.
- **Skills and Training:** underlying skills, competencies, and training of public sector employees, including lifelong learning (as measured through admittedly imperfect proxies, such as formal education).
- **Compensation:** monetary and non-monetary benefits (e.g., paid leave) for public officials, with compensation equity, competitiveness, and performance incentives (e.g., bonuses) as guiding principles.

citizen portals). The cluster comprises five indicators (see section 2.1, table 1), focusing on the following:

- **Digital Solutions:** development of digital technologies used in the public sector, including software, websites, and advanced technologies such as machine learning.
- **Data and Core Information Systems:** development and maintenance of management information systems (MIS) and other data collection efforts (e.g., census, service delivery), including data governance to ensure the integrity of data and information systems.
- **Citizen Engagement:** development of websites, portals, and other digital technologies (e.g., mobile apps) that improve citizens' access to public goods and services.



9. Business Environment Institutions

Thriving private and financial sectors are crucial for economic development and job creation. A favorable business environment attracts both domestic and foreign investment, reduces unemployment, contributes to innovation and productive growth, and facilitates trade and market access (e.g., Djankov and others 2002; World Bank 2019; Hallward-Driemeier and Pritchett 2015; World Economic Forum 2019).

The Business Environment Institutions cluster corresponds to the rules that govern product markets and financial markets, such as trade and firm regulations, regulatory governance, business and trade regulations, and rules governing the banking and financial sectors. The cluster comprises six indicators (see section 2.1, table 1,) focusing on the following:

- **Regulation of Market Entry:** rules and their implementation regarding the ability to invest and start a new business for both nationals and foreigners, disaggregated by gender.
- **Regulation of Trade:** rules and their implementation regarding trading internationally, in particular (but not exclusively) the functioning of customs.
- **Regulation of Firm Operations:** rules and their implementation regarding competition and regulations affecting firms' daily operations, such as permits.



8. Digital and Data Institutions

In the public sector, digital technologies and data facilitate access to information and knowledge, enhancing productivity and improving service delivery (Muralidharan, Niehaus, and Sukhtankar 2016; Aker and others 2016). The key role of data for enabling development is recognized by the 2021 WDR on Data for Better Lives (World Bank 2021).

The Digital and Data Institutions cluster corresponds to the rules, policies, and organizations that manage how governments develop and use digital technologies, data, and data analytics. This cluster includes institutions that shape technologies for both internal functioning (e.g., information systems, ICT) and external engagement (e.g.,

- **Regulation of Property Rights:** rules and their implementation regarding the establishment of clear property rights and their enforcement.
- **Competition in the Banking Sector:** level of market concentration in the banking sector.



10. SOE Corporate Governance Institutions

When SOEs are governed effectively, they are more likely to operate in a transparent and accountable manner, leading to better decision-making, resource allocation, and operational efficiency. This, in turn, enhances the overall productivity and performance of SOEs, contributing to economic development. Corporate governance also aims to ensure that SOEs are accountable to their stakeholders, including the government, shareholders, and the public (e.g., World Bank 2019; OECD 2015).

Following standard definitions, the SOE Corporate Governance Institutions cluster defines SOEs as any corporate entity recognized by national law as an enterprise in which the state exercises ownership, including joint stock companies, limited liability companies, and partnerships limited by shares. This cluster focuses on the key elements of SOE corporate governance. Rather than passing judgment on whether state intervention in service delivery is desirable, the cluster considers whether the state operates according to market rules and in equal terms relative to other private actors in the same market. The cluster comprises six indicators (see section 2.1, table 1), focusing on the following:

- **Legal and Regulatory Frameworks:** including how tariffs are set, protection of shareholders in mixed ownership companies, and whether there are laws and regulations that limit competition.
- **State Ownership Arrangements:** including boards of directors and the degree of SOEs' autonomy in making market-related decisions.
- **Performance Management Systems:** development and maintenance of evaluation systems and other performance and data collection efforts.
- **Financial and Fiscal Discipline:** including transparency and disclosure, such as whether SOEs are required to

provide clear and transparent information to customers on tariffs and consumption.

Data Gap: Due to lack of data on SOEs, indicators in this cluster are taken from the OECD Product Market Regulation database, which has coverage limitations.



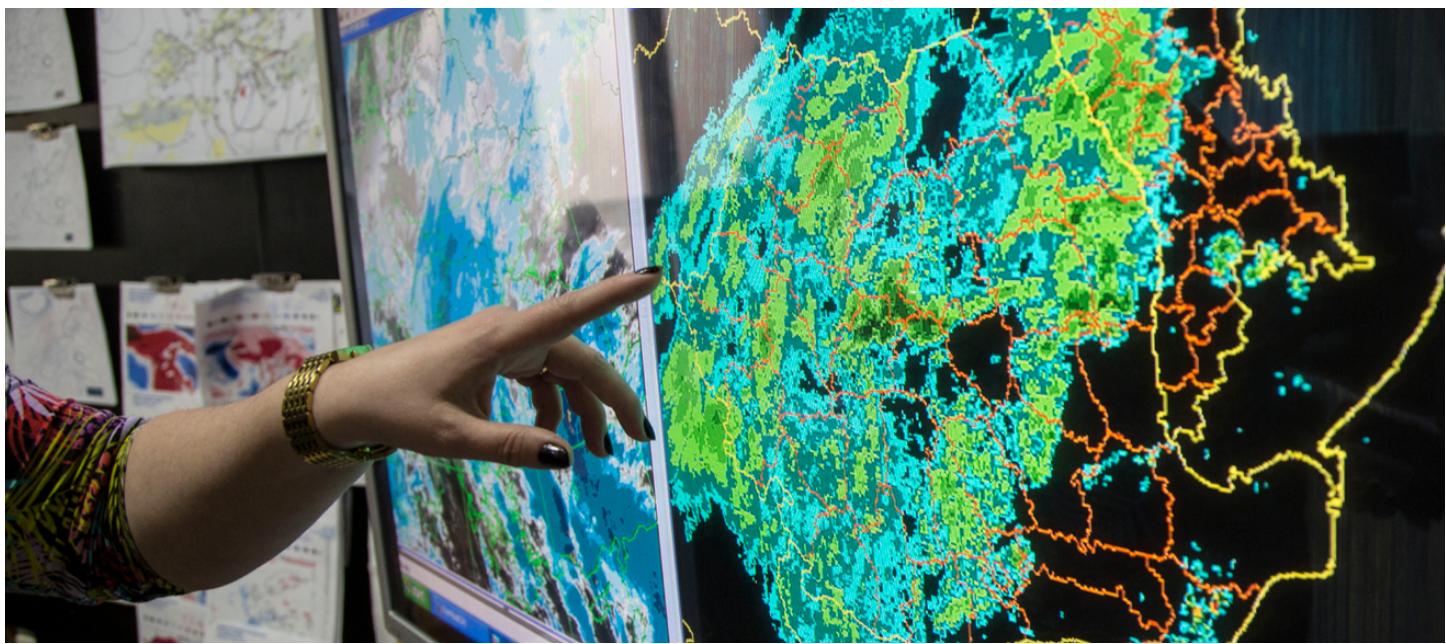
11. Labor and Social Protection Institutions

Labor protection matters to development because it promotes social justice, enhances productivity, ensures economic stability, supports human capital development, and attracts investment. By ensuring access to education, training, and skills development opportunities, labor protection enables workers to acquire the necessary knowledge and skills for higher productivity and better job prospects. Moreover, labor protection measures, such as providing a safe and healthy work environment, promoting work-life balance, and ensuring fair compensation contribute to higher worker productivity (e.g. World Bank 2019).

The Labor and Social Protection Institutions cluster focuses on the laws, regulations, and organizations that shape the labor market and the relationships between workers and employers, taking into account gender equality and the availability of social protection schemes. The cluster comprises seven indicators (see section 2.1, table 1), covering the following:

- **Employment Protection Rules:** whether rules covering dismissal and labor contracts are clear and consistently applied.
- **Guarantee of Fundamental Labor Rights:** including freedom of association, collective bargaining, and freedom from discrimination.
- **Social Protection Schemes:** adequacy and availability of social insurance, social safety nets, and unemployment benefits and active labor market programs.

Data Gap: This cluster ideally would also cover enforcement of labor rules (e.g., effectiveness of labor courts) and active labor policies (e.g., whether policies exist to help unemployed people to reskill and find new employment and whether such policies are effectively applied). However, due to lack of data, these areas are not currently included.



12. Service Delivery Institutions

Human capital is central to economic growth and development. Human capital is commonly the result of education, healthcare, and utility services (e.g., electricity, water, and sewage). Where they are not publicly provided, such services are typically regulated by public institutions.

The Service Delivery Institutions cluster focuses on the rules, policies, and organizations for the delivery of education, healthcare, and utility services to citizens. Given the nature of service delivery institutions we do not include outcomes in the benchmarking exercise (such as student test scores, or malnutrition) but rather the institutional inputs that could explain those outcomes. The cluster comprises 11 indicators (see section 2.1, table 1), covering the following:

- **Delivery of Health Services:** inputs, rules, and implementation aspects that affect the functioning of the public organizations that deliver health services (e.g., staff qualifications, availability of inputs, and access to health services by specific population groups).
- **Delivery of Education Services:** inputs, rules, and implementation aspects that affect the functioning of the public organizations that deliver education services.
- **Delivery of Utility Services:** access to electricity, water, and sewage.



13. Climate Change Institutions

To be effective, efforts at tackling climate change mitigation and adaptation require supportive governance and strong institutions. Institutions are needed to move beyond climate-related policy commitments toward implementation and achievement of results. This is doubly important for countries to successfully mobilize private capital contributions (IPCC 2014).

The Climate Change Institutions cluster focuses on the rules, policies, and organizations in place to address climate change issues – including institutions related to mitigation and adaptation, such as sustainable energy regulations. The cluster comprises 15 indicators (see section 2.1, table 1), covering the following:

- **Regulations for the Sustainable Energy Sector:** regulation in the energy sector to promote the use of renewable energy and its implementation.

Data Gap: This cluster would ideally also cover disaster risk management (i.e., whether a country has an adequate disaster risk management system) and other climate change institutional features, such as green procurement, climate change legislation, and government coordination mechanisms. However, due to lack of global data, these topics are not currently included.

2.1 CLIAR Benchmarking Data

The CLIAR Benchmarking is based on 138 indicators spanning the period between 2013 and 2022. These indicators are largely drawn from the World Bank's ProsperityData360 database, complemented by additional data sources that capture relevant dimensions not included in the ProsperityData360 platform. The selection of indicators is intended as a "live experiment," with newer versions of the CLIAR data to be released on a yearly basis for two purposes. First, all institutional indicators will be updated when new data points are released (a process that will benefit from using the ProsperityData360 database as the main data source). Second, additional indicators can be added (or removed) to refine the measurement of each institutional cluster or to add new institutional clusters, whenever new or better sources are available. The full description of the 138 benchmarking indicators can be found in appendix A, table A.4.1.

Each indicator is uniquely mapped onto a given institutional cluster (table 1).¹³ While some indicators are straightforward to map, others are less straightforward and objectively could belong to more than one institutional cluster. For example, the Open Budget Initiative (OBI) indicator is

included in the Transparency and Accountability Institutions cluster but also relates to the Public Finance Institutions cluster. Such decisions are validated by a Thematic Expert Group (see paras. 56–57) but ultimately should be kept in mind when thinking about the linkages across institutional clusters. Appendix A, table A.4.1 further describes the indicators' definitions and coverage.

The benchmarking exercise excludes outcomes and non-monotonic indicators. Outcome indicators are excluded because the benchmarking analysis focuses on institutional features and processes instead of development outcomes.¹⁴ "Non-monotonic" indicators – or indicators that are hard to interpret because their relationships to other data are inconsistent or non-linear – are also excluded from the benchmarking. As such, outcome and non-monotonic indicators, along with other potentially relevant data, that are available for download from the CLIAR master database have been excluded from the benchmarking exercise. The full list of non-benchmarked indicators is presented in appendix A, table A.4.2.

> > >

TABLE 1 - CLIAR Benchmarking Indicators, by Institutional Cluster (CLIAR Benchmarking Database 2.0)

Institutional Cluster	Total Number of Indicators Included (138 indicators)
1. Political Institutions 	11 Indicators: (1) democracy status (BTI), (2) constraints on government powers (WJP), (3) separation of powers (BTI), (4) legislative constraints on the executive index (V-DEM), (5) free and fair elections (BTI), (6) political rights (Freedom House), (7) power distributed by socioeconomic position (V-DEM), (8) power distributed by social group (V-DEM), (9) power distributed by gender (V-DEM), (10) lower chamber gender quota (V-DEM), (11) Women Political Empowerment Index (V-DEM)
2. Social Institutions 	16 Indicators: (1) civil liberties (Freedom House), (2) association and assembly rights (BTI), (3) political polarization (V-DEM), (4) press freedom (Press Freedom Index), (5) civil society participation (V-DEM), (6) CSO entry and exit (V-DEM), (7) CSO repression (V-DEM), (8) engaged society (V-DEM), (9) freedom of assembly and association (WJP), (10) freedom of academic and cultural expression (V-DEM), (11) freedom of belief and religion (WJP), (12) freedom of opinion and expression (WJP), (13) freedom from arbitrary interference with privacy (WJP), (14) freedom of discussion for men (V-DEM), (15) freedom of discussion for women (V-DEM), (16) Women's Social Equality Index (CLIAR)

Table 1 continued

Institutional Cluster	Total Number of Indicators Included (138 indicators)
 3. Absence of Corruption	<p>5 Indicators: (1) absence of corruption (WJP), (2) public sector corruption (V-DEM), (3) executive corruption (V-DEM), (4) legislative corruption (V-DEM), (5) government regulations are applied and enforced without improper influence (WJP)</p>
 4. Transparency and Accountability Institutions	<p>5 Indicators: (1) right to information (WJP), (2) publicized laws and government data (WJP), (3) Open Budget Index (Open Budget Survey), (4) complaint mechanisms (WJP), (5) Digital Citizen Engagement Index score (GTMI)</p>
 5. Justice Institutions	<p>17 Indicators: (1) judicial accountability (V-DEM), (2) independent judiciary (BTI), (3) high court independence (V-DEM), (4) judicial branch corruption (WJP), (5) lower court independence (V-DEM), (6) fair trial (Global State of Democracy), (7) expropriation without lawful process and adequate compensation (WJP), (8) due process of law and rights of the accused (WJP), (9) alternative dispute resolution mechanisms (WJP), (10) people can access and afford civil justice (WJP), (11) civil justice is effectively enforced (WJP), (12) civil justice is not subject to unreasonable delays (WJP), (13) criminal adjudication system is timely and effective (WJP), (14) criminal investigation system is effective (WJP), (15) criminal system is impartial (WJP), (16) access to justice for men (V-DEM), (17) access to justice for women (V-DEM)</p>
 6. Public Finance Institutions	<p>29 Indicators: (1) monetary stability (BTI), (2) fiscal stability (BTI), (3) Debt Transparency Index (CLIAR), (4) PFM management information systems (CLIAR), (5) budget documentation (PEFA), (6) transfers to subnational governments (PEFA), (7) performance information for service delivery (PEFA), (8) fiscal risk reporting (PEFA), (9) public investment management (PEFA), (10) public asset management (PEFA), (11) debt management (PEFA), (12) macroeconomic and fiscal forecasting (PEFA), (13) fiscal strategy (PEFA), (14) medium-term perspective in expenditure budgeting (PEFA), (15) budget preparation process (PEFA), (16) legislative scrutiny of budgets (PEFA), (17) revenue administration (PEFA), (18) accounting for revenues (PEFA), (19) predictability of in-year resource allocation (PEFA), (20) expenditure arrears (PEFA), (21) payroll controls (PEFA), (22) procurement (PEFA), (23) internal controls on nonsalary expenditure (PEFA), (24) internal audit effectiveness (PEFA), (25) financial data integrity (PEFA), (26) in-year budget reports (PEFA), (27) annual financial reports (PEFA), (28) external audit (PEFA), (29) public procurement of energy efficiency products (RISE)</p>
 7. Public HRM Institutions	<p>5 Indicators: (1) rigorous and impartial public administration (V-DEM), (2) efficient use of assets (BTI), (3) criteria for appointment decisions in the state administration (V-DEM), (4) access to state jobs by political group (V-DEM), (5) access to state jobs by socioeconomic position (V-DEM)</p>
 8. Digital and Data Institutions	<p>5 Indicators: (1) Core Government Systems Index (CGSI) (GTMI), (2) GovTech Enablers Index (GTEI) (GTMI), (3) Public Service Delivery Index (PSDI) (GTMI), (4) censuses and surveys (SPI), (5) standards and methods (SPI)</p>

Table 1 continued

Institutional Cluster	Total Number of Indicators Included (138 indicators)
 9. Business Environment	6 Indicators: (1) property rights (V-DEM); (2) competition policy (BTI); (3) regulatory enforcement (WJP); (4) efficiency of the clearance process (WB LPI); (5) bank concentration (%) (GFDB); (6) Women, Business and Law Entrepreneurship Index (WBL).
 10. SOE Corporate Governance Institutions	6 Indicators: (1) scope of state-owned enterprises (OECD PMR), (2) government involvement in network sectors (OECD PMR), (3) direct control over business enterprises (OECD PMR), (4) governance of state-owned enterprises (OECD PMR), (5) price controls (OECD PMR), (6) use of command-and-control regulation (OECD PMR)
 11. Labor and Social Protection Institutions	7 Indicators: (1) fundamental labor rights are effectively guaranteed (WJP), (2) Workers' Rights Index (Global State of Democracy), (3) employment protection for regular workers (OECD), (4) employment protection for temporary workers (OECD), (5) Women's Labor Equality Index (CLIAR), (6) Social Protection Coverage (ASPIRE), (7) adequacy of social protection benefits (ASPIRE)
 12. Service Delivery Institutions	11 Indicators: (1) access to public services distributed by political group (V-DEM), (2) access to public services distributed by socioeconomic position (V-DEM), (3) access to public services distributed by gender (V-DEM), (4) pregnant women receiving prenatal care (%) (WDI), (5) births attended by skilled health staff (% of total) (WDI), (6) completeness of birth registration (%) (WDI), (7) pupil-teacher ratio in primary education (WDI), (8) pupil-teacher ratio in secondary education (WDI), (9) trained teachers in preprimary education (% of total teachers) (WDI), (10) trained teachers in primary education (% of total teachers) (WDI), (11) trained teachers in secondary education (% of total teachers) (WDI)
 13. Climate Change and Environment Institutions	15 Indicators: (1) environmental policy (BTI), (2) national energy efficiency planning (RISE), (3) energy efficiency entities (RISE), (4) incentives and mandates – industrial and commercial end users (RISE), (5) incentives and mandates – public sector (RISE), (6) incentives and mandates – energy utility programs (RISE), (7) financing mechanisms for energy efficiency (RISE), (8) minimum energy efficiency performance standards (RISE), (9) energy labeling systems (RISE), (10) building energy codes (RISE), (11) legal framework for renewable energy (RISE), (12) planning for renewable energy expansion (RISE), (13) incentives and regulatory support for renewable energy (RISE), (14) attributes of financial and regulatory incentives (RISE), (15) carbon pricing and monitoring (RISE)

Source: World Bank Country Level Institutional Assessment and Review (CLIAR) Dashboard.

Note: The list of indicators corresponds to the CLIAR Benchmarking Database version 2.0. This database is a “live experiment” and reflects the team’s ongoing efforts to add additional sources to improve measurement and mitigate the risk of bias of specific indicators. ASPIRE = Atlas of Social Protection Indicators of Resilience and Equity, BTI = Bertelsmann Transformation Index, CLIAR = Country Level Institutional Assessment and Review, CSO = Civil Society Organization, GFDB = Global Financial Database, GTMI = GovTech Maturity Index, PEFA = Public Expenditure and Financial Accountability, PMR = Product Market Regulation (OECD Database), RISE, = Regulatory Indicators for Sustainable Energy, V-DEM = Varieties of Democracy Database, WDI = World Development Indicators, WJP = World Justice Project.

While CLIAR's focus is on existing and publicly available indicators, a number of indicators were created in some specific and exceptional cases. This was done in circumstances where (1) publicly available data indicators exist but are binary in nature (which precludes analysis using the “closeness to the frontier” methodology described in section 3); and (2) there is a sufficient number of such binary indicators to create an index by averaging them. Following this procedure, four indicators are created: a Debt Transparency Index (based on the World Bank’s Debt Reporting Heat Map), a PFM Management Information Systems index (based on GTMI data), a Women’s Social Equality Index, and a Women’s Labor Equality Index (based on Women, Business and the Law data).

2.1.1 Indicator Selection Criteria and Validation

Underlying our selection of indicators is a structured data governance and review process guided by two core criteria: coverage and quality. A quantitative review assesses indicator coverage for both country and year, with a particular focus on coverage for the last five years. A qualitative review ensures that the indicators selected are publicly available, conceptually relevant to each institutional cluster, and of high quality (e.g., reputable source, data collection, and methodology) (box 1).

> > >

BOX 1 - CLIAR Benchmarking Quantitative Review Guidelines

The quantitative review relies on the following guiding criteria for inclusion in the CLIAR Benchmarking:

Continuity: The indicator must have been updated at least once in the past five years.

Country Coverage: The indicator must have covered 100 countries at least once over the past five years, or 50 countries but have at least one country in every region.

Year Coverage: We include only variables that have at least two years of data (not per country but overall), and for each year to count, coverage must be of at least 10 countries.

The quantitative review provides guidelines for selection based on coverage across countries and time. The guidelines are structured around criteria for (1) continuity, (2) country coverage, and (3) year coverage (box 1). Given the comparative dimension of the benchmarking exercise, the quantitative criteria prioritize global coverage. In addition, indicators with longer time series are preferred because they allow performance to be measured more precisely (e.g., smoothing over idiosyncratic shocks) and allow substantive trends to be captured (as explored in the Dynamic Benchmarking, further described in paras. 75–78). In cases where indicators from different sources measure the same concept, priority was given to the indicator with better coverage. This decision, along with the entire data selection process, was subject to qualitative review and validation from the Data Expert Group.¹⁵

Given the huge gaps in global data for some institutional clusters, the quantitative criteria allow for flexibility

and well-justified and documented exceptions. Two important clusters falling under this category are SOE Corporate Governance and Public Finance. In the case of SOE Governance, there are limited sources around the institutional strength of SOEs on a global scale. The best existing database in that regard is the OECD PMR database, which covers a global but limited sample of countries and was last updated in 2018 (the last year of eligibility for the current version of the CLIAR database). A similar case occurs in the Public Finance cluster, where most indicators are drawn from PEFA scores. As PEFA scores are derived from specific country assessments – which are not implemented across many countries, let alone repeated over a short period of time – PEFA data is not only limited in spatial coverage but is also sparse across time, putting additional constraints to the observations that fall under the last five-year period.¹⁵ Against the alternative of not including an institutional cluster covering SOE or Public Finance, exceptions to the quantitative guidelines were granted.

2.1.1.1 VALIDATION PROCESS: DATA EXPERT GROUP

The main part of the validation process was done by a Data Expert Group convened by the Governance Global Practice. The members of the Data Expert Group are World Bank thematic experts representing areas relevant to public institutions across many Global Practices. In most cases, each expert reviewed a specific institutional cluster, even though the same experts reviewed both the Absence of Corruption cluster and the Transparency and Accountability cluster. The task of reviewing the Service Delivery cluster was divided among multiple experts (e.g., health experts were asked to review health-related indicators, and likewise for other sectors in that cluster).

Thematic experts for each institutional cluster were identified over the period of July-August 2023 and the validation process took place over September-November 2023. Each expert received a note explaining the criteria for indicator selection in the relevant institutional cluster and was asked to provide comments on the preliminary indicator selection. The requested feedback included, but was not limited to, (1) the extent to which a given indicator measured institutional performance and functions, rather than outcomes or institutional forms; (2) how well an indicator fits within an institutional cluster, vis-à-vis others; (3) whether the number of indicators in a cluster was appropriate; (4) whether the proposed exceptions were reasonable; and

(5) whether the balance across different data sources was acceptable. Experts were also asked to provide comments on the availability of (or plans to develop) additional indicators in the future. All written feedback was documented, and in some cases, more extensive discussions were held.¹⁶ All feedback was processed by the team; and along with the results of the quantitative review, a matrix of feedback and decisions made was shared and archived, concluding the validation process. This entire process will be repeated in the anticipated annual updates of the CLIAR database.

2.1.1.2 DATA PIPELINE AND DASHBOARD

The data pipeline relies on a mixture of ProsperityData360 and manually imported data, requiring harmonization and integrity checks for each data source. CLIAR integrates data from a variety of data sources, including the ProsperityData360 and manually imported datasets such as the Open Budget Index. Because of this complexity, CLIAR introduces a set of harmonization procedures and integrity checks to ensure that the data is correctly merged, and that there are no duplications. This data harmonization process means that the indicators compiled by CLIAR provide curated indicators that are mapped onto corresponding country and years, fully compatible with other World Bank data sources and comparable over time. As such, the qualitative and quantitative reviews, combined with transparent, reproducible, and tested data pipelines, provide a robust data foundation for analytical work in CLIAR and beyond.



Beyond harmonization and integrity checks, the CLIAR team implemented a series of edits to improve and adjust the data for the purpose at hand. This includes simple pre-processing tasks, such as inverting indicators so that higher values represent better performance (as described in Appendix 2.1), adjusting the years so that the data reflect the year of measurement of the issue in question and not the publication date, and creating West Bank and Gaza indicators when data is reported separately for West Bank and for Gaza. These processes are described in further detail in appendix A.

As part of the review process, the CLIAR team produced an open-source code for the data pipeline and dashboard that is transparent, reproducible, and tested. The CLIAR Benchmarking was developed in the open-source programming language R and the full source code and documentation are available in a public GitHub repository.¹⁷ The data pipeline compiles in a single step and introduces a set of automated integrity tests: (1) creation of red flags signaling the inclusion criteria (e.g., continuity); (2) automated tests that ensure full coverage of country-year observations and automated indicator selection through a metadata file; and (3) a set of data coverage diagnostics by indicator (e.g., the number of countries covered and complete country-year observations). Once compiled, the data pipeline workflow produces a full report outlining each step in the data processing, as well as diagnostics and tests.

To facilitate implementation and take-up of the CLIAR Benchmarking, the team developed an updated CLIAR

Benchmarking Dashboard (or simply CLIAR Dashboard) to support users. Institutional benchmarking can be time consuming, as it requires extensive data identification, data collection, and specific statistical skills, as well as coordination and exchange of information. Developed by the Governance Global Practice with support from ProsperityData360 and the Development Impact Evaluation (DIME) unit, the CLIAR Dashboard is a web-based tool that offers a user-friendly interface and performs the CLIAR benchmarking analysis with the click of a button, without requiring researchers to spend time coding or managing data. Besides making the findings of the benchmarking analysis immediately available and accessible to interested data users, the Dashboard ensures the default standardization of the analytical approach, thus ensuring consistency in the application of the CLIAR toolkit. The Dashboard is integrated by construction with the data pipeline and is designed to allow (almost) automatic updating of data via application programming interfaces, ensuring the latest available information is used for the analysis without the need to invest in time-consuming, manual data updates.

Beyond facilitating the CLIAR Benchmarking analysis itself, the Dashboard also supports the use and dissemination of CLIAR data. In addition to the Benchmarking features, the Dashboard offers additional functionalities to analyze and visualize the CLIAR data. Moreover, it also allows users to download the CLIAR data (in different formats) so that those so inclined can run their own analysis. The full source code and documentation are also available in a public GitHub repository.



3

CLiar Benchmarking: Scoring and Aggregation Methodology

3.1 Institutional Snapshot: Static Benchmarking Analysis

3.1.1 Closeness to Frontier: Measuring Absolute Performance

The CLiar benchmarking exercise employs the “closeness to frontier” (CTF) methodology to standardize, compare institutional indicators, and create an absolute measure of performance. The CTF methodology facilitates the assessment of a country’s performance by comparing it with the “global frontier,” corresponding to the world’s best performer. For each indicator, a country’s performance (y) is rescaled on a 0 to 1 scale using a linear transformation

$$\frac{(Worst - y)}{(Worst - Frontier)}$$
, where the final CTF score ranges between 0 (representing the worst performer) and 1 (representing the best performer).¹⁸ The *Worst* and *Frontier* values are calculated using available data from the global sample and uses the relevant time period according to the benchmarking approach – i.e., static (default) or dynamic CTF benchmarking scores, as explained in paras. 75–78.



The CLIAR Static Benchmarking is the core and default scoring calculation. Here, a country's performance for each indicator is averaged over the last five years (i.e., 2018–2022) creating an institutional snapshot.¹⁹ Using these country averages, the (static) CTF scores are calculated for a given country indicator, with *Worst* and *Frontier* levels derived from countries whose time-period average is the worst and best for a given indicator. When interpreting CTF values, higher scores indicate that the country is closer to the best performer while lower scores indicate that the country is closer to the worst performer (and thus more distant to the frontier). As such, CTF scores provide an absolute measure of institutional performance.

To create CTF scores at the institutional cluster level, a balanced sample of individual CTF scores is aggregated. For each institutional cluster, the methodology creates a “balanced” subset of countries with full coverage (i.e., with no missing data) across all indicators within each cluster. This ensures that each CTF cluster-level aggregate score relies on the same set of indicators for every country, allowing for robust and methodologically sound inferences. The cluster-

level score is then computed via simple averaging of the indicators within each cluster, capturing overall performance for a given institutional category relative to the global frontier. The drawback of this methodologically robust aggregation approach is that the data requirement is higher. As such, CTF cluster scores are not computed for three institutional clusters that do not meet the data requirements for aggregation: SOE Corporate Governance, Labor and Social Protection, and Service Delivery.

We estimate measures of dispersion to quantify uncertainty regarding our institutional cluster-level CTF scores at the country-level. This is important to transparently convey the range of scores for a country, and more explicitly that a case where a country-cluster average is higher than other does not necessarily mean that specific country scores follow the same pattern. To better show this, Figure 2 illustrates the dispersion for one selected cluster (Public HRM). The CLIAR Dashboard provides additional data to intuitively show this dispersion: for each country-cluster (and each country-cluster-year when applicable) we provide the CTF score variance, minimum and maximum.

> > >

FIGURE 2 - Spread of Indicator-Level CTF Scores, by Country (Public HRM Cluster)

Source: World Bank Country Level Institutional Assessment and Review (CLIAIR) Dashboard.

Note: HRM = human resource management.

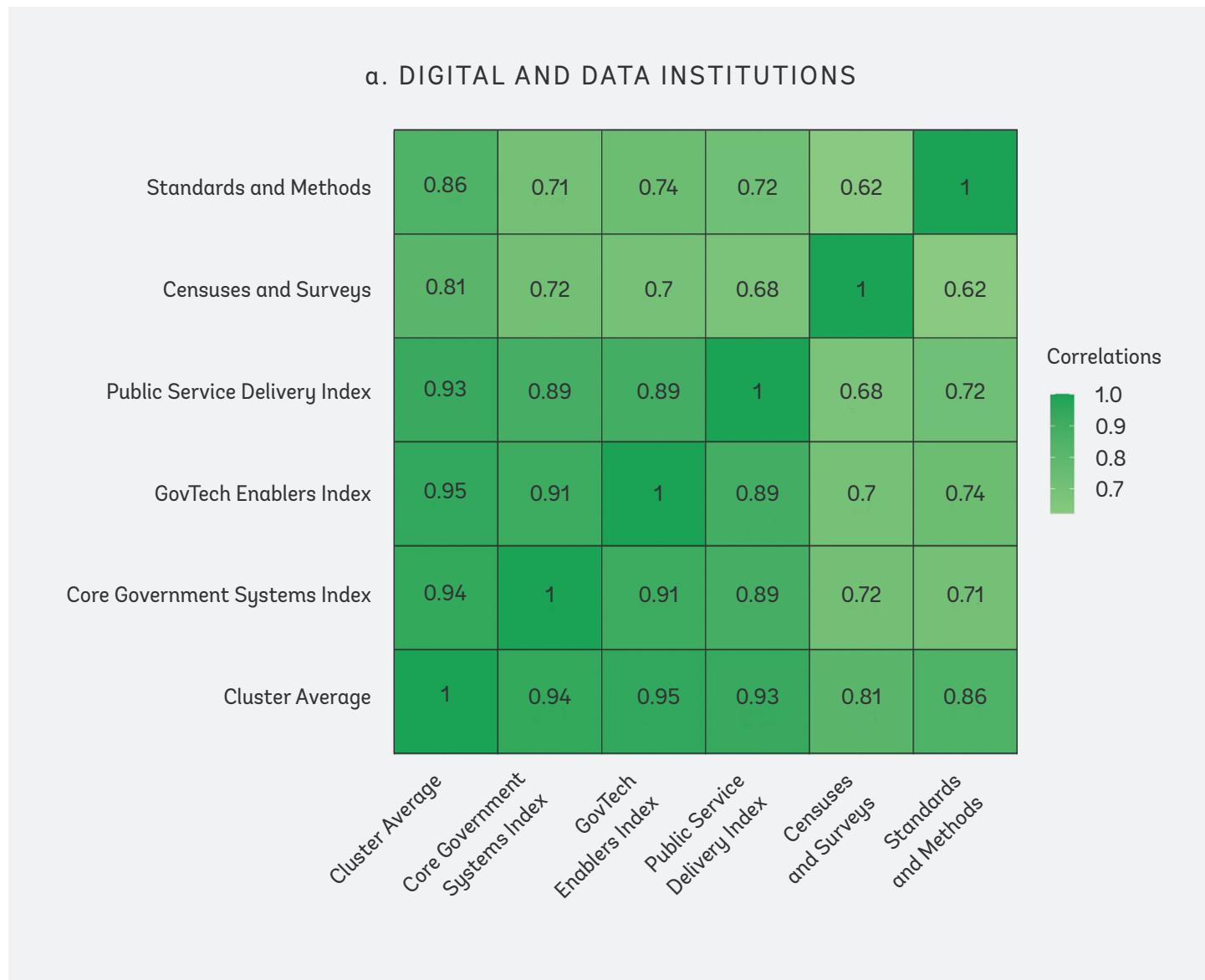
We refer to these estimated CTF cluster-level scores in the balanced sample as “Global” cluster-level scores to differentiate them from what we refer to in paras. 71–74 as “Benchmarked or Dashboard” cluster-level scores. The former scores are not part of the standard percentile analysis implemented in the Dashboard. The latter are exclusively produced in the Dashboard as a function of the percentile analysis and the base country and comparator group and make up the overview analysis graph (see example in figure 2.1).

We use the individual CTF score to analyze the institutional groupings and find that institutional indicators are in general correlated within their respective institutional clusters, with notable exceptions. When mapping indicators onto their respective institutional clusters, the team assessed

(1) whether indicators were conceptually linked to one another and (2) whether increases in the value of indicators corresponds to improvements in the strength of public institutions. In general, we would expect institutional indicators in the same cluster to be positively correlated with one another. While this is what we find in the majority of cases, there are exceptions. For example, in the Digital and Data Institutions cluster, we find that the indicators are strongly correlated to one another (e.g., figure 3, panel a). In contrast, for institutional clusters such as Business Environment Institutions, the indicator correlation is weaker and sometimes negative, suggesting that its indicators are independent from one another (e.g., figure 2, panel b). Similarly, for the Public Finance Institutions cluster, we find variation in the strength of correlation between indicators, particularly for PEFA indicators.²⁰

> > >

FIGURE 3 - Correlation Heatmap for Digital and Business Environment Clusters



b. BUSINESS ENVIRONMENT



Source: World Bank Country Level Institutional Assessment and Review (CLiar) Dashboard.

Note: Due to missingness of indicators for particular years, only pairwise complete observations were considered in computing the correlation. Correlations are computed on the static Closeness to Frontier (CTF) scores.

Additional statistical analysis finds that internal consistency among indicators is elevated within clusters, validating the team's choice of indicators. To analyze the internal consistency (or scale reliability) within each institutional cluster, the team relied on Cronbach's alpha analyses (Cronbach 1951).²¹ Out of the 11 institutional clusters where global cluster-level scores are computed, 10 have a Cronbach's alpha of 0.88 or higher, with Business Environment having the relatively lowest value (0.69), corroborating figure 2's panel b.²² This emphasizes the importance of treating the CLiar data as a live dataset and continuing the addition of new data sources, as well as the benefits of complementing the benchmarking exercise with qualitative approaches and country-specific data.

Variation in the strength of correlation between institutional indicators suggests variation in the quality of institutions, even within the same cluster. This is particularly true for institutional clusters that measure complex public institutions, such as Public Finance Institutions. For example, a country may have a robust debt management system while investing less in the management of public expenditure. In other words, it is expected that countries prioritize particular institutions over others, even within the same institutional clusters. As such, the institutional indicators collected in CLiar can shed light on which indicators are close to the frontier and which ones are not, laying out a nuanced institutional assessment at the country level and highlighting potentially strategic entry points for reform.

3.1.2 Percentile Analysis: Measuring Relative Performance and the Importance of Comparators

Because CLIAR measures relative performance vis-à-vis other country, the selection of comparator countries affects the resulting analyses of institutional strength. To assess a country's institutional strengths relative to other countries, the CLIAR Benchmarking utilizes percentile analysis based on 10 or more country comparators selected by the user. This metric is defined as the percentile distribution of a given indicator, relative to a set of comparator countries that must be chosen by the dashboard users for each analysis. The selection of comparator countries is thus consequential for the resulting analyses of institutional strength since different comparator countries will affect the relative institutional performance of a country. Pilot applications of the CLIAR Benchmarking showed that, as long as the choice of comparator countries is transparent and follows the selection criteria articulated by the data user, it can represent an additional element of flexibility that can help dashboard users in shaping the narrative of the overall institutional analysis.²³ Along these lines, a user's choice of comparator countries also stems from the purpose of their analysis as well as the particular country context – e.g., comparison of peer countries on the basis of regional, aspirational, or other structural factors.

Once country comparators are selected, percentile analysis and categorization through traffic light coloring is used to highlight a country's largest institutional gaps – though users must also choose from one of two threshold approaches. The default thresholds classify "weak institutions" as those in the bottom 25 percent of the selected comparator group, "emerging institutions" as those between the 25th and 50th percentiles, and "strong institutions" as those in the top 50 percent. An alternative threshold system uses terciles, which is useful, for example, if a user's chosen set of comparator countries is a "less demanding" group (i.e., one that excludes aspirational countries with a history of strong institutions). The tercile thresholds approach classifies "weak" institutions as those in the bottom 33 percent of the selected comparator group, "emerging" as those between the 33rd and 66th percentiles, and "strong" as those in the top 66 percent (figure 4). Regarding the selection of comparator countries, users should make an informed decision when defining which thresholds to use, since these parameters also affects the identification of institutional strengths and weaknesses for a given country (albeit to a lesser extent than the selection of comparator countries).

> > >

FIGURE 4 - Percentile Analysis Categories, by Threshold

High Priority			Medium Priority			Low Priority		
WEAK INSTITUTIONAL CAPITAL			EMERGING INSTITUTIONAL CAPITAL			STRONG INSTITUTIONAL CAPITAL		
Default Thresholds								
Bottom 25 percent	25 percent to 50 percent					Top 50 percent		
Tercile Thresholds								
Bottom 33 percent	33 percent to 66 percent					Top 66 percent		

Source: World Bank Country Level Institutional Assessment and Review (CLIAR) Dashboard.

Underlying the percentile analysis are several methodological requirements. First, the analysis requires that the set of comparator countries is greater than or equal to 10, in order to add precision to the analysis. Second, indicators that are missing from the country of interest are automatically removed; however, if indicators are missing from comparator countries, the analysis is still implemented. Third, indicators are excluded from the analysis if the sample

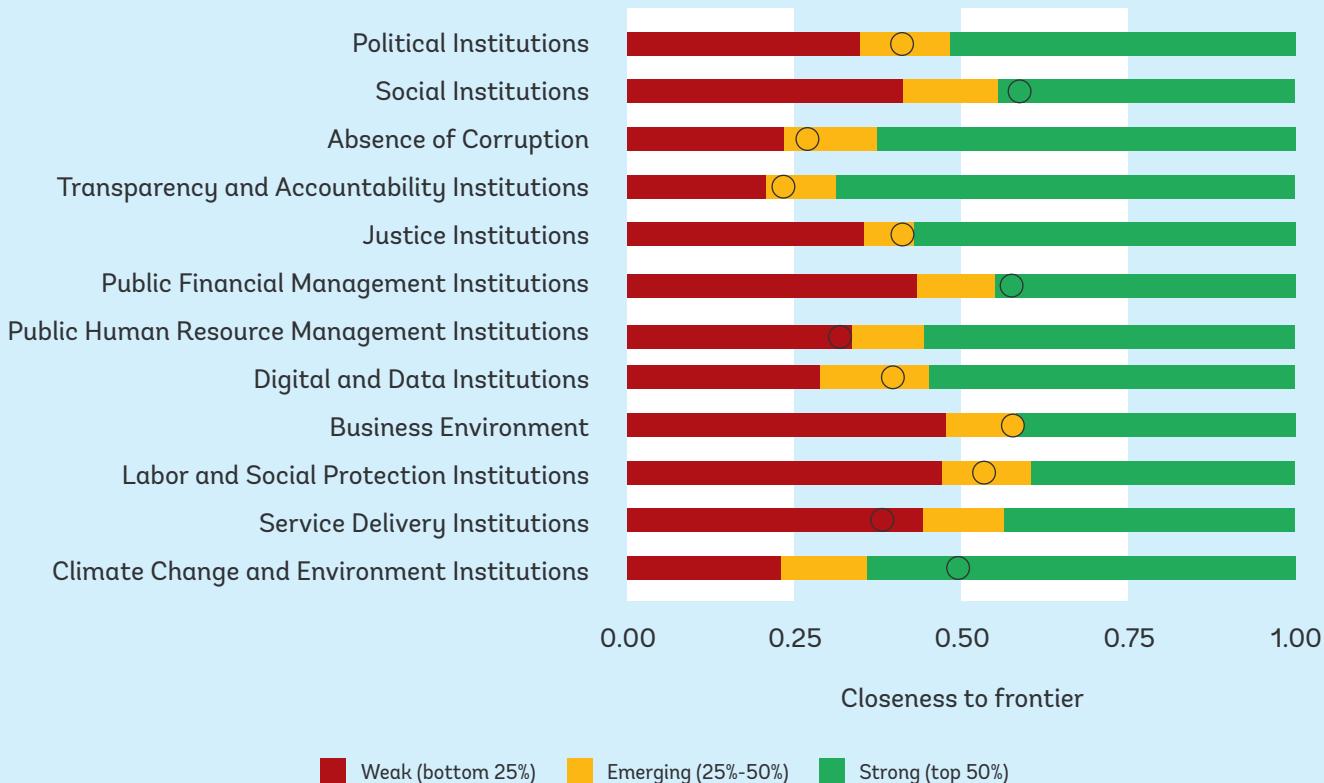
(i.e., the country of interest and the comparator countries) exhibit low variance – specifically, when there is no difference in the indicator's value between the 25th and 75th percentiles. Finally, the resulting indicators are then aggregated via simple average to create unique cluster-level CTF scores for display in the Benchmarking Overview (box 2). All these features are automatically implemented in the CLIAR Dashboard.

> > >

BOX 2 - Example of CLIAR Benchmarking Analysis (Static Version)

Here we use an abstract case to exemplify the CLIAR Benchmarking analysis in its static version as would be displayed in the CLIAR Dashboard. Figure 2.1 shows an example of an overview of all clusters available. The country of interest is denoted by the colored circle placed along the x-axis, which maps the CTF (an absolute metric that, as noted above, does not change regardless of comparator group). In contrast, the percentile analysis is displayed in Figure 2.1 using the traffic light coloring inside the country circle and its location on the horizontal bars, which also represent the different lengths of the threshold classifications. For instance, in Figure 2.1, the CTF score of the country of interest in "Service Delivery Institutions" is higher than that of "Transparency and Accountability" – the former is closer to the global frontier, but classified as "weak," while the latter has a lower CTF but is classified as "emerging." This is because the traffic light coloring is driven by the distribution of country comparators vis-à-vis the country of interest.

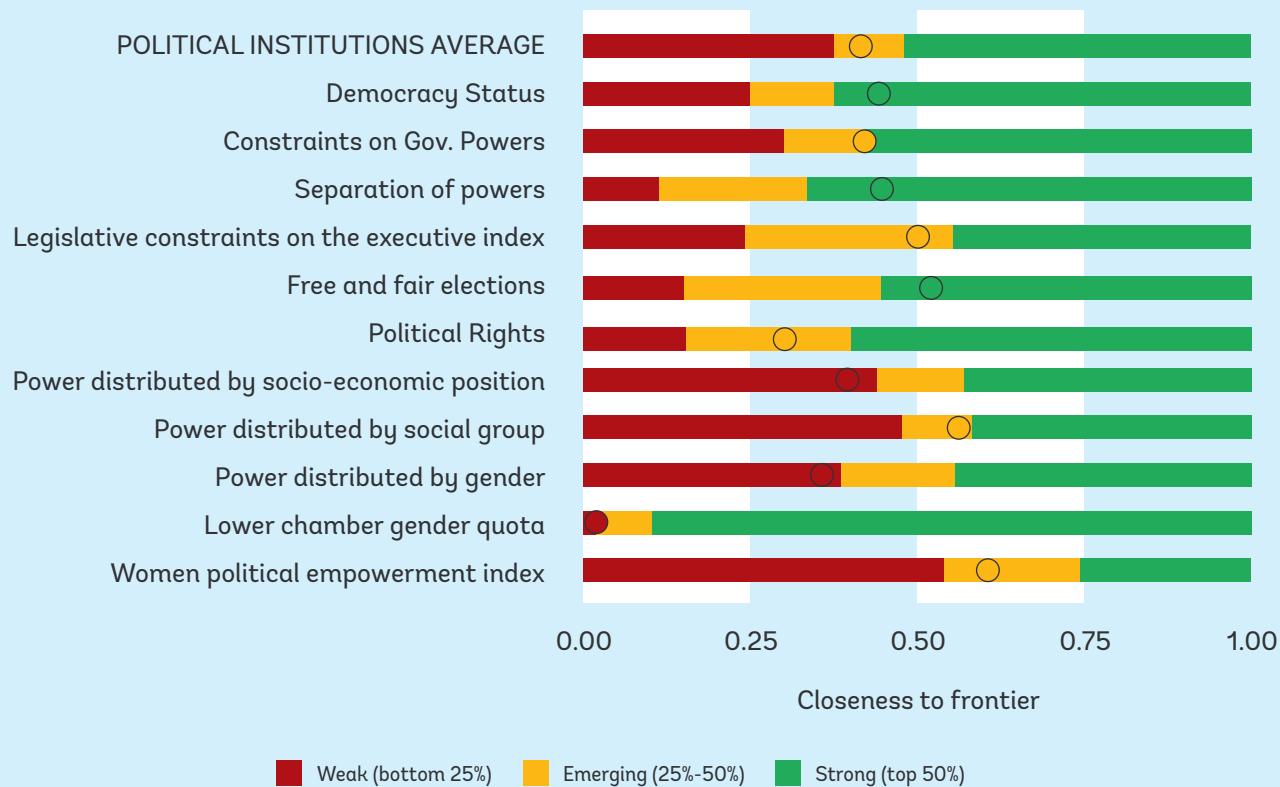
FIGURE 2.1 - Example of CLIAR Benchmarking Overview (Static Version)



Source: World Bank Country Level Institutional Assessment and Review (CLIAR) Dashboard.

These overview cluster-level CTF scores are benchmark-specific, rather than global as defined previously. That is, they are the unique outcome of the specific benchmarking analysis between the country of interest and the chosen set of comparator countries (as each cluster-level indicator is the simple average of the available indicators analyzed in each cluster). Figure 2.2 shows the results of the same benchmarking analysis but focused more specifically on the indicators within the “political institutions” cluster. Here, 11 indicators are used to examine the strength of political institutions, with three being classified as weak, five as emerging, and three as strong. In this example, while macro-political indicators concerning the status of democracy and overall features of checks and balances do not seem to be major concerns, the distribution of power and in particular the status of women in politics seems to be areas of weakness.

FIGURE 2.2 - Example of CLIAR Benchmarking Political Institutions Cluster (Static Version)



Source: World Bank Country Level Institutional Assessment and Review (CLIAR) Dashboard.

Notes: CLIAR= Country Level Institutional Assessment and Review, CTF = Closeness to Frontier.

Together, the CTF scores and percentile analysis capture two related but different aspects of a country's institutional performance. As noted, the CTF provides an *absolute* score by comparing it to a global frontier. The percentile analysis, drawing inferences based on the country's performance against a set of comparator countries, on the other hand, provides a *relative* measure. These two approaches have important distinctions. For example, the CTF score for an indicator or an institutional cluster in a country may be relatively high and close to 1, indicating closeness to the world's best performers.

At the same time, the same indicator or institutional cluster in the same country may be marked on the percentile analysis as weak (i.e., red color) if its performance is relatively worse than the user's selected group of comparator countries. The CLIAR Benchmarking exercise utilizes both approaches to assess the country's performance with respect to the global frontier as well as the performance of comparator countries. Both absolute and relative performance across indicators can help identify priority areas for institutional strengthening.

3.2 Institutional Trends: Dynamic Benchmarking Analysis

The CLIAR Benchmarking introduces a dynamic analysis of institutional trends over time, which is critical for developing a comprehensive overview of institutional development in a country. Public institutions can and do evolve over time (Mahoney and Thelen 2012), but capturing these changes is not a trivial endeavor because of methodological challenges and data issues. Methodologically, when conducting CTF estimations in different time periods, it is not necessarily clear how to define the relevant frontier, whether across the entire time period, or annually, since the frontier may shift over time as institutions evolve.²⁴ Data issues include the fact that indicator coverage varies significantly across time, whether because of infrequent data collection (e.g., PEFA) or the use of relatively new indicators that do not go back in time (e.g., GTMI). This is particularly important when aggregating indicators for over-time comparisons.

The dynamic analysis requires indicators with sufficient over-time coverage – otherwise, the indicators are excluded from the analysis. Compared to static benchmarking, dynamic benchmarking is more selective with respect to indicators by considering their panel characteristics. Hence, indicators that do not offer multiple measurements for the same country are excluded from the analysis – e.g., OECD PMR and PEFA, which consequently excludes the SOE Governance Institutions and Public Finance Institutions indicator clusters from dynamic benchmarking.

CTF estimations are then dynamically conducted at the indicator level. This follows the same methodology used in the static version, with the difference that a fixed global frontier is estimated for the entire time period (2013–2022) and that the resulting CTF scores, when available, are constructed

on an annual basis. A fixed global frontier for institutional indicators in the dynamic benchmarking has several benefits. Establishing a time-period-specific frontier allows us to measure how countries evolve over time, circumventing the issue of a frontier that moves every year. Another benefit of a fixed frontier is clarity in interpretation: improvements in the quality of institutions are measured at a global, fixed level, rather than against a level that changes annually.

The computation of global dynamic cluster-level CTF scores is constrained by limitations around indicators' time coverage, including overlapping time coverages. As discussed, computing global cluster-level CTF scores requires a balanced sample to ensure methodological soundness. In this case, it requires that a given set of countries have no missing data across both the entire set of indicators and the entire time series. Given the data limitations across both of these dimensions – particularly the need for indicators to have overlapping time coverage – some institutional clusters are not well-suited for robust aggregation and thus are not covered in the global dynamic cluster-level CTF benchmarking. This includes the following institutional clusters: (1) Absence of Corruption, (2) Political Institutions, (3) Social Institutions, (4) Transparency and Accountability, (5) Climate Change, and (6) Public HRM. Moreover, some indicators are only collected every two years – i.e., BTI indicators are only available in even years. In order to address non-overlapping time coverage across indicators and to have a consistent estimation across clusters, the global cluster-level CTF is computed every two years when all relevant indicators are available, from 2013 to 2022, meaning that it is available only for even years.²⁵ Box 3 describes an example of the CLIAR dynamic benchmarking analysis as applied in the Dashboard.

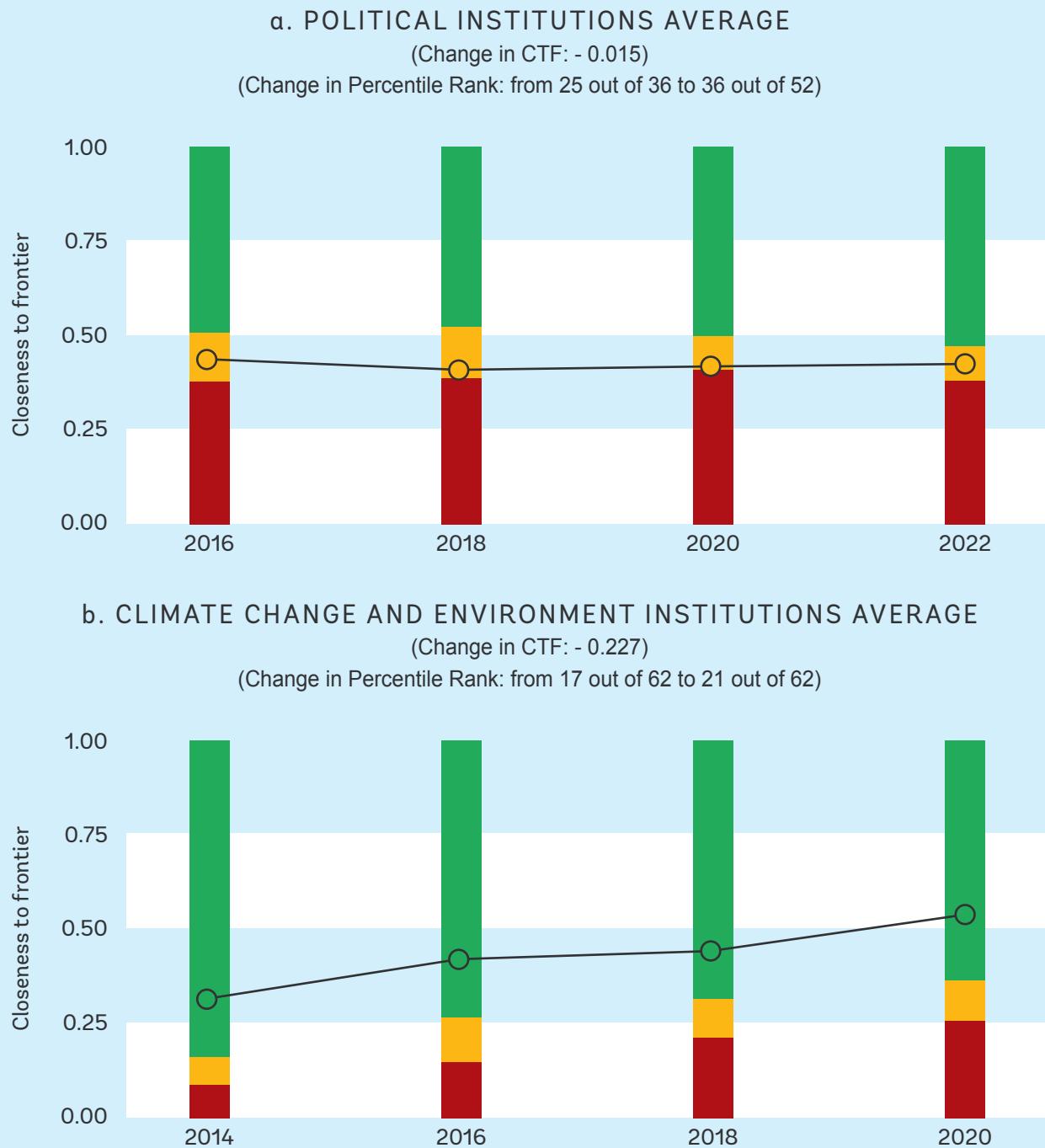


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BOX 3 - Example of CLIAR Benchmarking Analysis (Dynamic Version)

The results from dynamic benchmarking analyses are displayed in the Dashboard in a similar fashion as the static benchmarking analysis highlighted in box 2. Figure 3.1 shows the results of a hypothetical dynamic overview analysis. In this example, the strength of Political Institutions seems to stay relatively constant over time, both in absolute and in relative terms. The Climate Change and Environment Institutions cluster, by contrast, displays a large absolute improvement over time despite a relative decrease (from the rank of 17 to 21 of 62, while still being classified as “strong” performance). This suggests that other countries have improved relatively better than the country of interest over the same time period.

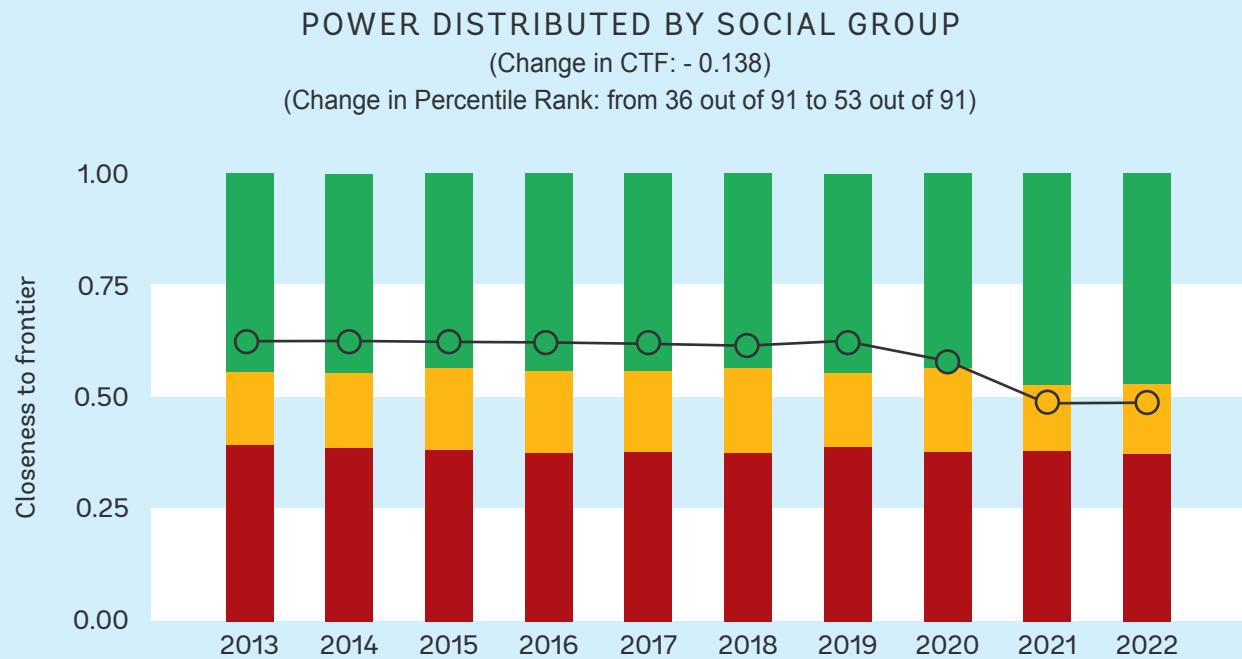
FIGURE 3.1 - Example of CLIAR Benchmarking Overview, by Cluster (Dynamic Version)



Source: World Bank Country Level Institutional Assessment and Review (CLIAR) Dashboard.

A similar dynamic analysis is implemented indicator-by-indicator, within each available cluster in the Dashboard. For example, Figure 3.1 displays the dynamic analysis of one particular indicator within the Political Institutions cluster, namely Power distributed by social group. Since the relevant data is available for all years between 2013 and 2022, the analysis displays the year-by-year trend. Comparing Figure 3.2 to Figure 2.2 (box 2) highlights the usefulness of dynamic benchmarking. Figure 2. classified this indicator as being on the border between “emerging” and “strong,” potentially suggesting improvement over time. The dynamic analysis in Figure 3.2, however, shows that the indicator in fact has been following a deteriorating trend from “strong” over 2013–2020 to “emerging” over 2021–2022.

FIGURE 3.2 - Example of Dynamic Benchmarking at the Indicator Level



Source: World Bank Country Level Institutional Assessment and Review (CLiar) Dashboard.

Notes: CLiar= Country Level Institutional Assessment and Review, CTF = Closeness to Frontier.



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Comparing CLIAR with Other World Bank Indicators of Institutional Strength

Given the existence of other indicators of institutional strength in the World Bank, it is important to outline how CLIAR compares against them. Two popular sources of governance data in the World Bank are the CPIA and the WGI. Table 2 provides a summary of the comparison between the WGI, the CPIA, and the CLIAR CTF data.

The CPIA is a diagnostic tool originally started in the mid-1970s to help the Bank assess the extent to which a country's policies and institutions support the effective use of development assistance. The CPIA data is important because it is one of the parameters used to determine the distribution of IDA's concessional lending and grants to low-income countries.

The CPIA data consists of ratings that World Bank country teams score based on their experience in the context and their knowledge of relevant diagnostic studies. Country teams rate the government's performance on a scale of 1 (lowest) to 6 (highest) across 16 different criteria. The criteria are then aggregated into four clusters (economic management, structural policies, policies for social inclusion/equity, and public sector management and institutions) wherein each criteria receives equal weight. The data were originally not disclosed outside the Bank, but as of 2000, the Bank started to publish *relative* ratings for IDA-eligible countries. Beginning in 2004, the disclosure expanded to include the numerical scores for IDA-eligible countries across the 16 different criteria. The data coverage is balanced and includes numerical scores for every country in every year since 2004.



Each of the 16 CPIA criteria captures the effectiveness of a country's public administration and public institutions with respect to a general policy dimension such as trade or the efficiency of revenue mobilization. These criteria importantly capture both public institutions and policies or "the key elements that are within the country's control" as opposed to realized outcomes such as growth rates. Moreover, the ratings are supposed to capture actual policy implementation rather than promises or intentions. Finally, the scores are based on the country's performance relative to the criteria, not the degree of change from the previous year.

The WGI is a database consisting of six composite indicators capturing broad dimensions of governance, each based on several indicators drawn from 31 different data sources. Like the CPIA, the WGI is an important data source for the cross-national study of government effectiveness. It is used widely in the World Bank, academia, and the broader international development community.

The WGI data captures six general governance concepts: voice and accountability, political stability and absence of violence, government effectiveness, regulatory quality, rule of law, and control of corruption. These concepts are broad

and – by design – do not directly relate to specific institutions or policies. Instead, the unobserved components model implicitly assumes that each of the underlying source variables is a noisy measure for one of these six more general concepts.

WGI's underlying source data comes from expert assessments, commercial business information providers, public sector agencies, and nongovernmental organizations. Each of the underlying variables are aggregated into one of six indicators based on transparent statistical procedure (i.e., an unobserved component model). With some small exceptions, both the composite indicators and the underlying source variables are publicly available. To maximize coverage of the overall sample, an unbalanced sample is used, acknowledging the caveats of missing data across indicators and countries that comes with it. Moreover, the statistical procedure that aggregates the variables modifies the weights used in the aggregation process. These two elements are key to understanding the underlying data sources and aggregation of indicators every year. The procedure implicitly assumes that the global average for each composite indicator is the same in each year, meaning that the WGI indicators can be used to compare relative positions in a year or relative positions over time but not absolute changes across years or countries.

While these two databases share some similarities with CLIAR, there are important differences. First, unlike some years of CPIA data, all the indicators included in CLIAR are publicly available. Second, unlike the CPIA, CLIAR's and WGI's scoring methods are also transparent and are publicly available statistical procedures. Third, the CLIAR is different from WGI in the sense that the "global" cluster-level CTF data is balanced (it is only in the Dashboard application that cluster-level aggregation

is allowed even if some data sources are not complete for every country/year). Fourth, CLIAR captures 13 institutional dimensions, more than WGI's six. The majority of CLIAR's dimensions are specific to a given sector of public institutions, such as public financial management or justice institutions. Finally, CLIAR scores are constructed in a way that can represent both absolute and relative measures of performance that can be compared across countries and over time.

> > >

TABLE 2 - Comparison between CLIAR, WGI, and CPIA Data

Dimension	CLIAR	WGI	CPIA
Data collection	Aggregates existing data	Aggregates existing data	Generates new data
Data sources	Publicly available	Publicly available	Bank staff assessment
Scoring method	Transparent statistical method: closeness to frontier (CTF)	Transparent statistical method (unobserved component analysis)	Guiding post available to Bank staff (internal only)
	Scores range 0 to 1	Scores range -2.5 to 2.5	
	Unweighted	Weighted indicators	
Sample	Balanced	Unbalanced	Balanced
Number of dimensions	13	6	16
Type of dimension	Specific to a broad category of public institutions	General concepts applicable to many different institutions	General policy dimensions relative to many different institutions
Relative vs. absolute measures	Both	Relative only	Both
Availability	Publicly available	Publicly available	Scores available only for IDA countries (starting in 2004 for raw scores)

Source: World Bank.

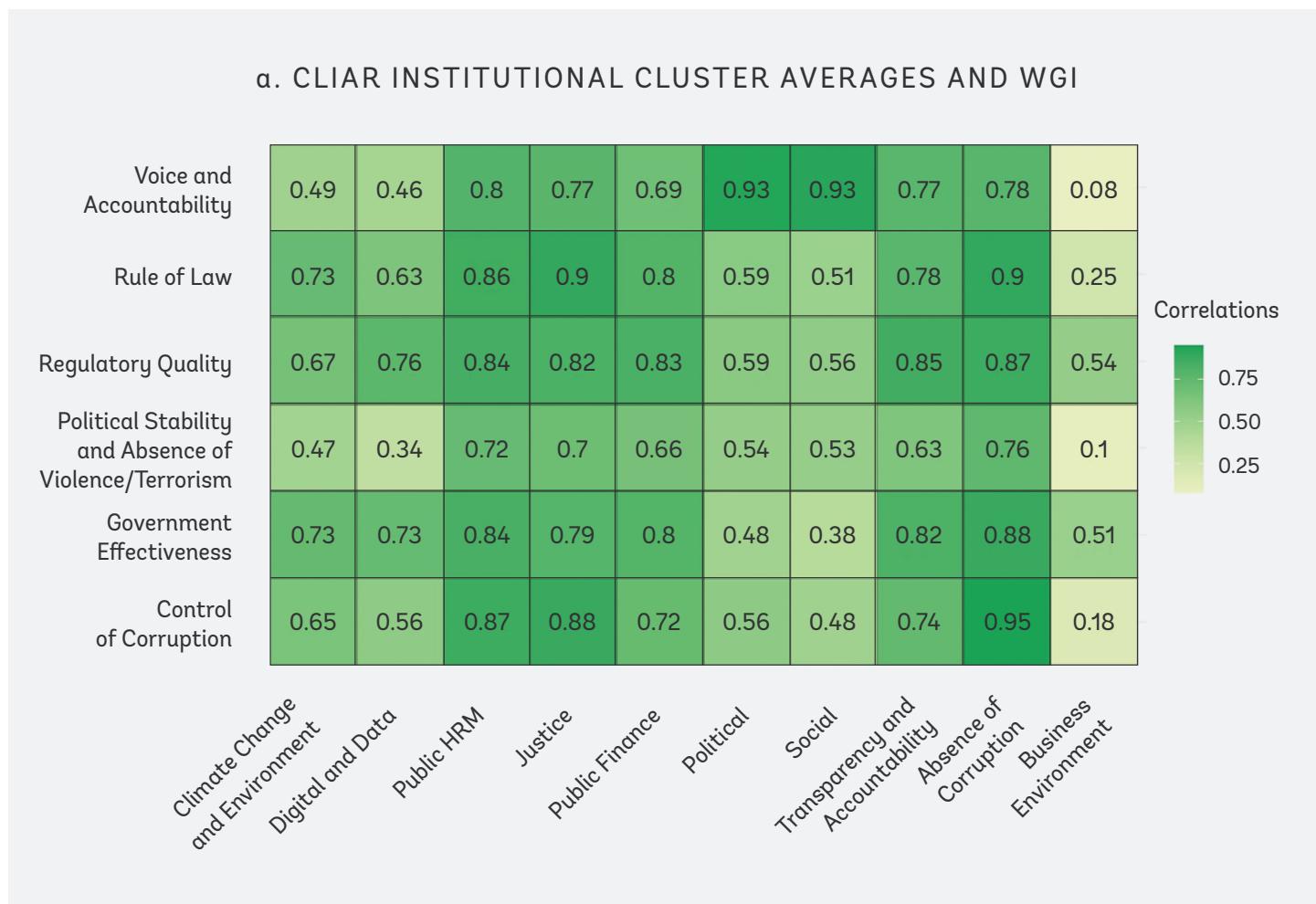
Note: CLIAR = Country Level Institutional Assessment and Review, CPIA = Country Policy and Institutional Assessment, CTF = Country Partnership Framework, IDA = International Development Association of the World Bank Group, WGI = World Governance Indicators.

Correlational analysis between CLIAR and the WGI validates the mapping of indicators onto institutional clusters, but comparisons with the CPIA highlight significant differences. Comparing CLIAR cluster-level average CTF scores with specific dimensions of the WGI, we find that the clusters and dimensions that are conceptually similar correlate positively (figure 5). For example, the dimension Voice and Accountability correlates positively with Political and Social Institutions, both at 0.93. Government

Effectiveness, on the other hand, correlates with Public HRM Institutions, Transparency and Accountability, and Absence of Corruption. An equivalent correlational analysis between CLIAR and the CPIA, however, suggest a weaker link between concepts (figure 5). For example, the Transparency and Accountability Institutions cluster in CLIAR has a 0.37 correlation with the CPIA Transparency and Accountability, or Public Finance in CLIAR has a -0.08 correlation with the CPIA Fiscal Policy.

> > >

FIGURE 5 - Correlation Heatmap for CLIAR with WGI and CPIA



b. CLIAR INSTITUTIONAL CLUSTER AVERAGES AND CPIA



Source: World Bank Country Level Institutional Assessment and Review (CLIAR) Dashboard, World Governance Indicators (WGI) and CPIA (Country Policy and Institutional Assessment)

Note: Due to missingness of indicators for particular countries, only pairwise complete observations were considered in computing the correlation. Correlations are computed on the static closeness-to-frontier scores. Scores for WGI and CPIA are averaged over 2018–2022, similar to the static CTF. CLIAR = Country Level Institutional Assessment and Review, CPIA = Country Policy and Institutional Assessment, CTF = Country Partnership Framework, WGI = World Governance Indicators.



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Methodology Caveats – User Warnings

Despite its many advantages, the CLIAR Dashboard analysis presents important limitations and potential risks related to data and methodological limitations. Indeed, the quality of a benchmarking exercise and its limitations is a function of the data available, including their coverage, definitions, and measurement strategies. These limitations are not CLIAR specific, but rather limitations that affect, in one way or another, all country-level institutional indicators. While many of these caveats or user warnings are often implicit in institutional data, it is important to be precise about them and, to the extent possible, to consider them when drawing inferences from the analysis.

- **Data coverage.** Availability of data and indicators is one of the fundamental limitations to any data analysis, and this is beyond missing data which is further discussed in paragraph 91. The substantive or topical coverage of indicators can have significant limitations and might fail to capture important information relative to the institutional functions under analysis. (This is discussed in section 2, where data gaps for specific institutional clusters are described.) Indicators may also not be updated regularly and/or not be available for a global sample. As such, important functional areas worth exploring are simply not subject to a benchmarking analysis because of the lack of international benchmarking indicators.

- **Form vs. function.** Many governance and institutional indicators have a normative bias and reflect specific institutional forms more than they capture performance relative to a given function. This bias reflects the notion that development could be accelerated through transplanting institutional forms and laws developed in high-income countries which would in turn facilitate institutional and functional convergence (Andrews, Pritchett, and Woolcock 2017). In contrast, being able to assess institutional *functions* can help to make sense of the multiple historical trajectories of institutional change around the world and the role that institutions and governance play in policy effectiveness (World Bank 2017). For the institutional benchmarking exercise, the team prioritized, whenever possible, institutional indicators capturing functions rather than forms, but this choice was limited by data.
- **Objective measures vs. subjective and expert assessments (akin to de jure vs. de facto).** Given the limitations in each measurement strategy, our intention is, whenever possible, to include both objective and subjective indicators. Both are critical elements that shape social cohesion and influence the business climate in a country, with significant implications for growth, poverty, and inequality. The objective measurement of some dimensions is hindered by their hidden or complex nature (such as corruption, or the quality of the legal system) and the fact that—when available—such granular data may not be comparable across countries. On the other hand, subjective measures, particularly in the scale of interest, may also suffer from other limitations, such as time-inconsistent measures, or time-varying coder bias (see Little and Meng 2023). At the same time, the benefit of this type of subjective assessment is that it relies on local coders, which is an important (yet partial) step for considering global perspectives (i.e., from the Global South and not only from the Global North) to make any analysis more representative and comprehensive.
- **Processes vs. outcomes.** The choice of the proposed indicators for the institutional analysis seeks to distinguish institutional *processes* (laws, regulations, norms) from development *outcomes*. For example, CLIAR is not focused on unemployment rate in the country but rather on

labor market institutions, such as employment regulations, that affect unemployment rates. While this distinction is clear in some domains, it is debatable in others. For example, absence of corruption can be perceived as an intermediate outcome, being the product of transparency, accountability, independence of the judiciary, and cultural norms and, at the same time, having implications on the business climate, attractiveness of foreign investments, and the overall economy of a country.

- **Formal vs. informal institutions.** Given the challenges associated with the effort to capture empirically informal institutions and the limited availability of cross-country data, the benchmarking exercise tends to be biased toward formal institutions. An important exception is the category of social institutions, which captures important manifestations of informal institutions such as social norms, beliefs, and social capital and trust. This bias toward formal institutions is an additional limitation of the quantitative analysis because in many countries, informal institutions often play an important role in shaping actors' expectations and behavior.
- **Central-level institutions.** An additional caveat of CLIAR is that it focuses on the central level of government. Subnational institutions are beyond the scope of this version of CLIAR. In many contexts, such as federations, subnational institutions are as important, if not more than federal ones. Moreover, it is well known that countries exhibit important and often-time institutionally driven inequalities and heterogeneities across regions. This additional institutional heterogeneity is also beyond the scope of the present analysis.

These limitations suggest that the benchmarking exercise is, at best, an “exercise of approximation.” It is not intended as an exhaustive and comprehensive analysis of the specific institutional constraints of each country and may not authoritatively identify all key institutional shortcomings. The tool should therefore be used only as an initial effort to bring well-structured evidence into the discussion of institutional challenges, which would be the basis for customizing it to the best extent possible to the country context.



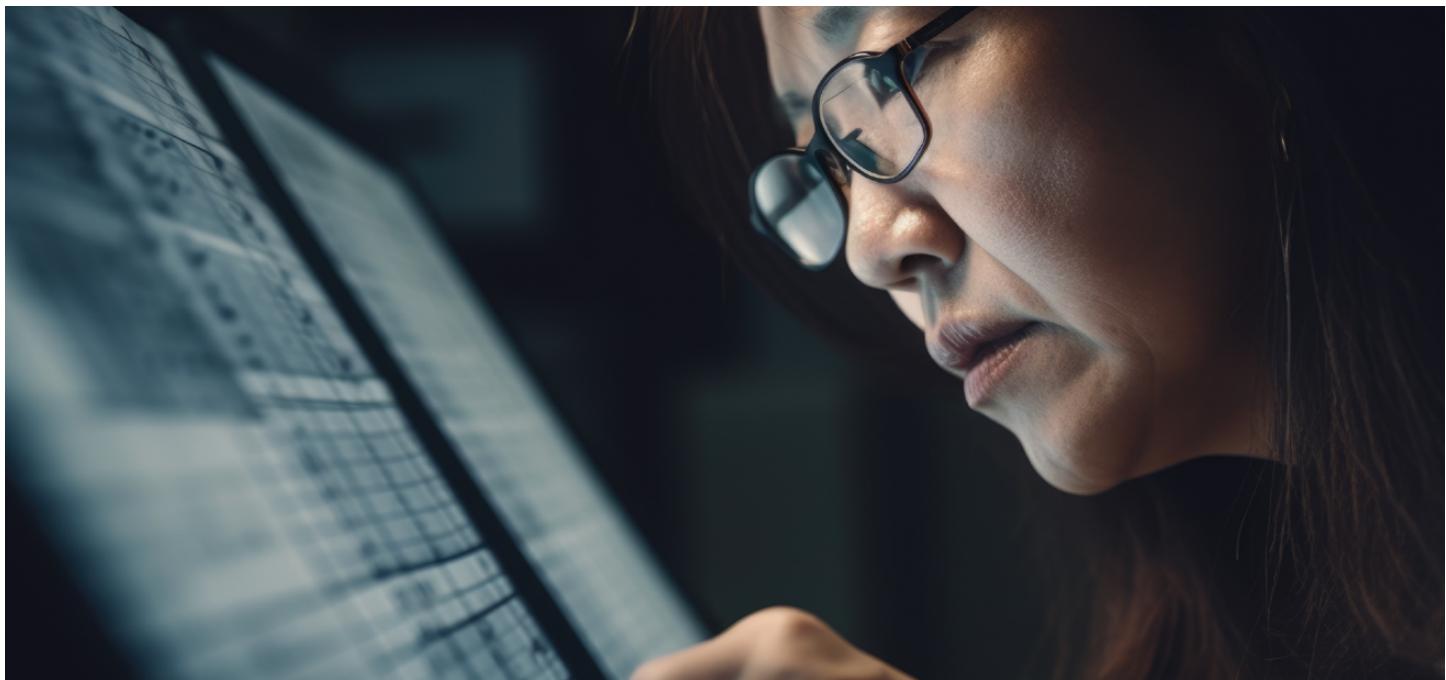
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Future Extensions and Developments

This section outlines the avenues for extensions and future developments in CLIAR's indicator selection and methodology, namely the imputation of missing data.

6.1 Dealing with Missing Data

Missing data presents two challenges for CLIAR: loss of precision and, most importantly, potential biases. This is because missing indicators or values in the institutional categories analyzed here are seldom “missing completely at random.” In other words, for a given variable, the probability that any observation is missing is not the same for every country or every year, and that probability is empirically and theoretically correlated with both observed and unobserved relevant country characteristics. Moreover, this challenge is exacerbated in practice because of the curating nature of CLIAR’s data, wherein the compilation of different data sources – which is often affected by cost, time, and access limitations – may not offer complete coverage for every country and every year. As a result, inferences made with available data have to be interpreted with this potential caveat in mind. Estimates that do not account for missing data when averaging across countries or years will represent a biased estimate of the true average.



Social scientists have different approaches for addressing the problem of missing data. The most extreme approach is to conduct a “complete case analysis” that excludes any units (i.e., countries) that have at least one missing observation. A slightly more complicated – but still relatively simple – option is to fit a regression model with the observed data where the dependent variable is the variable to be imputed. The model’s predicted values can then be used to estimate the missing values. This procedure has several limitations, but most importantly, the process does not capture any uncertainty around the imputed values – something that recent developments have addressed.

In future developments of CLIAR, and based on the latest literature, we propose a multiple imputation process to estimate the missing data in CLIAR (based on the Amelia II algorithm in Honaker and King [2010]). For each country-year cell that is missing in the data, multiple imputation produces a distribution of m imputed values. The researcher chooses the value m , but the literature suggests that m is generally set to five because any marginal benefits above five usually do not outweigh the costs of extra computation time (Lall 2017). The algorithm follows a Bayesian procedure to estimate these values based on a country/variable’s observed values and

other selected variables. Researchers are encouraged to select any variables – included in their data or elsewhere – that help predict missing data. We plan to develop a multiple imputation procedure that uses the Amelia II algorithm to estimate a distribution of values for each missing cell in the CLIAR master data.

Multiple imputation is a powerful approach in estimating missing data, but there are many limitations. First, since the determinants of missing data are rarely fully known, multiple imputation models may not select the appropriate variables as inputs to the algorithm. Second, the algorithm can generate estimates for a given country and variable even if that country has no observed data for that variable. Multiple imputation used in this fashion is potentially suspect since that country/variable has no observed data and is entirely based on estimations from any selected variables. Imputing variables that are entirely missing is therefore potentially biased if the determinants of missing data are not known, which is the case with CLIAR. We will explore a variety of different approaches, including approaches that estimate any missing cell and those that estimate only variables for which there are at least some observed values. These procedures will be reviewed internally and will be piloted before the next CLIAR update.



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Notes

1. The term country, used interchangeably with economy, does not imply political independence but refers to any territory for which authorities report separate social or economic statistics.
2. This task can be undertaken with the CLIAR Country-Deep Dive.
3. Chang (2002) describes an example in East Asia, showing that while secure property rights and contract enforcement are core characteristics needed for sustained growth, others (a professional civil service, an independent central bank, accountability of elected officials) can emerge over time in conjunction with, or because of, economic growth.
4. The Public Sector Management and Institutions (cluster D), also referred to as the Governance cluster, covers property rights and rule-based governance; quality of budgetary and financial management; efficiency of revenue mobilization; quality of public administration; and transparency, accountability, and corruption in the public sector.
5. Appendix B describes the differences between CLIAR 1.0 and 2.0 in more detail.
6. Available at: <https://worldbankgroup.sharepoint.com/sites/scd/SitePages/PublishingPages/Stocktaking-09082021-170216.aspx> (last accessed November 7, 2023).
7. The CLIAR data is relevant to selected CPIA dimensions that are under the responsibility of the Governance Global Practice. CPIA can use the CLIAR Dashboard data to strengthen the analysis of at least one CPIA dimension (15 – Quality of Public Administration).
8. Establishing key institutions is one of the main requirements of the IBRD's graduation policy, but the new guidance on strengthening institutions underpinning the country engagement process does not specify how institutional quality should be assessed (World Bank 2018).

9. The structure of institutional clusters has been modified from the CLIAR Benchmarking 1.0. Version 2.0 now includes two additional new clusters (Service Delivery and Climate Change Institutions). Previous clusters are unpacked: the Public Sector cluster has been disaggregated into Public Finance, Public HRM, and Digital and Data Institutions, and the Accountability cluster has been disaggregated into Absence of Corruption and Transparency and Accountability Institutions. Financial Market Institutions was merged into Business and Trade Environment, which is now called Business Environment; and the Labor Market Institutions cluster is now broader and encompasses Social Protection. For further details, see appendix B.
10. The literature review is available upon request. Email CLIAR@worldbank.org.
11. This is an important distinction between the CLIAR Benchmarking Data (138 indicators) and the CLIAR Master Data (436 indicators total): the first only includes indicators that are benchmarked while the latter also includes indicators that are deemed relevant, but for different reasons, are not benchmarked.
12. In some cases, the distinction between an institutional feature of inherent interest to be benchmarked and a potential outcome is not clearcut (e.g., absence of corruption). Regarding the entire process of selecting indicators, the process for categorizing indicators to be benchmarked was protocolized and annotated, and validated by a Bank-wide data expert group.
13. Some of the non-benchmarked indicators in the CLIAR master data – such as GDP per capita – are not mapped onto a specific institutional cluster but rather to a “general outcomes” category.
14. While this distinction is clear in some domains, it is debatable in others. For example, corruption can be perceived as an intermediate outcome, being the product of transparency, accountability, independence of the judiciary, and cultural norms and, at the same time, having implications on the business climate, attractiveness of foreign investments, and the overall economy of a country.
15. This issue combined with the lack of comparable data pre-2016 due to a change in the methodology explains why the Public Finance cluster is excluded from the dynamic benchmarking analysis.
16. A matrix of comments and responses documenting this feedback and rationale is available upon request. Email CLIAR@worldbank.org.
17. The GitHub repository link, under the World Bank’s GitHub, is <https://github.com/worldbank/institutional-assessment-dashboard>.
18. When applicable, original indicators are inverted such that higher values always represent better performance.
19. Appendix A shows the robustness of using the last available data point instead.
20. A complete list of correlation heatmaps for all institutional clusters is presented in appendix A.2.

21. This measure describes whether the variables within each cluster are internally consistent, that is, how closely related a set of indicators are as a cluster. The values range from 0 to 1, and a rule of thumb generally used is that scores above 0.7 are acceptable, while values above 0.8 are good and above 0.9 excellent (Nunnally 1978).
22. The full list of Cronbach's alphas estimations are as follows – Political Institutions: 0.89, Social Institutions: 0.96, Absence of Corruption: 0.96, Transparency and Accountability Institutions: 0.89, Justice Institutions: 0.94, Public Finance Institutions: 0.88, HRM Institutions: 0.90, Digital and Data Institutions: 0.94, Business Environment: 0.69, Service Delivery Institutions: 0.89, and Climate Change Institutions: 0.92.
23. For example, in some cases, the teams showed how the findings change in terms of performance across different institutional clusters when a more demanding set of comparator countries is selected, setting different targets for the country of interest.
24. This is a similar issue faced by the Worldwide Governance Indicators, which adjusts the frontier each year it is measured.
25. As this is driven by BTI data availability, it does not affect all clusters. For consistency, however, the team decided to implement the bi-annual calculation across clusters.



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References

- Acemoglu, Daron, Simon Johnson, and James A. Robinson. 2001. "The Colonial Origins of Comparative Development: An Empirical Investigation." *American Economic Review* 91 (5): 1369–1401.
- Acemoglu, Daron, Simon Johnson, and James Robinson. 2005. "Institutions as the Fundamental Cause of Long-Run Growth." NBER Working Paper 10481.
- Andrews, M., L. Pritchett, and M. Woolcock. 2017. *Building state capability: Evidence, analysis, action*. Oxford University Press.
- Aker, J. C., R. Boumnijel, A. McClelland, and N. Tierney. 2016. "Payment mechanisms and antipoverty programs: Evidence from a mobile money cash transfer experiment in Niger." *Economic Development and Cultural Change* 65 (1): 1–37.
- Avis, Eric, Claudio Ferraz, and Frederico Finan. 2018. "Do Government Audits Reduce Corruption? Estimating the Impacts of Exposing Corrupt Politicians." *Journal of Political Economy* 126 (5): 1912–64.
- Auerbach, A. J., and M. Feldstein, eds. 1985. *Handbook of Public Economics*. Elsevier Science.
- Baland, J.-M., F. Bourguignon, J.-P. Platteau, and T. Verdier, eds. 2020. *The Handbook of Economic Development and Institutions*. Princeton University Press.
- BenYishay, A., and R. Betancourt. 2010. Civil liberties and economic development. *Journal of Institutional Economics* 6 (3): 281–304.
- Besley, T. J., R. Burgess, A. Khan, and G. Xu. 2022. "Bureaucracy and development." *Annual Review of Economics* 14: 397–424.
- Besley, Timothy, and Torsten Persson. 2009. "The Origins of State Capacity: Property Rights, Taxation, and Politics." *American Economic Review* 99 (4): 1218–44.
- Björkman, M., and J. Svensson. 2009. "Power to the People: Evidence from a Randomized Field Experiment on Community-Based Monitoring in Uganda." *The Quarterly Journal of Economics* 124 (2): 735–769.

Bobonis, G. J., L. R. C. Fuertes, and R. Schwabe. 2016. "Monitoring Corruptible Politicians." *The American Economic Review* 106 (8): 2371–2405. <http://www.jstor.org/stable/43956916>.

Boese-Schlosser, Vanessa Alexandra, and Markus Eberhardt. 2022. "Which Institutions Rule? Unbundling the Democracy-Growth Nexus." V-Dem Working Paper 13.

Bosio, Erica. 2023. "A Survey of Judicial Effectiveness: The Last Quarter Century of Empirical Evidence." Policy Research Working Paper 10501, World Bank, Washington, DC.

Brunetti, Aymo, Gregory Kisunko, and Beatrice Weder. 1997. "Institutions in Transition: Reliability of Rules and Economic Performance in Former Socialist Countries." Policy Research Working Paper 1809, World Bank, Washington, DC.

Burgess, Robin, Remi Jedwab, Edward Miguel, Ameet Morjaria, and Gerard Padró i Miquel. 2015. "The Value of Democracy: Evidence from Road Building in Kenya." *American Economic Review* 105 (6): 1817–51.

Cavalcanti, T. V., and A. Novo. 2005. "Institutions and Economic Development: How Strong Is the Relation?" *Empirical Economics* 30: 263–76.

Chang, Ha-Joon. 2002. *Kicking Away the Ladder: Development Strategy in Historical Perspective*. Anthem Press.

Cronbach, L. J. 1951. "Coefficient Alpha and the Internal Structure of Tests." *Psychometrika* 16: 297–334.

Djankov, Simeon, Rafael La Porta, Florencio Lopez-de-Silanes, and Andrei Shleifer. 2002. "The Regulation of Entry." *Quarterly Journal of Economics* 117 (1): 1–37.

Durlauf, Steven N. 2020. "Institutions, Development, and Growth: Where Does Evidence Stand?" In *The Handbook of Economic Development and Institutions*, edited by Jean-Marie Baland, François Bourguignon, Jean-Philippe Platteau, and Thierry Verdier, 189–217. Princeton University Press.

Easterly, William. 2008. "Institutions: Top Down or Bottom Up?" *American Economic Review* 98 (2): 95–99.

Evans, Peter, and James E. Rauch. 1999. "Bureaucracy and Growth: A Cross-National Analysis of the Effects of 'Weberian' State Structures on Economic Growth." *American Sociological Review* 64: 748–765.

Feld, Lars, and Stefan Voigt. 2003. "Economic growth and judicial independence: Cross-country evidence using a new set of indicators." *European Journal of Political Economy* 19 (3): 497–527.

Fujiwara, T. 2015. "Voting Technology, Political Responsiveness, and Infant Health: Evidence from Brazil." *Econometrica* 83: 423–464.

Fukuyama, F. 2014. *Political Order and Political Decay: From the Industrial Revolution to the Globalization of Democracy*. US: Farrar, Straus, and Giroux.

Gill, I. S., H. J. Kharas, and D. Bhattachari. 2007. *An East Asian Renaissance: Ideas for Economic Growth*. Washington, DC: World Bank.

Hallward-Driemeier, Mary, and Lant Pritchett. 2015. "How Business Is Done in the Developing World: Deals versus Rules." *Journal of Economic Perspectives* 29 (3): 121–40.

Hambergren, Linn, Dory Reiling, and Adrian Di Giovanni. 2007. *Justice Sector Assessments – A Handbook*. Washington, DC: World Bank.

Hodler, R., and P. A. Raschky. 2014. "Regional Favoritism." *The Quarterly Journal of Economics* 129 (2): 995–1033.

Honaker, J., and G. King. 2010. "What to Do About Missing Values in Time – Series Cross – Section Data." *American Journal of Political Science* 54 (2): 561–581.

IPCC (Intergovernmental Panel on Climate Change). 2014. *Climate Change 2014: Synthesis Report*. Geneva: IPCC.

Kaufmann, Daniel, Aart Kraay, and Massimo Mastruzzi. 2010. "The Worldwide Governance Indicators: Methodology and Analytical Issues." Policy Research Working Paper 5430, World Bank, Washington, DC.

Knack, S., and N. Manning. 2000. "Towards Consensus on Governance Indicators." Working Paper, World Bank, Washington, DC.

Knack, Stephen, and Philip Keefer. 1995. "Institutions and Economic Performance: Cross-Country Tests Using Alternative Institutional Measures." *Economics & Politics* 7 (3): 207–227.

Langbein, Laura, and Stephen Knack. 2010. "The Worldwide Governance Indicators: Six, One, or None?" *The Journal of Development Studies* 46 (2): 350–370.

Lall, R. 2017. "How Multiple Imputation Makes a Difference." *Political Analysis* 24 (4): 414–433.

Levy, Brian. 2014. *Working with the Grain: Integrating Governance and Growth in Development Strategies*. Oxford University Press.

Little, Andrew, and Anne Meng. 2023. "Measuring Democratic Backsliding." *PS: Political Science & Politics*.

Mahoney, J., and K. Thelen, eds. 2009. *Explaining Institutional Change: Ambiguity, Agency, and Power*. Cambridge: Cambridge University Press.

Muralidharan, Karthik, Paul Niehaus, and Sandip Sukhtankar. 2016. "Building State Capacity: Evidence from Biometric Smartcards in India." *American Economic Review* 106 (10): 2895–2929.

Myers, Bernard, and Rajni Bajpai. 2020. *Enhancing Government Effectiveness and Transparency: The Fight Against Corruption* (English). Washington, DC: World Bank Group.

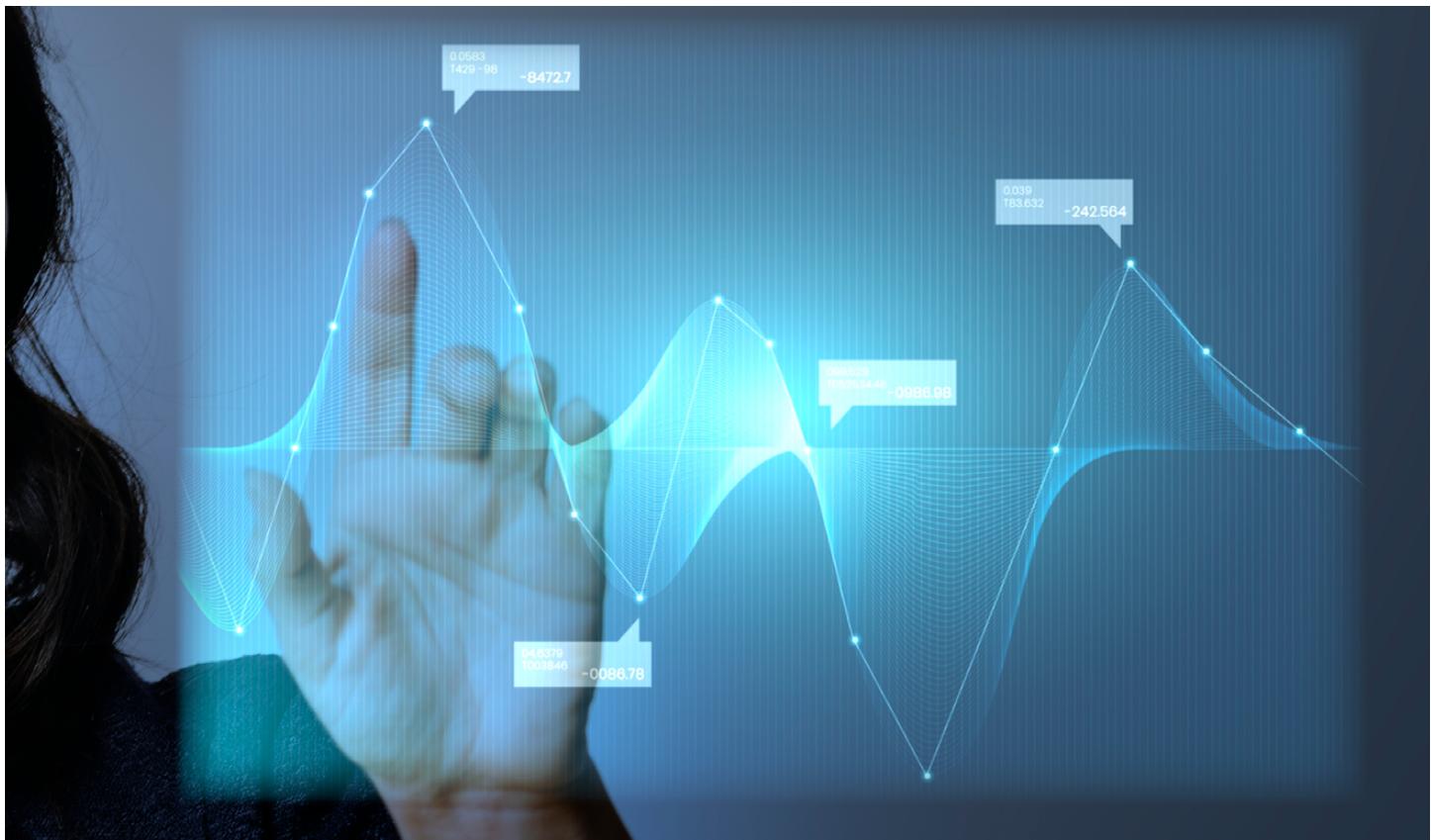
Noll, R. G., and W. A. Pizer, eds. 2016. *The Oxford Handbook of Public Economics*. Oxford University Press.

North, D. C. 1990. *Institutions, Institutional Change and Economic Performance*. Cambridge: Cambridge University Press.

- Nunnally, J. C. 1978. *Psychometric Theory*. Second Edition. New York: McGraw-Hill.
- Organisation for Economic Co-operation and Development (OECD). OECD Guidelines on Corporate Governance of State-Owned Enterprises (2015 Edition)
- Olken, B. A. 2007. "Monitoring Corruption: Evidence from a Field Experiment in Indonesia." *Journal of Political Economy* 115 (2): 200–249. <https://doi.org/10.1086/517935>.
- Pepinsky, T. B., J. H. Pierskalla, and A. Sacks. 2017. "Bureaucracy and Service Delivery." *Annual Review of Political Science* 20: 249–68.
- Putnam, R. D. 1995. "Bowling Alone: America's Declining Social Capital." *Journal of Democracy* 6 (1): 65–78.
- Ramos-Maqueda, Manuel, and Daniel Li Chen. 2021. "The Role of Justice in Development: The Data Revolution." Policy Research Working Paper 9720, World Bank, Washington, DC.
- Rodrik, Dani. 2007. *One Economics, Many Recipes: Globalization, Institutions, and Economic Growth*. Princeton, New Jersey: Princeton University Press.
- Rose-Ackerman, S. 1997. "The Political Economy of Corruption." *Corruption and the Global Economy* 31 (60): 54.
- Van de Walle, S. 2006. The State of the World's Bureaucracies. *Journal of Comparative Policy Analysis* 8 (4): 437–448.
- World Bank. 1988. "Opportunities and Risks in Managing the World Economy: Public Finance in Development World." *World Development Report*. Washington, DC: World Bank.
- World Bank. 2017. "Governance and the Law." *World Development Report*. Washington, DC: World Bank.
- World Bank. 2018. "Sustainable Financing for Sustainable Development: World Bank Group Capital Package Proposal." Background document prepared for the World Bank Development Committee Meeting, Washington DC, April 2018.
- World Bank. 2019. *Anticorruption Initiatives: Reaffirming Commitment to a Development Priority*. Washington, DC: World Bank.
- World Bank. 2020. *Building for Peace: Reconstruction for Security, Sustainable Peace, and Equity in the Middle East and North Africa*. Washington, DC: World Bank.
- World Bank. 2021. *World Development Report 2021: Data for Better Lives*. Washington, DC: World Bank.

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Appendix A. Additional Notes and Results



A.1 Data Pipeline Edits

The following edits were implemented to improve and adjust the data:

- Inverting indicators.** The CTF estimation requires that for any indicator, higher values represent better performance. While the majority of original indicators are coded in that way, there are exceptions, hence the original score had to be inverted, namely, political rights (Freedom House), civil liberties (Freedom House), political polarization (V-DEM), public sector corruption (V-DEM), executive corruption (V-DEM), bank concentration (%) (GFDB), pupil–teacher ratio, and primary and secondary (WDI).
- Adjustment of years.** The years corresponding to the Open Budget Index (Open Budget Survey) have been modified to correspond with measurement. The

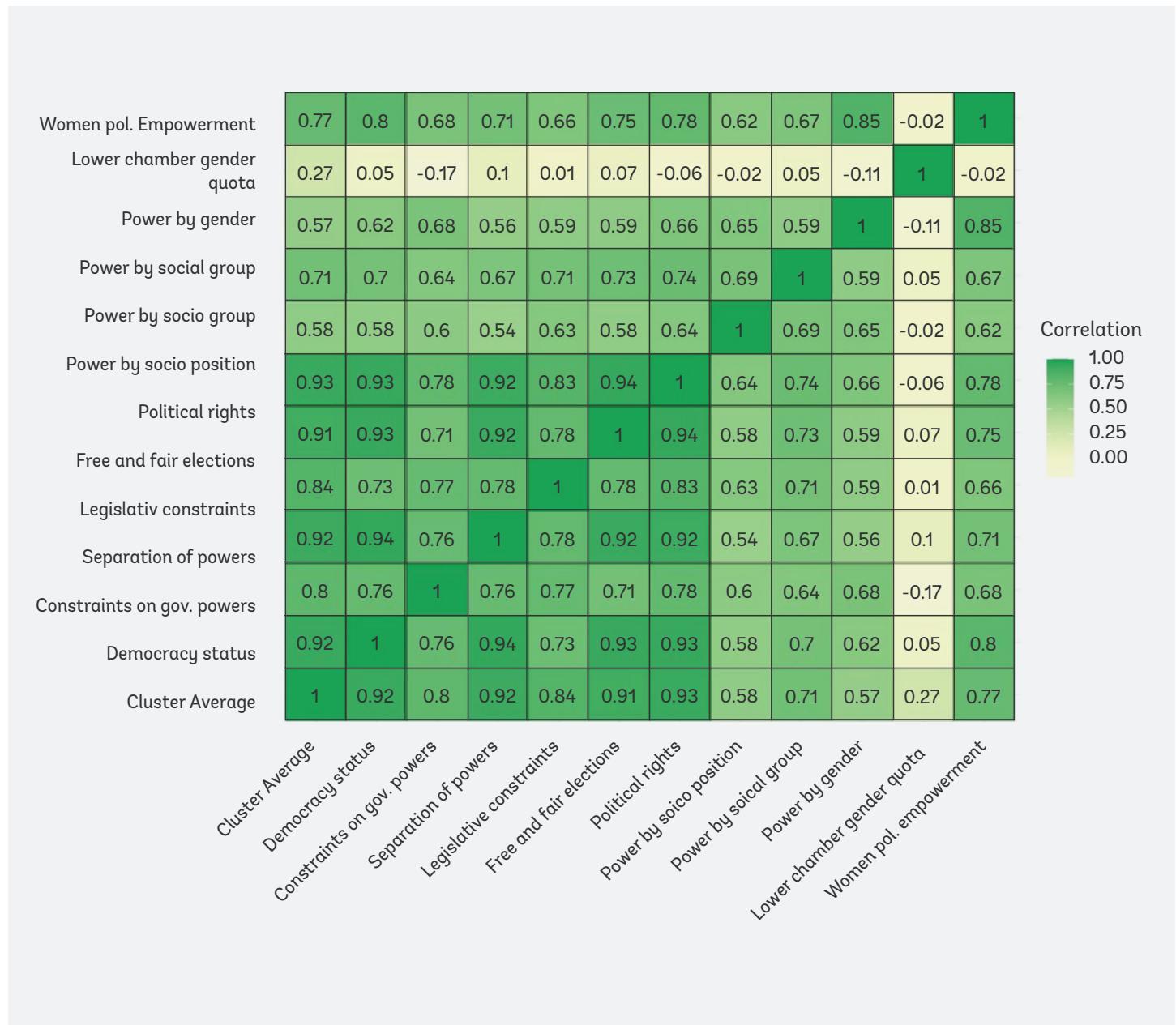
Open Budget Index originally corresponding to, say 2019, is edited to correspond to 2018, as the 2019 results correspond to budget transparency as of December 31, 2018.

- West Bank and Gaza indicators.** V-DEM does not provide data for West Bank and Gaza as a single unit, but rather provides separate estimates for West Bank on one hand, and Gaza on the other. While there is no theoretically correct way to aggregate it, we take an intuitive and transparent approach by aggregating both indicators into one, when available, weighting them by population, when data is reported separately for West Bank and for Gaza. We use 2022 population estimates (West Bank – 3,000,021 people; Gaza – 1,997,328 people).

A.2 Correlation for Institutional Indicators within Clusters

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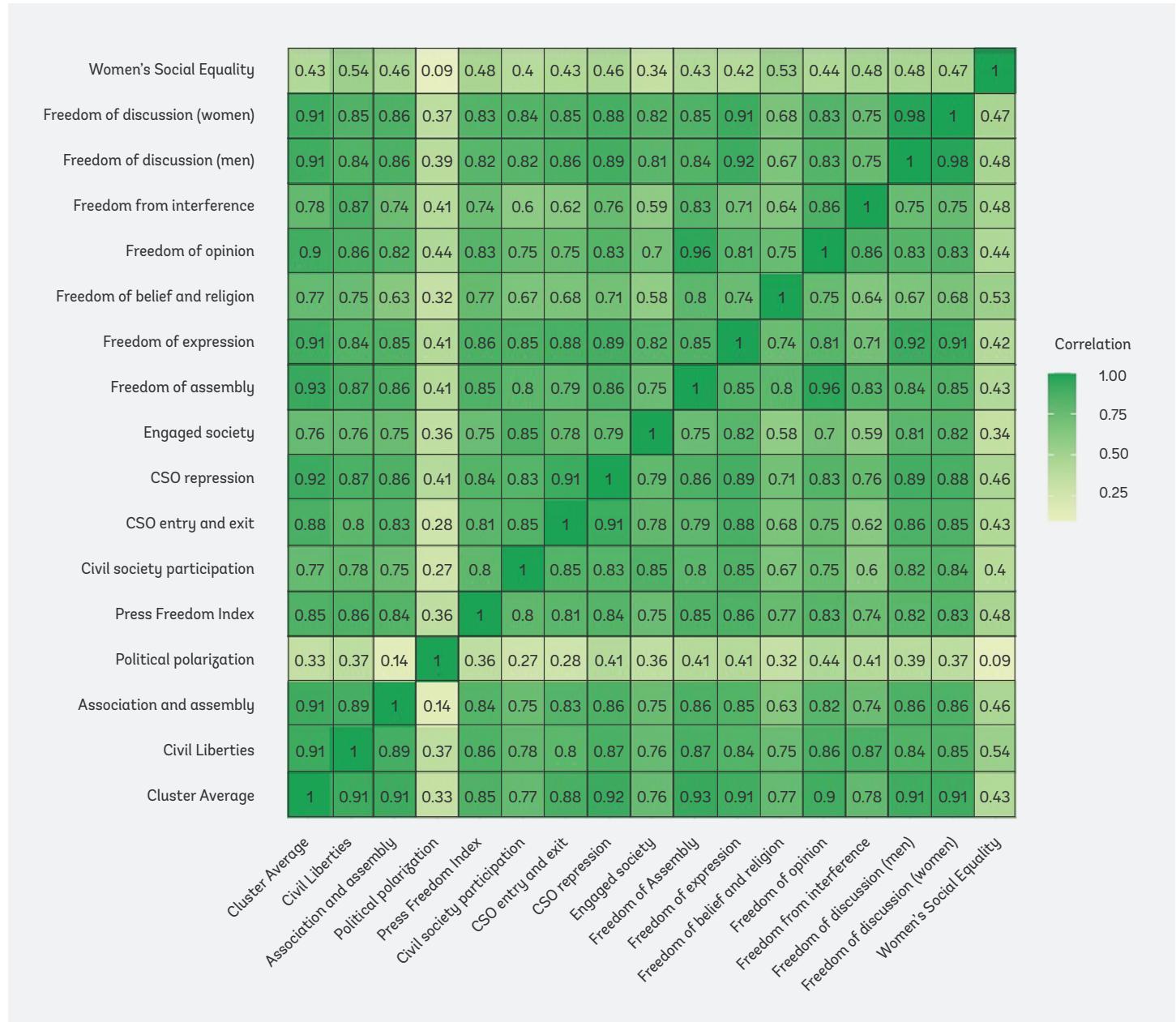
FIGURE A.2.1 - Correlation Heatmap for Political Institutions



Source: World Bank Country Level Institutional Assessment and Review (CLIA) Dashboard.

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FIGURE A.2.2 - Correlation Heatmap for Social Institutions



Source: World Bank Country Level Institutional Assessment and Review (CLIAR) Dashboard.

Note: CSO = Civil Society Organization.

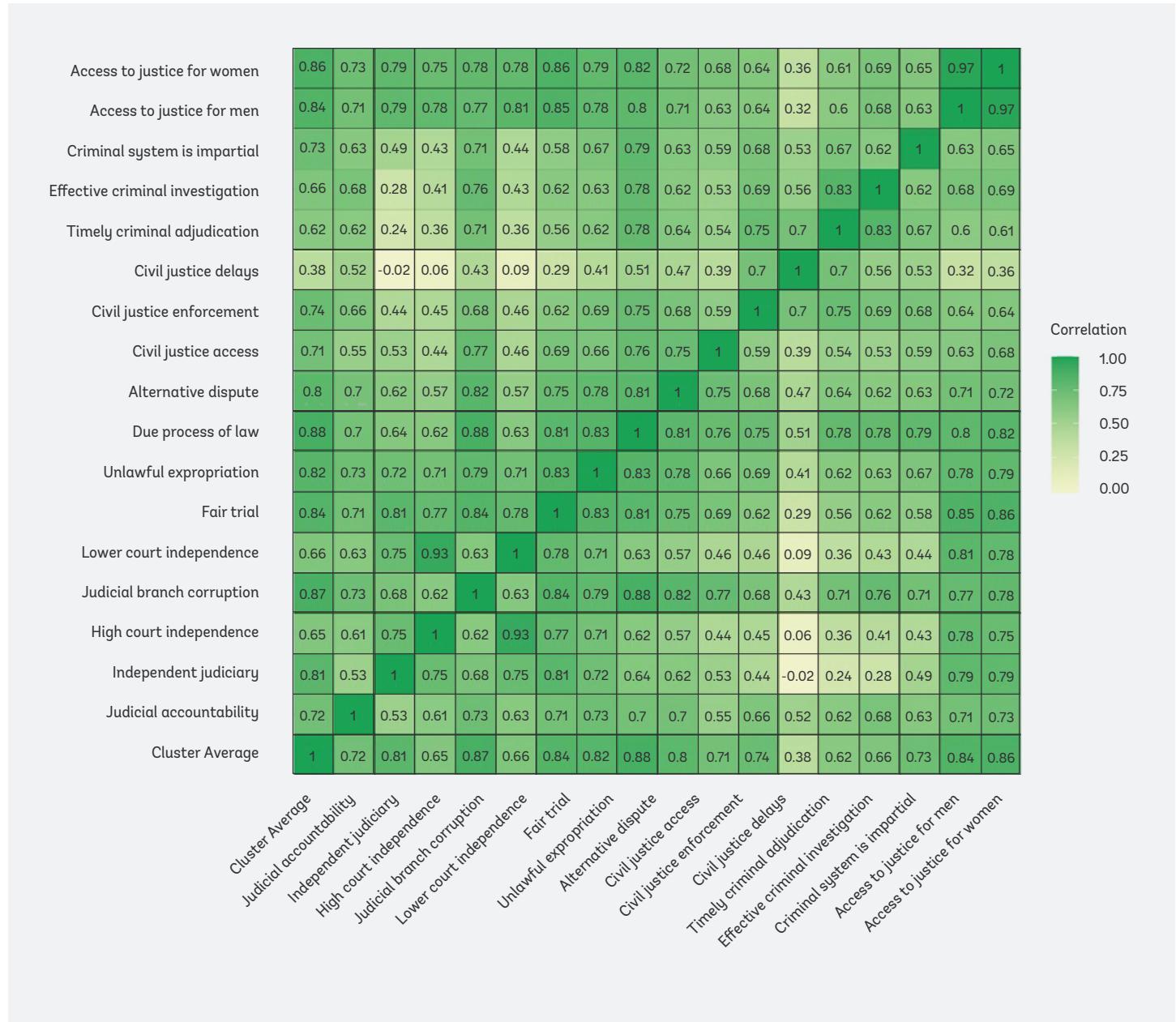
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FIGURE A.2.3 - Correlation Heatmap for Absence of Corruption

Source: World Bank Country Level Institutional Assessment and Review (CLIAR) Dashboard.

Note: CSO = Civil Society Organization.

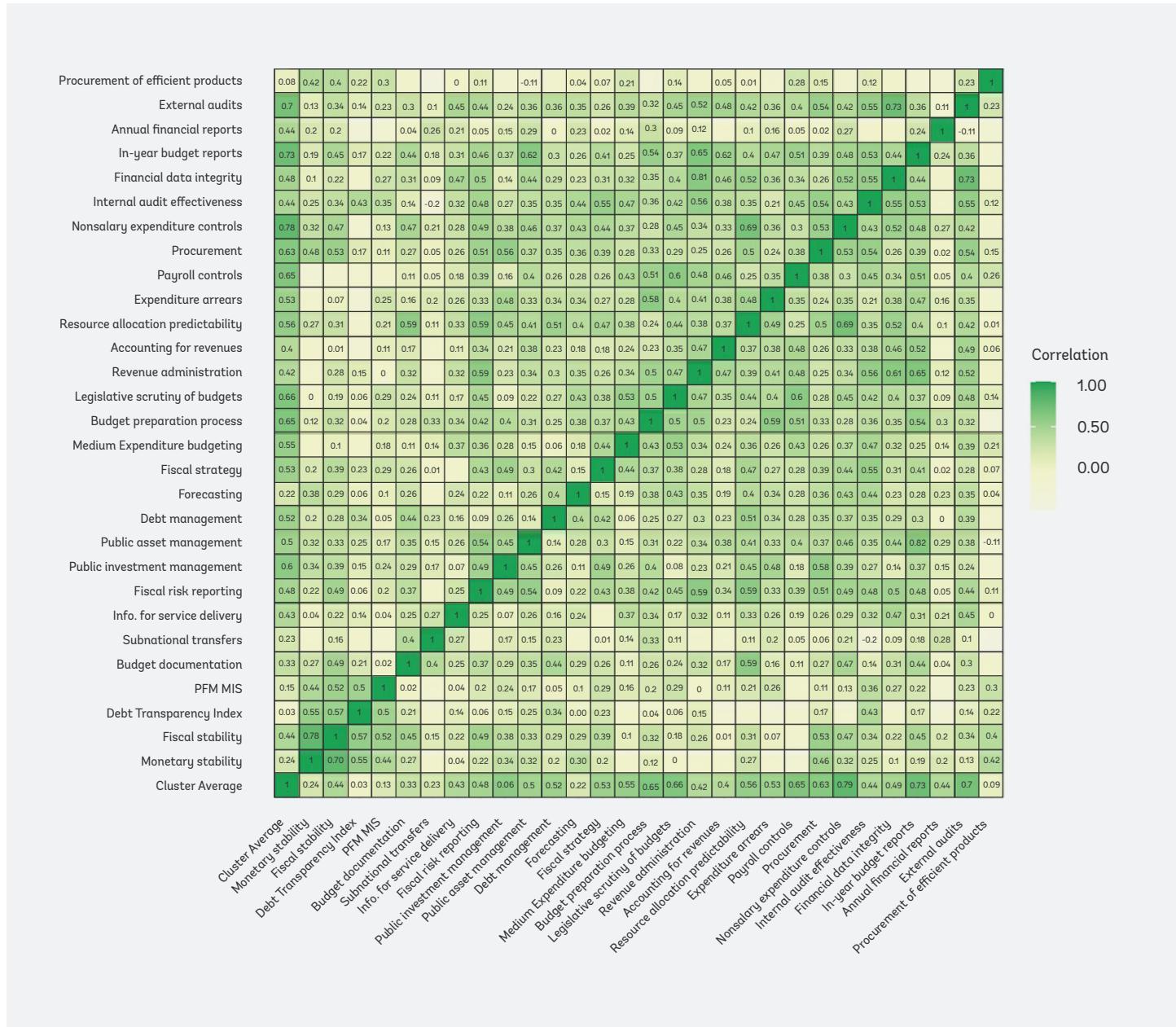
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FIGURE A.2.4 - Correlation Heatmap for Justice Institutions

Source: World Bank Country Level Institutional Assessment and Review (CLiar) Dashboard.

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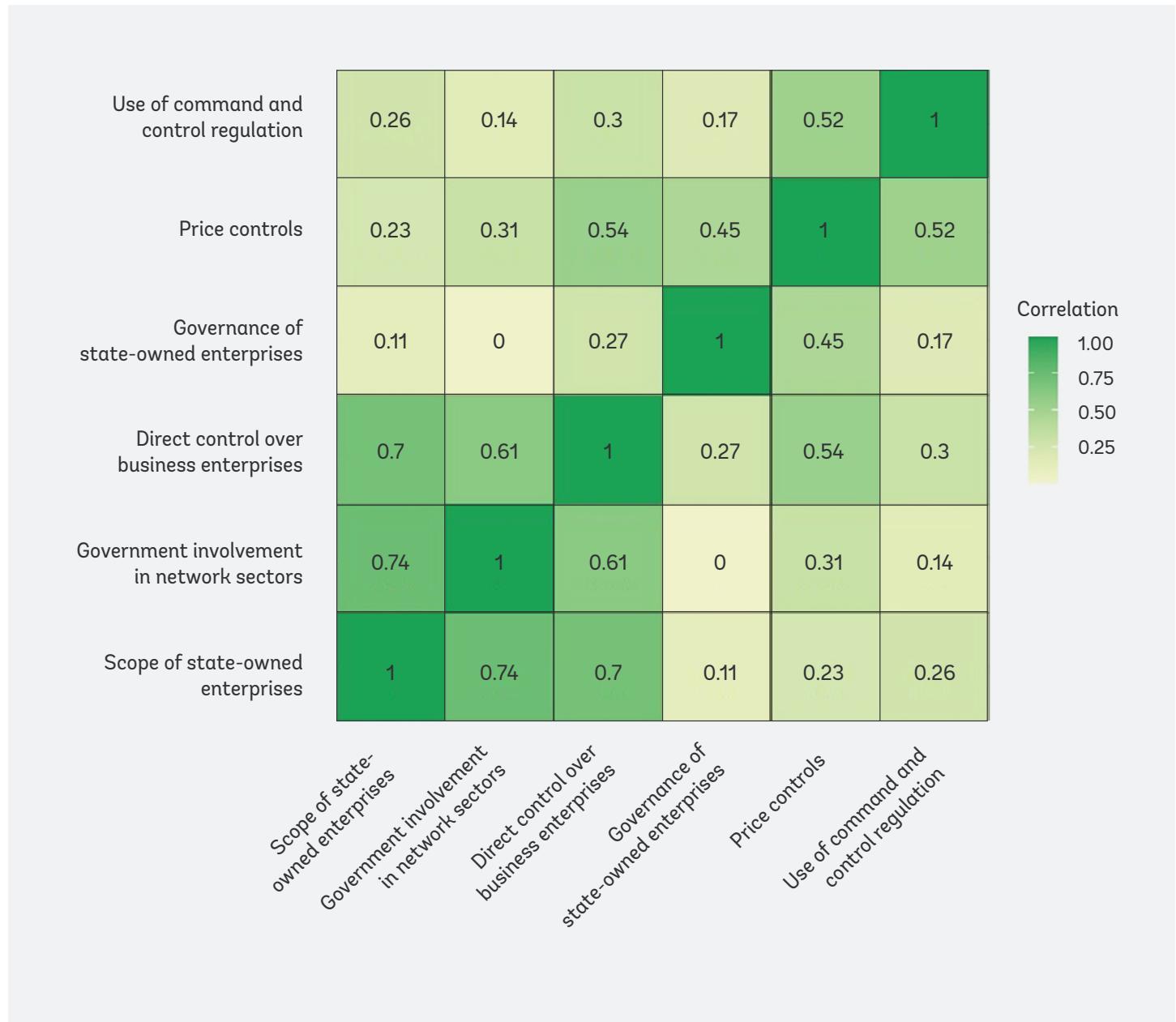
FIGURE A.2.5 - Correlation Heatmap for Public Finance Institutions



Source: World Bank Country Level Institutional Assessment and Review (CLIA) Dashboard.

Note: PFM – MIS = Public Financial Management – Management Information System.

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FIGURE A.2.6 - Correlation Heatmap for State-Owned Enterprise Corporate Governance

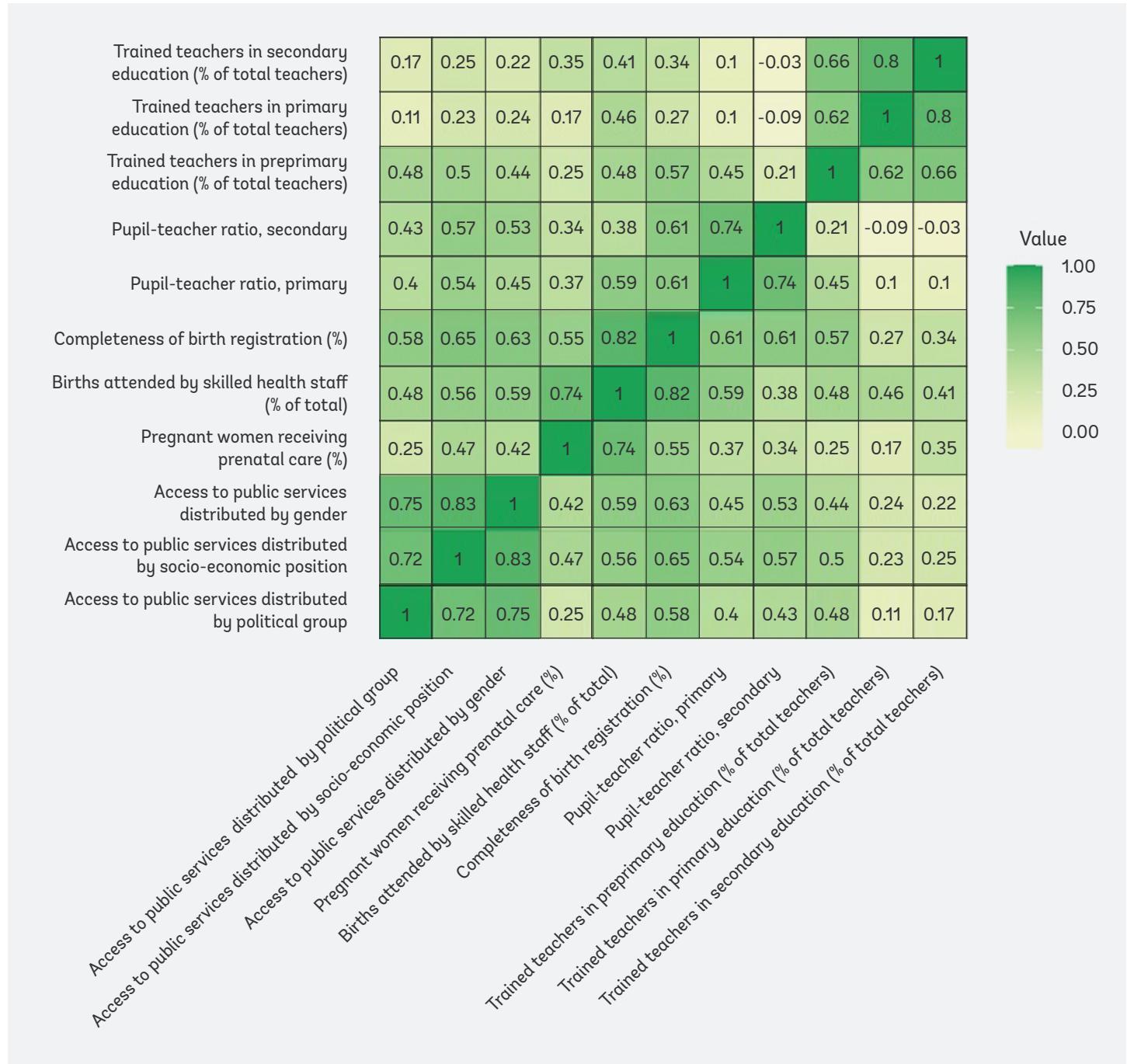
Source: World Bank Country Level Institutional Assessment and Review (CLiar) Dashboard.

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FIGURE A.2.7 - Correlation Heatmap for Labor and Social Protection Institutions

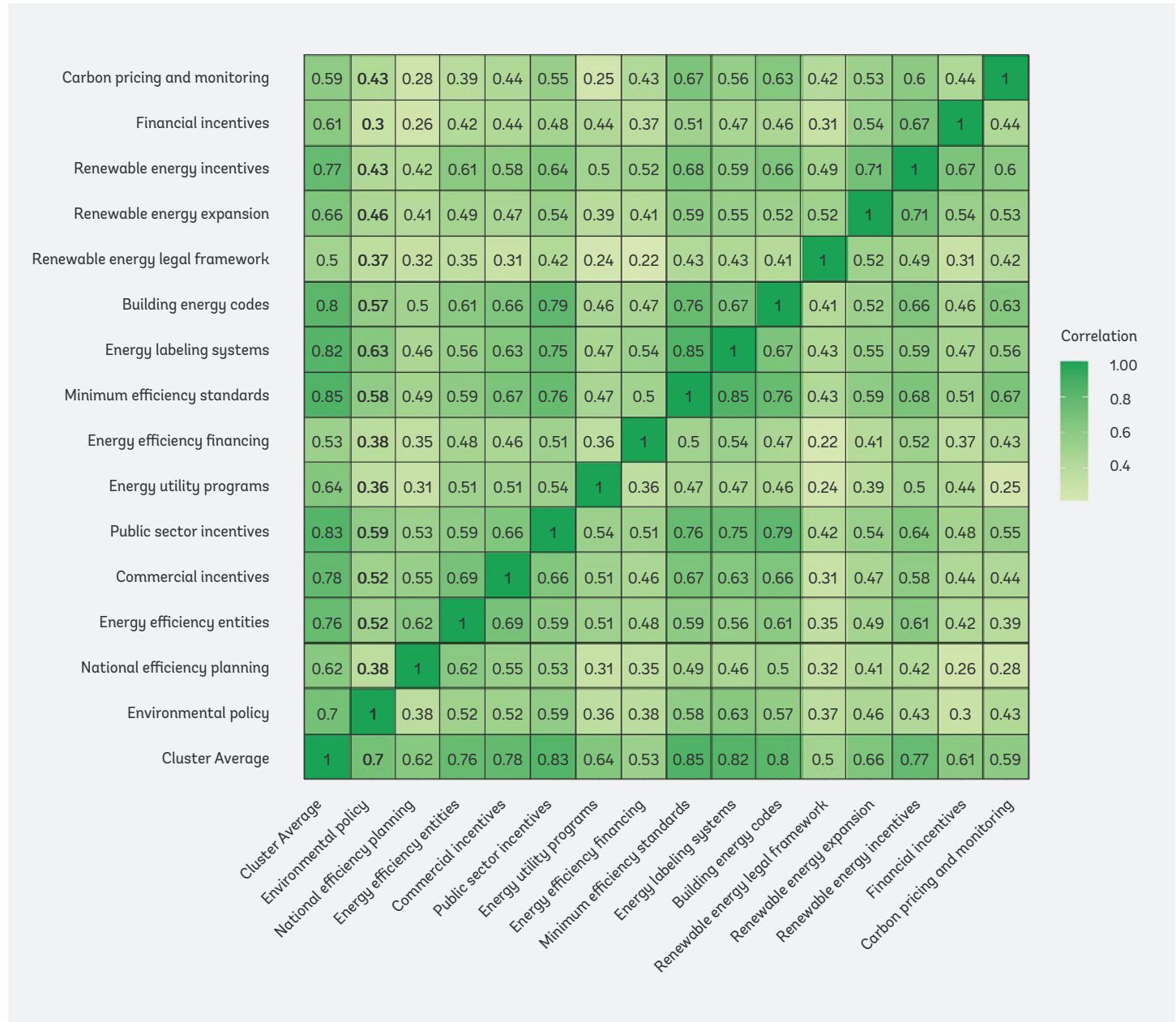
Source: World Bank Country Level Institutional Assessment and Review (CLiar) Dashboard.

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FIGURE A.2.8 - Correlation Heatmap for Service Delivery Institutions

Source: World Bank Country Level Institutional Assessment and Review (CLIAR) Dashboard.

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FIGURE A.2.9 - Correlation Heatmap for Climate Change and Environment Institutions

Source: World Bank Country Level Institutional Assessment and Review (CLAIR) Dashboard.

A.3 Robustness and Sensitivity for Static CTF: 5-year Average vs. Last Available Data

This section outlines robustness checks showing that the substantive results from the baseline benchmarking are not affected when alternative estimation methods are implemented. Baseline static CTF results rely on averaging indicators over the last five years to increase data coverage and measure performance more precisely, thereby smoothing over idiosyncratic shocks over time. Concerns may arise regarding these analytical decisions made by the team. For example, even five-year averages (a relatively short time frame) may severely punish (spare) countries that have been on a clear positive (negative) trend.

We address the robustness of the results with two tests: (1) a correlational analysis (visualized with a scatterplot) where the unit of analysis is a country-indicator combination, and (2) a histogram of the correlation for each indicator. Figure

A.3.1 shows a scatterplot of the values of country-indicator CTF-scores for the 5-year average against the last-year available. The CTF scores produced using these different approaches are clustered along the 45-degree line, indicating that they are strongly correlated and are broadly equal to one another. Figure A.3.2 summarizes the previous CTF scores at the indicator level, computing the correlation between the CTF scores using 5-year averages and last-year values for each indicator. For example, for the indicator “separation of powers,” we calculate the correlation of its two types of CTF scores (5-year vs. last-year) across countries. This gives us a final correlation score at the indicator level (e.g., 0.982). The same procedure is repeated for each indicator. This is shown in the histogram of all correlation scores for each indicator, showing that the majority of indicator-level correlation scores (96.4%) are above 0.95.

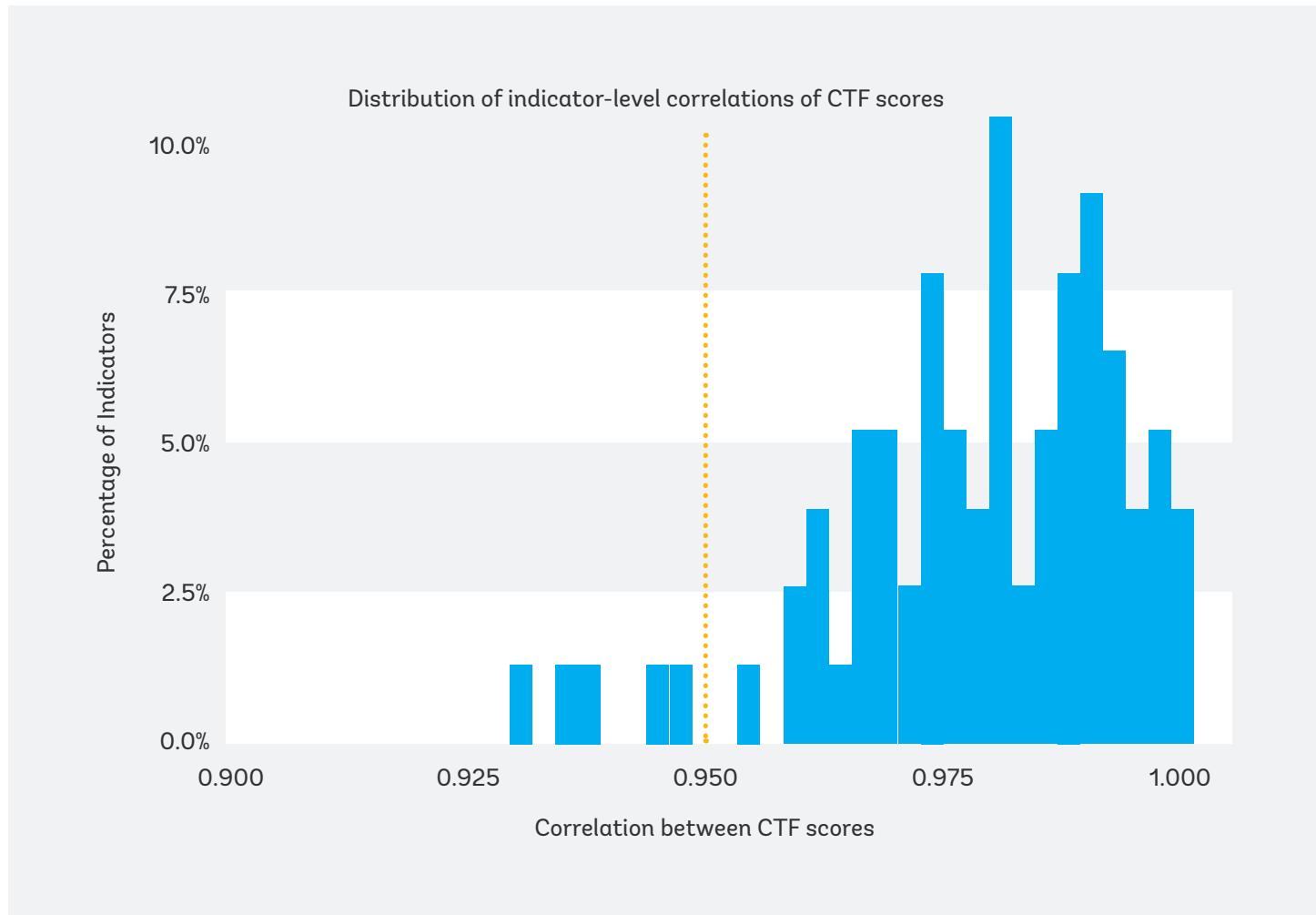
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FIGURE A.3.1 - Correlation between 5-Year Average CTF Score vs. Latest Available CTF Data, Using Country-Indicator



Source: World Bank Country Level Institutional Assessment and Review (CLIAIR) Dashboard.
Note: CTF = Closeness to Frontier.

> > >

FIGURE A.3.2 - Correlation between 5-Year Average CTF Score vs. Latest Available CTF Data, Using Indicator

Source: World Bank Country Level Institutional Assessment and Review (CLIA) Dashboard.

Note: CTF = Closeness to Frontier. A correlation above 0.95. 5 out of 137 (3.6%) indicators have a correlation below 0.95. No indicators have a correlation between 0.9.

A.4 Indicators Description and Coverage

Table A.4.1 and table A.4.2 describes benchmarked and non-benchmarked indicators respectively, including their definition/description, source, and number of countries covered. Table A.4.1 shows the percentage of complete records in the last five years and the percentage of coverage in the CTF static data ("Countries in CTF"). Table A.4.2 shows the percentage of years covered (1990–2022) and the percentage of

complete records in the last five years. Complete records are estimated based on country-year coverage from 1990 to 2022 (or 2018–2022 for the last five years), using the 218 countries and economies recognized by the World Bank as baseline. As such, it represents a very conservative estimate of completeness of records.

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TABLE A.4.1 - CLIAR Benchmarked Indicators Description and Coverage, by Institutional Cluster

Cluster	Indicator	Description	Source	Countries	Years	Complete records in last 5 years	Countries in CTF
Political Institutions	Democracy Status	The democracy status is made up of five criterion: Stateness, measured by the normative statement “There is clarity about the nation’s existence as a state with adequately established and differentiated power structures”; Political Participation, measured by the normative statement “The populace decides who rules and it has other political freedoms”; Rule of Law measured by the normative statement “State powers check and balance one another and ensure civil rights”; Stability of Democratic Institutions, measured by the normative statement “Democratic Institutions are capable of performing, and they are adequately accepted”; and Political and Social Integration, measured by the normative statement “Stable patterns of representation exist for mediating between society and the state; there is also a consolidated civic culture”	BTI	135	9	37%	62.67%
Political Institutions	Constraints on Gov. Powers	Government powers are effectively limited by the legislature; Government powers are effectively limited by the judiciary; Government powers are effectively limited by independent auditing and review; Government officials are sanctioned for misconduct; Government powers are subject to non-governmental checks; Transition of power is subject to the law.	WJP	140	8	60%	64.98%
Political Institutions	Separation of powers	To what extent is there a working separation of powers (checks and balances)?	BTI	135	9	37%	62.67%
Political Institutions	Legislative constraints on the executive index	To what extent is the legislature and government agencies (e.g., comptroller general, general prosecutor, or ombudsman) capable of questioning, investigating, and exercising oversight over the executive?	V-DEM	174	33	80%	80.65%

Table A.4.1 continued...

Cluster	Indicator	Description	Source	Countries	Years	Complete records in last 5 years	Countries in CTF
Political Institutions	Free and fair elections	This indicator assesses if: general elections are regularly conducted on the national level; universal suffrage with secret ballot is ensured; several parties with different platforms are able to run; and if political posts are filled according to election outcome. For this indicator evaluated the quality of elections considering if; the electoral management body is impartial and effective; registration procedures for voters, candidates and parties are transparent and fair; the polling procedures, including vote count, results verification and complaint resolution, are conducted in a transparent, impartial and correct manner; fair and equal media access is ensured for all candidates and parties; polling is accessible, secure and secret to ensure effective participation. This indicator is graded on a 1 to 10 scale, and a score over 6 is considered free and fair elections	BTI	135	9	37%	62.67%
Political Institutions	Political Rights	Political Rights is measured on a one-to-seven scale, with one representing the highest degree of Freedom and seven the lowest	Freedom House	195	33	90%	89.86%
Political Institutions	Power distributed by socio-economic position	Is political power distributed according to socioeconomic position? From “Wealthy people enjoy a virtual monopoly on political power. Average and poorer people have almost no influence.” to “Wealthy people have no more political power than those whose economic status”.	V-DEM	174	33	81%	80.65%
Political Institutions	Power distributed by social group	Is political power distributed according to social groups? From “Political power is monopolized by one social group comprising a minority of the population” to “All social groups have roughly equal political power or there are no strong ethnic, caste, linguistic, racial, religious, or regional differences to speak of. Social group characteristics are not relevant to politics.”	V-DEM	174	33	81%	80.65%

Table A.4.1 continued...

Cluster	Indicator	Description	Source	Countries	Years	Complete records in last 5 years	Countries in CTF
Political Institutions	Power distributed by gender	Is political power distributed according to gender? From “Men have a near-monopoly on political power” to “Men and women have roughly equal political power”.	V-DEM	174	33	81%	80.65%
Political Institutions	Lower chamber gender quota	0 represents countries with no national level gender quota and 4 represents countries where there are reserved seats in the legislature for women.	V-DEM	171	33	79%	79.26%
Political Institutions	Women political empowerment index	How politically empowered are women? Women's political empowerment is defined as a process of increasing capacity for women, leading to greater choice, agency, and participation in societal decision-making. It is understood to incorporate three equally-weighted dimensions: fundamental civil liberties, women's open discussion of political issues and participation in civil society organizations, and the descriptive representation of women in formal political positions. Aggregation: The index is formed by taking the average of women's civil liberties index (v2x_gencl), women's civil society participation index (v2x_gencs), and women's political participation index (v2x_genpp).	V-DEM	174	33	80%	80.65%
Social Institutions	Civil Liberties	Civil Liberties is measured on a one-to-seven scale, with one representing the highest degree of Freedom and seven the lowest	Freedom House	195	33	90%	89.86%
Social Institutions	Association and assembly rights	This indicator assesses to what extent can individuals form and join independent political or civic groups? To what extent can these groups operate and assemble freely? This considers: if the constitution guarantees freedom of association and assembly, and if these laws are enforced; if there are severe restrictions on assembly	BTI	135	9	37%	62.67%

Table A.4.1 continued...

Cluster	Indicator	Description	Source	Countries	Years	Complete records in last 5 years	Countries in CTF
		and association for all citizens or for particular groups; if the government uses intimidation, harassment or threats of retaliation to prevent citizens from exercising the rights to association and assembly (e.g. by arbitrarily arresting, detaining and imprisoning peaceful demonstrators or using excessive force); if the government uses transparent and non-discriminatory criteria in evaluating requests for permits to associate and/or assemble; if groups are able to operate free from unwarranted state intrusion or interference in their affairs					
Social Institutions	Political polarization	The extent to which political differences affect social relationships beyond political discussions. Societies are highly polarized if supporters of opposing political camps are reluctant to engage in friendly interactions, for example, in cluster functions, civic associations, their free time activities and workplaces Responses from 0 (Not at all. Supporters of opposing political camps generally interact in a friendly manner.) to 4 (Yes, to a large extent. Supporters of opposing political camps generally interact in a hostile manner).	V-DEM	174	33	80%	80.65%
Social Institutions	Press Freedom Index	The methodology is based on a definition of press freedom as “the ability of journalists as individuals and collectives to select, produce, and disseminate news in the public interest independent of political, economic, legal, and social interference and in the absence of threats to their physical and mental safety”. It uses five new indicators that shape the Index and provide a vision of press freedom in all its complexity: political context, legal framework, economic context, sociocultural context and safety. In the 180 countries and territories ranked	Press Freedom Index	176	20	81%	81.57%

Table A.4.1 continued...

Cluster	Indicator	Description	Source	Countries	Years	Complete records in last 5 years	Countries in CTF
		by RSF, these indicators are evaluated on the basis of a quantitative tally of abuses against journalists and media outlets, and a qualitative analysis based on the responses of hundreds of press freedom experts selected by RSF (including journalists, academics and human rights defenders) to more than 100 questions. Because of the change in methodology, care should be taken when comparing pre- and post-2021 rankings and scores.					
Social Institutions	Civil Society participation	Question: Are major CSOs routinely consulted by policymakers; how large is the involvement of people in CSOs; are women prevented from participating; and is legislative candidate nomination within party organization highly decentralized or made through party primaries? The sphere of civil society lies in the public space between the private sphere and the state. Here, citizens organize in groups to pursue their collective interests and ideals. We call these groups civil society organizations CSOs. CSOs include, but are by no means limited to, interest groups, labor unions, spiritual organizations if they are engaged in civic or political activities, social movements, professional associations, charities, and other non-governmental organizations. The core civil society index CCSi is designed to provide a measure of a robust civil society, understood as one that enjoys autonomy from the state and in which citizens freely and actively pursue their political and civic goals, however conceived. Aggregation: The index is formed by taking the point estimates from a Bayesian factor analysis model of the indicators for candidate selection — national/local (v2pscnslnl), CSO consultation (v2cscnslt),CSO participatory environment (v2csprtcpt), and CSO women participation (v2csgender).	V-DEM	174	33	81%	80.65%

Table A.4.1 continued...

Cluster	Indicator	Description	Source	Countries	Years	Complete records in last 5 years	Countries in CTF
Social Institutions	CSO entry and exit	Question: To what extent does the government achieve control over entry and exit by civil society organizations (CSOs) into public life? Responses: 0: Monopolistic control. The government exercises an explicit monopoly over CSOs. The only organizations allowed to engage in political activity, such as endorsing parties or politicians, sponsoring public issues forums, organizing rallies or demonstrations, engaging in strikes or publicly commenting on public officials and policies, are government-sponsored organizations. The government actively represses those who attempt to defy its monopoly on political activity. 1: Substantial control. The government licenses all CSOs and uses political criteria to bar organizations that are likely to oppose the government. There are at least some citizen-based organizations that play a limited role in politics independent of the government. The government actively represses those who attempt to flout its political criteria and bars them from any political activity. 2: Moderate control. Whether the government ban on independent CSOs is partial or full, some prohibited organizations manage to play an active political role. Despite its ban on organizations of this sort, the government does not or cannot repress them, due to either its weakness or political expediency. 3: Minimal control. Regardless of whether the government licenses CSOs, constitutional provisions exist that allow the government to ban organizations or movements that have a history of anti-democratic action. Such bans take place within the rule of law and conditions of judicial independence. 4: Unconstrained. Regardless of whether the government licenses CSOs, the government does not impede their formation and operation unless they	V-DEM	174	33	81%	80.65%

Table A.4.1 continued...

Cluster	Indicator	Description	Source	Countries	Years	Complete records in last 5 years	Countries in CTF
		are engaged in activities that seek to violently overthrow the government.					
Social Institutions	CSO repression	Does the government attempt to repress civil society organizations (CSOs)? Responses: 0: Severely. The government violently and actively pursues all real and even some imagined members of CSOs. They seek not only to deter the activity of such groups but to effectively liquidate them. 1: Substantially. In addition to the kinds of harassment outlined in responses 2 and 3 below, the government also arrests, tries, and imprisons leaders of and participants in oppositional CSOs who have acted lawfully. Other sanctions include disruption of public gatherings and violent sanctions of activists (beatings, threats to clusters, destruction of valuable property). 2: Moderately. In addition to material sanctions outlined in response 3 below, the government also engages in minor legal harassment (detentions, short-term incarceration) to dissuade CSOs from acting or expressing themselves. The government may also restrict the scope of their actions through measures that restrict association of civil society organizations with each other or political parties, bar civil society organizations from taking certain actions, or block international contacts. 3: Weakly. The government uses material sanctions (fines, firings, denial of social services) to deter oppositional CSOs from acting or expressing themselves. They may also use burdensome registration or incorporation procedures to slow the formation of new civil society organizations and sidetrack them from engagement. The government may also organize Government Organized Movements or NGOs (GONGOs) to crowd out independent organizations.	V-DEM	174	33	81%	80.65%

Table A.4.1 continued...

Cluster	Indicator	Description	Source	Countries	Years	Complete records in last 5 years	Countries in CTF
		4: No. Civil society organizations are free to organize, associate, strike, express themselves, and to criticize the government without fear of government sanctions or harassment.					
Social Institutions	Engaged society	Wide and independent public deliberations when important policy changes are being considered. 0 represents countries where public deliberation is never, or almost never allowed; 5 represents countries where a large numbers of non-elite groups as well as ordinary people tend to discuss major policies among themselves, in the media, in associations or neighborhoods, or in the streets, and grass-roots deliberation is common and unconstrained.	V-DEM	174	33	81%	80.65%
Social Institutions	Freedom of assembly and association	Measures whether people can freely attend community meetings, join political organizations, hold peaceful public demonstrations, sign petitions, and express opinions against government policies and actions without fear of retaliation.	WJP	140	8	60%	64.98%
Social Institutions	Freedom of academic and cultural expression	A measure on whether “there is academic freedom and freedom of cultural expression related to political issues.” Coded Responses: 0: Not respected by public authorities. Censorship and intimidation are frequent. Academic activities and cultural expressions are severely restricted or controlled by the government. 1: Weakly respected by public authorities. Academic freedom and freedom of cultural expression are practiced occasionally, but direct criticism of the government is mostly met with repression. 2: Somewhat respected by public authorities. Academic freedom and freedom of cultural expression are practiced	V-DEM	174	33	81%	80.65%

Table A.4.1 continued...

Cluster	Indicator	Description	Source	Countries	Years	Complete records in last 5 years	Countries in CTF
		routinely, but strong criticism of the government is sometimes met with repression. 3: Mostly respected by public authorities. There are few limitations on academic freedom and freedom of cultural expression, and resulting sanctions tend to be infrequent and soft. 4: Fully respected by public authorities. There are no restrictions on academic freedom or cultural expression. Scale: Ordinal, converted to interval by the measurement model.					
Social Institutions	Freedom of belief and religion	Measures whether members of religious minorities can worship and conduct religious practices freely and publicly, and whether non-adherents are protected from having to submit to religious laws.	WJP	140	8	60%	64.98%
Social Institutions	Freedom of opinion and expression	Measures whether an independent media, civil society organizations, political parties, and individuals are free to report and comment on government policies without fear of retaliation.	WJP	140	8	60%	64.98%
Social Institutions	Freedom from arbitrary interference with privacy	Measures whether the police or other government officials conduct physical searches without warrants, or intercept electronic communications of private individuals without judicial authorization	WJP	140	8	60%	64.98%
Social Institutions	Freedom of discussion for men	Are men able to openly discuss political issues in private homes and in public spaces? Responses: 0: Not respected. Hardly any freedom of expression exists for men. Men are subject to immediate and harsh intervention and harassment for expression of political opinions. 1: Weakly respected. Expressions of political opinions by men are frequently exposed to intervention and harassment. 2: Somewhat respected. Expressions	V-DEM	174	33	81%	80.65%

Table A.4.1 continued...

Cluster	Indicator	Description	Source	Countries	Years	Complete records in last 5 years	Countries in CTF
		of political opinions by men are occasionally exposed to intervention and harassment. 3: Mostly respected. There are minor restraints on freedom of expression in the private sphere, predominantly limited to a few isolated cases or only linked to soft sanctions. As a rule, however, there is no intervention or harassment if men make political statements. 4: Fully respected. Freedom of speech for men in their homes and in public spaces is unrestricted. Clarification: This indicator specifies the extent to which men are able to engage in private discussions, particularly on political issues, in private homes and public spaces, such as restaurants, public transport, sports events or at work, without fear of harassment by other members of the polity or the public authorities. Of interest are restrictions by the government and its agents but also cultural restrictions or customary laws that are enforced by other members of the polity, sometimes in informal ways. This question does not ask you to assess the relative freedom of men and women. Thus, it is correct to assign the lowest possible score to a country where men and women enjoy equal but extremely few rights to freedom of discussion.					
Social Institutions	Freedom of discussion for women	Are women able to openly discuss political issues in private homes and in public spaces? Responses: 0: Not respected. Hardly any freedom of expression exists for women. Women are subject to immediate and harsh intervention and harassment for expressing political opinions. 1: Weakly respected. Expressions of political opinions by women are frequently exposed to intervention and harassment. 2: Somewhat respected. Expressions of political opinions by women are occasionally exposed to intervention and harassment. 3: Mostly respected.	V-DEM	174	33	81%	80.65%

Table A.4.1 continued...

Cluster	Indicator	Description	Source	Countries	Years	Complete records in last 5 years	Countries in CTF
		There are minor restraints on freedom of expression in the private sphere, predominantly limited to a few isolated cases or only linked to soft sanctions. As a rule, however, there is no intervention or harassment if women make political statements. 4: Fully respected. Freedom of speech by women in their homes and in public spaces is unrestricted. Clarification: This indicator specifies the extent to which women are able to engage in private discussions, particularly on political issues, in private homes and public spaces, such as restaurants, public transport, sports events or at work, without fear of harassment by other members of the polity or the public authorities. Of interest are restrictions by the government and its agents but also cultural restrictions or customary laws that are enforced by other members of the polity, sometimes in informal ways. This question does not ask you to assess the relative freedom of men and women. Thus, it is correct to assign the lowest possible score to a country where men and women enjoy equal but extremely few rights to freedom of discussion.					
Social Institutions	Women's Social Equality Index	CLIAR made index based on Women, Business and the Law indicators for mobility (constraints on freedom of movement), marriage (legal constraints related to marriage), and assets (gender differences in property and inheritance).	CLIAR	190	33	88%	88.02%
Absence of Corruption	Absence of Corruption	It is an index of 4 items: Government officials in the executive branch do not use public office for private gain; Government officials in the judicial branch do not use public office for private gain; Government officials in the	WJP	140	8	60%	64.98%

Table A.4.1 continued...

Cluster	Indicator	Description	Source	Countries	Years	Complete records in last 5 years	Countries in CTF
		police & the military do not use public office for private gain; Government officials in the legislative branch do not use public office for private gain.					
Absence of Corruption	Political Corruption	How pervasive is political corruption? Clarification: The directionality of the V-Dem corruption index runs from less corrupt to more corrupt unlike the other V-Dem variables that generally run from less democratic to more democratic situation. The corruption index includes measures of six distinct types of corruption that cover both different areas and levels of the polity realm, distinguishing between executive, legislative and judicial corruption. Within the executive realm, the measures also distinguish between corruption mostly pertaining to bribery and corruption due to embezzlement. Finally, they differentiate between corruption in the highest echelons of the executive at the level of the rulers/cabinet on the one hand, and in the public sector at large on the other. The measures thus tap into several distinguished types of corruption: both 'petty' and 'grand'; both bribery and theft; both corruption aimed and influencing law making and that affecting implementation. Aggregation: The index is arrived at by taking the average of (a) public sector corruption index (v2x_pubcorr); (b) executive corruption index (v2x_execcorr); (c) the indicator for legislative corruption (v2lgcrprt); and (d) the indicator for judicial corruption (v2jucorrdc). In other words, these four different government spheres are weighted equally in the resulting index. We replace missing values for countries with no legislature by only taking the average of a, b and d.	V-DEM	174	33	81%	80.65%

Table A.4.1 continued...

Cluster	Indicator	Description	Source	Countries	Years	Complete records in last 5 years	Countries in CTF
Absence of Corruption	Executive bribery and corrupt exchanges	Question: How routinely do members of the executive (the head of state, the head of government, and cabinet ministers), or their agents, grant favors in exchange for bribes, kickbacks, or other material inducements? Responses: 0: It is routine and expected. 1: It happens more often than not in dealings with the executive. 2: It happens but is unpredictable: those dealing with the executive find it hard to predict when an inducement will be necessary. 3: It happens occasionally but is not expected. 4: It never, or hardly ever, happens.	V-DEM	174	33	81%	80.65%
Absence of Corruption	Government regulations are applied and enforced without improper influence	Measures whether the enforcement of regulations is subject to bribery or improper influence by private interests, and whether public services, such as the issuance of permits and licenses and the administration of public health services, are provided without bribery or other inducements.	WJP	140	8	60%	64.98%
Transparency and Accountability Institutions	Right to information	Measures whether requests for information held by a government agency are granted, whether these requests are granted within a reasonable time period, if the information provided is pertinent and complete, and if requests for information are granted at a reasonable cost and without having to pay a bribe. It also measures whether people are aware of their right to information, and whether relevant records are accessible to the public upon request. Coded from 0 to 1, with higher scores indicating stronger rights.	WJP	140	8	60%	64.98%
Transparency and Accountability Institutions	Publicized laws and government data	Measures whether basic laws and information on legal rights are publicly available, presented in plain language, and made accessible in all languages used in the country or jurisdiction. It also measures the quality and	WJP	140	8	60%	64.98%

Table A.4.1 continued...

Cluster	Indicator	Description	Source	Countries	Years	Complete records in last 5 years	Countries in CTF
		accessibility of information published by the government in print or online, and whether administrative regulations, drafts of legislation, and high court decisions are made accessible to the public in a timely manner					
Transparency and Accountability Institutions	Open Budget Index	A country's budget transparency score, reflected on the Open Budget Index, assesses the public's access to timely and comprehensive budget information. A transparency score of 61 (out of 100) or higher indicates a country is publishing sufficient information to support informed public debate.	Open Budget Survey	120	8	22%	55.76%
Transparency and Accountability Institutions	Complaint mechanisms	Measures whether people are able to bring specific complaints to the government about the provision of public services or the performance of government officers in carrying out their legal duties in practice, and how government officials respond to such complaints. Coded from 0 to 1, with higher scores indicating stronger mechanisms.	WJP	140	8	60%	64.98%
Transparency and Accountability Institutions	Digital Citizen Engagement Index score	The Digital Citizen Engagement Index (6 indicators) measures aspects of public participation platforms, citizen feedback mechanisms, open data, and open government portals.	GTMI	196	2	36%	90.78%
Justice Institutions	Judicial accountability	When judges are found responsible for serious misconduct, how often are they removed from their posts or otherwise disciplined? Responses: 0: Never. 1: Seldom. 2: About half of the time. 3: Usually. 4: Always. Scaled to range from 0 (lowest score) to 1 (highest score).	V-DEM	174	33	81%	80.65%
Justice Institutions	Independent judiciary	An independent judiciary has the ability and autonomy to: interpret and review existing laws, legislation and policies,	BTI	135	9	37%	62.67%

Table A.4.1 continued...

Cluster	Indicator	Description	Source	Countries	Years	Complete records in last 5 years	Countries in CTF
		both public and civil, pursue its own reasoning, free from the influence of political decision-makers or powerful groups and individuals and from corruption, develop a differentiated organization, including legal education, jurisprudence, regulated appointment of the judiciary, rational proceedings, professionalism, channels of appeal and court administration.					
Transparency and Accountability Institutions	High court independence	Question: When the high court in the judicial system is ruling in cases that are salient to the government, how often would you say that it makes decisions that merely reflect government wishes regardless of its sincere view of the legal record? Clarification: We are seeking to identify autonomous judicial decision-making and its absence. Decisions certainly can reflect government wishes without "merely reflecting" those wishes, i.e. a court can be autonomous when its decisions support the government's position. This is because a court can be fairly persuaded that the government's position is meritorious. By "merely reflect the wishes of the government" we mean that the court's own view of the record, its sincere evaluation of the record, is irrelevant to the outcome. The court simply adopts the government's position regardless of its sincere view of the record. Responses: 0: Always. 1: Usually. 2: About half of the time. 3: Seldom.	V-DEM	174	33	81%	80.65%
Justice Institutions	Judicial branch corruption	Measures whether judges and judicial officials refrain from soliciting and accepting bribes to perform duties or expedite processes, and whether the judiciary and judicial rulings are free of improper influence by the government, private interests, or criminal organizations.	V-DEM	174	33	81%	80.65%

Table A.4.1 continued...

Cluster	Indicator	Description	Source	Countries	Years	Complete records in last 5 years	Countries in CTF
Justice Institutions	Lower court independence	When judges not on the high court are ruling in cases that are salient to the government, how often would you say that their decisions merely reflect government wishes regardless of their sincere view of the legal record? Responses: 0: Always. 1: Usually. 2: About half of the time. 3: Seldom. 4: Never.	V-DEM	174	33	81%	80.65%
Justice Institutions	Fair trial	Definition: The indicator specifies the extent to which citizens have the right to a fair trial in practice: they are not subjected to arbitrary arrest, detention or exile; and they have the right to recognition as a person before the law; the right to be under the jurisdiction of and seek redress from competent, independent and impartial tribunals; and the right to be heard and to be tried without undue delay if arrested, detained or charged with a criminal offence. Indicator Scale: 1. Severely restricted: Fair trials are very unlikely. The courts are totally subordinated to the will of government or the justice system is profoundly undermined by arbitrary arrests, incompetence, corruption and intimidation. 2. Substantially restricted: Some elements of fair trials exist but the courts are not fully independent of the government and/or the justice system is characterized by widespread corruption, intimidation and inefficiency. 3. Moderately restricted: The courts are generally independent of the government, but the justice system is characterized by moderate degrees of corruption or inefficiency. 4. Unrestricted: All elements of fair trials are respected. No arbitrary arrests take place, the courts are competent, independent and impartial; and hearings and trials generally follow arrest and charge within a reasonable time. Scaled to range from 0 (lowest	Global State of Democracy	171	33	79%	79.26%

Table A.4.1 continued...

Cluster	Indicator	Description	Source	Countries	Years	Complete records in last 5 years	Countries in CTF
		score) to 1 (highest score). Hosted by GSOD. Original source: The Civil Liberty Dataset (Skaanning, 2020).					
Justice Institutions	Expropriation without lawful process and adequate compensation	Measures whether the government respects the property rights of people and corporations, refrains from the illegal seizure of private property, and provides adequate compensation when property is legally expropriated	WJP	140	8	60%	64.98%
Justice Institutions	Due process of law and rights of the accused	Measures whether the basic rights of criminal suspects are respected, including the presumption of innocence and the freedom from arbitrary arrest and unreasonable pre-trial detention. It also measures whether criminal suspects are able to access and challenge evidence used against them, whether they are subject to abusive treatment, and whether they are provided with adequate legal assistance. In addition, it measures whether the basic rights of prisoners are respected once they have been convicted of a crime.	WJP	140	8	60%	64.98%
Justice Institutions	Alternative dispute resolution mechanisms	Alternative dispute resolution mechanisms are accessible, impartial, and effective (WJP Rule of Law Index)	WJP	140	8	60%	64.98%
Justice Institutions	People can access and afford civil justice	People can access & afford civil justice; Civil justice is free of discrimination; Civil justice is free of corruption; Civil justice is free of improper government influence; Civil justice is not subject to unreasonable delay; Civil justice is effectively enforced; Alternative dispute resolution mechanisms are accessible, impartial, and effective.	WJP	140	8	60%	64.98%

Table A.4.1 continued...

Cluster	Indicator	Description	Source	Countries	Years	Complete records in last 5 years	Countries in CTF
Justice Institutions	Civil justice is effectively enforced	Measures the effectiveness and timeliness of the enforcement of civil justice decisions and judgments in practice.	WJP	140	8	60%	64.98%
Justice Institutions	Civil justice is not subject to unreasonable delays	Measures whether civil justice proceedings are conducted and judgments are produced in a timely manner without unreasonable delay.	WJP	140	8	60%	64.98%
Justice Institutions	Criminal adjudication system is timely and effective	Criminal investigation system is effective; Criminal adjudication system is timely and effective; Correctional system is effective in reducing criminal behavior; Criminal justice system is impartial; Criminal justice system is free of corruption; Criminal justice system is free of improper government influence; Due process of the law & rights of the accused.	WJP	140	8	60%	64.98%
Justice Institutions	Criminal investigation system is effective	Measures whether perpetrators of crimes are effectively apprehended and charged. It also measures whether police, investigators, and prosecutors have adequate resources, are free of corruption, and perform their duties competently.	WJP	140	8	60%	64.98%
Justice Institutions	Criminal system is impartial	Measures whether the police and criminal judges are impartial and whether they discriminate in practice based on socio-economic status, gender, ethnicity, religion, national origin, sexual orientation, or gender identity.	WJP	140	8	60%	64.98%
Justice Institutions	Access to justice for men	Do men enjoy secure and effective access to justice? Clarification: This question specifies the extent to which men can bring cases before the courts without risk to their personal safety, trials are fair, and men have effective ability to seek redress if public authorities violate their	V-DEM	174	33	81%	80.65%

Table A.4.1 continued...

Cluster	Indicator	Description	Source	Countries	Years	Complete records in last 5 years	Countries in CTF
		rights, including the rights to counsel, defense, and appeal. This question does not ask you to assess the relative access to justice men and women. Thus, it is possible to assign the lowest possible score to a country even if men and women enjoy equal — and extremely limited — access to justice. Responses: 0: Secure and effective access to justice for men is non-existent. 1: Secure and effective access to justice for men is usually not established or widely respected. 2: Secure and effective access to justice for men is inconsistently observed. Minor problems characterize most cases or occur rather unevenly across different parts of the country. 3: Secure and effective access to justice for men is usually observed. 4: Secure and effective access to justice for men is almost always observed.					
Justice Institutions	Access to justice for women	Do women enjoy equal, secure and effective access to justice? This question specifies the extent to which women can bring cases before the courts without risk to their personal safety, trials are fair, and women have effective ability to seek redress if public authorities violate their rights, including the rights to counsel, defense, and appeal. This question does not ask you to assess the relative access to justice men and women. Thus, it is possible to assign the lowest possible score to a country even if men and women enjoy equal — and extremely limited — access to justice. Responses: 0: Secure and effective access to justice for women is non-existent. 1: Secure and effective access to justice for women is usually not established or widely respected. 2: Secure and effective access to justice for women is inconsistently observed. Minor problems characterize most cases or	V-DEM	174	33	81%	80.65%

Table A.4.1 continued...

Cluster	Indicator	Description	Source	Countries	Years	Complete records in last 5 years	Countries in CTF
		occur rather unevenly across different parts of the country. 3: Secure and effective access to justice for women is usually observed. 4: Secure and effective access to justice for women is almost always observed.					
Public Finance Institutions	Monetary stability	To what extent does the monetary authority pursue and communicate a consistent monetary stabilization policy?	BTI	135	9	37%	62.67%
Public Finance Institutions	Fiscal stability	To what extent do the government's budgetary policies support fiscal stability?	BTI	135	9	37%	62.67%
Public Finance Institutions	Debt Transparency Index	The debt transparency index is obtained as a simple average of the World Bank's debt reporting heatmap sub-components that measure instrument and sectorial coverage of debt statistics, availability of financial terms on new loans, and publication of DMS and ABP.	CLIAR	74	2	14%	34.56%
Public Finance Institutions	PFM Management Information Systems	CLIAR made Index of PFM MIS. Considers whether there's an operational FMIS (GTMI_I-5), a TSA (GTMI_I-6), a Tax MIS (GTMI_I-7), a DMS (GTMI_I-13), and a PIMS (GTMI_I-14) in place.	CLIAR	196	1	18%	90.78%
Public Finance Institutions	Budget Documentation	The comprehensiveness of information provided in the annual budget documentation, as measured against a specified list of basic and additional elements.	PEFA	61	7	4%	17.51%
Public Finance Institutions	Fiscal risk reporting	The extent to which fiscal risks to central government are reported.	PEFA	61	7	4%	17.51%
Public Finance Institutions	Public investment management	The extent to which the government conducts economic appraisals, selects, projects the costs, and monitors the implementation of public investment projects, with emphasis on the largest and most significant projects.	PEFA	61	7	4%	17.51%

Table A.4.1 continued...

Cluster	Indicator	Description	Source	Countries	Years	Complete records in last 5 years	Countries in CTF
Public Finance Institutions	Public asset management	PI-12 Public asset management. Based on Financial asset monitoring, Nonfinancial asset monitoring, and Transparency of asset disposal.	PEFA	61	7	4%	17.51%
Public Finance Institutions	Debt management	PI-13 Debt management. Based on Recording and reporting of debt and guarantees, Approval of debt and guarantees, and Debt management strategy	PEFA	61	7	4%	17.51%
Public Finance Institutions	Macroeconomic and fiscal forecasting	The ability of a country to develop robust macroeconomic and fiscal forecasts, which are crucial to developing a sustainable fiscal strategy and ensuring greater predictability of budget allocations.	PEFA	61	7	4%	17.51%
Public Finance Institutions	Fiscal strategy	PI-15 Fiscal strategy. Based on the Fiscal impact of policy proposals, and the Fiscal strategy adoption.	PEFA	61	7	4%	17.51%
Public Finance Institutions	Medium term perspective in expenditure budgeting	The extent to which expenditure budgets are developed for the medium term within explicit medium-term budget expenditure ceilings. It also examines the extent to which annual budgets are derived from medium-term estimates and the degree of alignment between medium-term budget estimates and strategic plans.	PEFA	61	7	4%	17.51%
Public Finance Institutions	Budget preparation process	The effectiveness of participation by relevant stakeholders in the budget preparation process, including political leadership, and whether that participation is orderly and timely.	PEFA	61	7	4%	17.51%
Public Finance Institutions	Legislative scrutiny of budgets	This indicator assesses the nature and extent of legislative scrutiny of the annual budget. It considers the extent to which the legislature scrutinizes, debates, and approves the annual budget, including the extent to which the legislature's procedures for scrutiny are well established	PEFA	61	7	4%	17.51%

Table A.4.1 continued...

Cluster	Indicator	Description	Source	Countries	Years	Complete records in last 5 years	Countries in CTF
Public Finance Institutions	Revenue administration	and adhered to. The indicator also assesses the existence of rules for in-year amendments to the budget without ex ante approval by the legislature.	PEFA	61	7	4%	17.51%
Public Finance Institutions	Accounting for revenues	PI-19 Revenue administration. Based on Rights and obligations for revenue measures, Revenue risk management, Revenue audit and investigation, Revenue arrears monitoring.	PEFA	61	7	4%	17.51%
Public Finance Institutions	Predictability of in-year resource allocation	The procedures for recording and reporting revenue collections, consolidating revenues collected, and reconciling tax revenue accounts. It covers both tax and nontax revenues collected by the central government.	PEFA	61	7	4%	17.51%
Public Finance Institutions	Expenditure arrears	The extent to which the central ministry of finance is able to forecast cash commitments and requirements and to provide reliable information on the availability of funds to budgetary units for service delivery.	PEFA	61	7	4%	17.51%
Public Finance Institutions	Payroll controls	The extent to which there is a stock of arrears, and whether any systemic problem in this regard is being addressed and brought under control.	PEFA	61	7	4%	17.51%
Public Finance Institutions	Procurement	How the payroll for public servants is managed, how changes are handled, and how consistency with personnel records management is achieved.	PEFA	61	7	4%	17.51%
Public Finance Institutions	Internal controls on nonsalary expenditure	PI-24. Based on Procurement monitoring, Procurement methods, Public access to procurement information, and Procurement complaints management.	PEFA	61	7	4%	17.51%

Table A.4.1 continued...

Cluster	Indicator	Description	Source	Countries	Years	Complete records in last 5 years	Countries in CTF
Public Finance Institutions	Internal audit effectiveness	Measures the effectiveness of the standards and procedures applied in internal audit	PEFA	61	7	4%	17.51%
Public Finance Institutions	Financial data integrity	Measures the standards and procedures applied in internal audit	PEFA	61	7	4%	17.51%
Public Finance Institutions	In-year budget reports	The extent to which treasury bank accounts, suspense accounts, and advance accounts are regularly reconciled and how the processes support the integrity of financial data.	PEFA	61	7	4%	17.51%
Public Finance Institutions	Annual financial reports	The extent to which annual financial statements are complete, timely, and consistent with generally accepted accounting principles and standards.	PEFA	61	7	4%	17.51%
Public Finance Institutions	External audit	External audit. Based on Audit coverage and standards, Submission of audit reports to the legislature, External audit follow-up, Supreme Audit Institution, independence	PEFA	61	7	4%	17.51%
Public Finance Institutions	Public procurement of energy efficiency products	Are there specific policies or mandated guidelines for public procurement of energy-efficient products and services on the following levels? Are there guidelines or tools to help identify energy-efficient options for procurement (eg: EE calculators, technical specifications, product rating catalogues)?	RISE	140	12	52%	64.98%
Public HRM Institutions	Rigorous and impartial public administration	Question: Are public officials rigorous and impartial in the performance of their duties? Responses: 0: The law is not respected by public officials. Arbitrary or biased administration of the law is rampant. 1: The law is weakly respected by public officials. Arbitrary or biased administration of the law is widespread. 2: The law is modestly respected by public officials. Arbitrary or biased administration of the law is moderate. 3: The law is	V-DEM	174	33	81%	80.65%

Table A.4.1 continued...

Cluster	Indicator	Description	Source	Countries	Years	Complete records in last 5 years	Countries in CTF
		mostly respected by public officials. Arbitrary or biased administration of the law is limited. 4: The law is generally fully respected by the public officials. Arbitrary or biased administration of the law is rare. Clarification This question focuses on the extent to which public officials generally abide by the law and treat like cases alike; or, conversely, the extent to which public administration is characterized by arbitrariness and bias (i.e. nepotism, cronyism or discrimination). The question covers the public officials who handle the cases of ordinary people. If no functioning public administration exists, the lowest score (0) applies.					
Public HRM Institutions	Efficient use of assets	To what extent does the government make efficient use of available human, financial and organizational resources?	BTI	135	9	37%	62.67%
Public HRM Institutions	Criteria for appointment decisions in the state administration	To what extent are appointment decisions in the state administration based on personal and political connections, as opposed to skills and merit? Clarification: Appointment decisions include hiring, firing and promotion in the state administration. Note that the question refers to the typical de facto (rather than de jure) situation obtaining in the state administration, excluding the armed forces. If there are large differences between different branches of the state administration or between top and lower level state administrators please try to consider the average when answering the question. Responses: from 0: All appointment decisions in the state administration are based on personal or political connections, to 4: None of the appointment decisions in the state administration are based on personal or political connections. All are based on skills and merit.	V-DEM	174	33	81%	80.65%

Table A.4.1 continued...

Cluster	Indicator	Description	Source	Countries	Years	Complete records in last 5 years	Countries in CTF
Public HRM Institutions	Access to state jobs by political group	Are state jobs equally open to qualified individuals regardless of their association with a political group? A political group is defined as those who are affiliated with a particular political party or candidate, or a group of parties/candidates. Responses: 0: Extreme. Because of their political group affiliation, 75 percent (%) or more of the population, even if qualified, lack access to state jobs. 1: Unequal. Because of their political group affiliation, 25 percent (%) or more of the population, even if qualified, lack access to state jobs. 2: Somewhat Equal. Because of their political group affiliation, 10 to 25 percent (%) of the population, even if qualified, lack access to state jobs. 3: Relatively Equal. Because of their political group affiliation, 5 to 10 percent (%) of the population, even if qualified, lack access to state jobs. 4: Equal. Because of their political group affiliation, less than 5 percent (%) of the population, even if qualified, lack access to state jobs.	V-DEM	174	33	80%	80.65%
Public HRM Institutions	Access to state jobs by socio-economic position	Are state jobs equally open to qualified individuals regardless of socio-economic position? Socio-economic position defines groups based on attributes of wealth, occupation, or other economic circumstances such as owning property. Responses: 0: Extreme. Because of poverty or low income, 75 percent (%) or more of the population, even if qualified, lack access to state jobs. 1: Unequal. Because of poverty or low income, makes 25 percent (%) or more of the population, even if qualified, lack access to state jobs. 2: Somewhat Equal. Because of poverty or low income, 10 to 25 percent (%) of the population, even if qualified, lack access to state jobs. 3: Relatively Equal. Because of poverty or low income, 5 to	V-DEM	174	33	80%	80.65%

Table A.4.1 continued...

Cluster	Indicator	Description	Source	Countries	Years	Complete records in last 5 years	Countries in CTF
Digital and Data Institutions	Core Government Systems Index (CGSI)	10 percent (%) of the population, even if qualified, lack access to state jobs. 4: Equal. Because of poverty or low The Core Government Systems Index (17 indicators) captures the key aspects of a whole-of-government approach, including government cloud, interoperability framework and other platforms.	GTMI	196	2	36%	90.78%
Digital and Data Institutions	GovTech Enablers Index (GTEI)	The GovTech Enablers Index (16 indicators) captures strategy, Institutions, laws, and regulations, as well as digital skills, and innovation policies and programs, to foster GovTech.	GTMI	196	2	36%	90.78%
Digital and Data Institutions	Public Service Delivery Index (PSDI)	The Public Service Delivery Index (9 indicators) measures the maturity of online public service portals, with a focus on citizen centric design and universal accessibility.	GTMI	196	2	36%	90.78%
Digital and Data Institutions	Censuses and Surveys	Availability of recent censuses and surveys covering broad areas. The following censuses and surveys are considered: Population & Housing census, Agriculture census, Business/establishment census, Household Survey on income/ consumption/ expenditure/ budget/ Integrated Survey, Agriculture survey, Labor Force Survey, Health/Demographic survey, Business/establishment survey. Source: NSO websites, World Bank microdata library, ILO microdata library, IHSN microdata library.	SPI	190	16	35%	88.02%
Digital and Data Institutions	Standards and Methods	This set of indicators is based on countries' use of internationally accepted and recommended methodologies, classifications and standards regarding data integration. These indicators help facilitate data exchange and provide the foundation for the preparation of relevant statistical indicators. The following methods and	SPI	190	16	35%	88.02%

Table A.4.1 continued...

Cluster	Indicator	Description	Source	Countries	Years	Complete records in last 5 years	Countries in CTF
		standards are considered: System of national accounts in use, National Accounts base year, Classification of national industry, CPI base year, Classification of household consumption, Classification of status of employment, Central government accounting status, Compilation of government finance statistics, Compilation of monetary and financial statistics, Business process. Further work could improve the validity of this indicator and reduce the risk that countries may be incentivized to adopt only traditional standards and methods and neglect innovative solutions that may be more valid in the current context.					
Business Environment	Property rights	Do citizens enjoy the right to private property? Clarification: Private property includes the right to acquire, possess, inherit, and sell private property, including land. Limits on property rights may come from the state which may legally limit rights or fail to enforce them; customary laws and practices; or religious or social norms. This question concerns the right to private property, not actual ownership of property.	V-DEM	174	33	81%	80.65%
Business Environment	Competition Policy	To what level have the fundamentals of market-based competition developed? The main focus of this question is to assess if free and fair competition is guaranteed by an institutional framework that ensures unrestricted participation in the market and a level playing field for all market participants. From “Market competition is present only in small segments of the economy and its institutional framework is rudimentary. Rules for market participants are unreliable and frequently set arbitrarily. The informal	BTI	135	9	37%	62.67%

Table A.4.1 continued...

Cluster	Indicator	Description	Source	Countries	Years	Complete records in last 5 years	Countries in CTF
		sector is large.” to “Market competition is consistently defined and implemented both macroeconomically and microeconomically. There are state-guaranteed rules for market competition with equal opportunities for all market participants. The informal sector is very small.”					
Business Environment	Regulatory enforcement	Government regulations are effectively enforced; Government regulations are applied & enforced without improper influence; Administrative proceedings are conducted without unreasonable delay; Due process is respected in administrative proceedings; The government does not expropriate without lawful process & adequate compensation.	WJP	140	8	60%	64.98%
Business Environment	Efficiency of the clearance process	Efficiency of customs clearance processes (i.e. speed, simplicity and predictability of formalities) by border control agencies, including customs	WB International LPI	166	6	15%	73.27%
Business Environment	Bank concentration (%)	Assets of three largest commercial banks as a share of total commercial banking assets. Total assets include total earning assets, cash and due from banks, foreclosed real estate, fixed assets, goodwill, other intangibles, current tax assets, deferred tax assets, discontinued operations and other assets.	GFDB	176	22	56%	76.04%
Business Environment	Women, Business and Law Entrepreneurship Index	Analyzes constraints on women's starting and running businesses.	WBL	190	33	88%	88.02%

Table A.4.1 continued...

Cluster	Indicator	Description	Source	Countries	Years	Complete records in last 5 years	Countries in CTF
Business Environment	Customs Management Information System	Survey question: Is there a Customs Management Information System in place? Measured by 0= No, 1= Implementation in progress, 2= Yes (in use)	GTMI	196	1	18%	90.78%
Business Environment	Freedom of foreigners to visit	Freedom of foreigners to visit (Robert Lawson and Jayme Lemke 2012)	Fraser Institute, Lawson and Lemke (2012)	165	16	46%	76.50%
SOE Corporate Governance	Scope of state-owned enterprises	It measures whether the government controls at least one firm in a number of business sectors, with a higher weight given to the key network sectors on which the PMR exercise focuses.	OECD PMR	49	1	5%	23.04%
SOE Corporate Governance	Government involvement in network sectors	It measures the size of the government's stake in the largest firm in key network sectors.	OECD PMR	49	1	5%	23.04%
SOE Corporate Governance	Direct control over business enterprises	It measures the existence of special voting rights by the government in privately owned firms and constraints to the sale of government stakes in publicly controlled firms.	OECD PMR	49	1	5%	23.04%
SOE Corporate Governance	Governance of state-owned enterprises	It captures how policymakers interact with stakeholders when shaping regulations affecting business communities. It considers: publication of forward regulatory plans; consultation on proposed regulations; report back on the results of that consultation process; conduct regulatory impact assessment; laws are made publicly accessible.	OECD PMR	49	1	5%	23.04%

Table A.4.1 continued...

Cluster	Indicator	Description	Source	Countries	Years	Complete records in last 5 years	Countries in CTF
SOE Corporate Governance	Price controls	It measures whether tariffs are regulated and whether there are laws and regulations that limit competition. Higher values mean worse performance.	OECD PMR	49	1	5%	23.04%
SOE Corporate Governance	Use of command and control regulation	It measures the degree of autonomy of SOEs for taking market-related decisions, such as opening hours for retail distribution, if taxis are allowed to offer ride-sharing to customers, if air companies are free to choose which routes to serve, etc. It also measures whether SOEs (for utilities) are required to provide clear and transparent information to customers on tariffs and consumption. Higher values mean worse performance.	OECD PMR	49	1	5%	23.04%
Labor and Social Protection Institutions	Fundamental labor rights are effectively guaranteed	Measures the effective enforcement of fundamental labor rights, including freedom of association and the right to collective bargaining, the absence of discrimination with respect to employment, and freedom from forced labor and child labor.	WJP	140	8	60%	64.98%
Labor and Social Protection Institutions	Workers' rights Index	Workers should have freedom of association at their workplaces and the right to bargain collectively with their employers. In addition, they should have other rights at work. The 1984 Generalized System of Preferences (GSP) agreement of the World Trade Organization requires reporting on worker rights in GSP beneficiary countries. It states that internationally recognized worker rights include: (A) the right of association; (B) the right to organize and bargain collectively; (C) a prohibition on the use of any form of forced or compulsory labor; (D) a minimum age for the employment of children; and (E) acceptable conditions of work with respect to minimum wages, hours of work, and occupational safety and	Global State of Democracy	171	33	79%	79.26%

Table A.4.1 continued...

Cluster	Indicator	Description	Source	Countries	Years	Complete records in last 5 years	Countries in CTF
		health. Composite measure, adding the values of seven individual variables (union_p + barg_p + hour_p + force_p + child_p + wage_p + safe_p), each of which is scored according to the following ordinal scale: 0: Severely restricted: If the government systematically violates the right of association and/or the right to organize and bargain collectively. 1: Somewhat restricted: If the government generally protects the rights to association and collective bargaining, but there are occasional violations of these rights or there are other significant violations of worker rights. 2: Fully protected: If the government consistently protects the exercise of these rights AND there are no mentions of violations of other worker rights. Hosted by GSOD, original from CIRI.					
Labor and Social Protection Institutions	Employment protection, regular	Composite indicator of Employment protection legislation governing regular contracts, individual dismissals.	OECD	42	7	8%	19.82%
Labor and Social Protection Institutions	Employment protection, temp.	Composite indicator of Employment protection legislation governing temporary contracts, individual dismissals.	OECD	37	7	7%	17.51%
Labor and Social Protection Institutions	Women's Labor Equality Index	CLIAR made index based on Women, Business and the Law indicator for workplace (laws affecting women's decisions to work), pay (laws and regulations affecting women's pay), including parenthood related (i.e., whether paid leave of at least 14 weeks available to mothers, and whether dismissal of pregnant workers prohibited).	CLIAR (based on WBL)	190	33	88%	88.02%

Table A.4.1 continued...

Cluster	Indicator	Description	Source	Countries	Years	Complete records in last 5 years	Countries in CTF
Labor and Social Protection Institutions	Social Protection Coverage	Coverage of social protection and labor programs (% of population) shows the percentage of population participating in social insurance, social safety net, and unemployment benefits and active labor market programs. Estimates include both direct and indirect beneficiaries.	ASPIRE	125	22	4%	14.29%
Labor and Social Protection Institutions	Adequacy of Social Protection benefits	Adequacy of social protection and labor programs (% of total welfare of beneficiary households) is measured by the total transfer amount received by the population participating in social insurance, social safety net, and unemployment benefits and active labor market programs as a share of their total welfare. Welfare is defined as the total income or total expenditure of beneficiary households. Estimates include both direct and indirect beneficiaries.	ASPIRE	121	22	4%	14.29%
Service Delivery Institutions	Access to public services distributed by political group	Is access to basic public services, such as order and security, primary education, clean water, and healthcare, distributed equally across political groups? A political group is defined as those who are affiliated with a particular political party or candidate, or a group of parties/ candidates. This question asks if political group is an important cleavage in society for the distribution of public services. Thus, if there are inequalities in access to public services, but these are not mainly due to differentiation between particular political groups, the code should be "4" (equal). The situation could of course vary by type of public service, such that a political group is denied access to some basic public services but not others. Responses: 0: Extreme. Because of their political group affiliation 75 percent (%) or more of the population lack access to basic public services of good quality. 1: Unequal. Because of their political group affiliation 25 percent (%) or more of	V_DEM	121174	33	80%	80.65%

Table A.4.1 continued...

Cluster	Indicator	Description	Source	Countries	Years	Complete records in last 5 years	Countries in CTF
		the population lack access to basic public services of good quality. 2: Somewhat Equal. Because of their political group affiliation 10 to 25 percent (%) of the population lack access to basic public services of good quality. 3: Relatively Equal. Because of their political group affiliation only 5 to 10 percent (%) of the population lack access to basic public services of good quality. 4: Equal. Because of their political group affiliation less than 5 percent (%) of the population lack access to basic public services of good quality.					
Service Delivery Institutions	Access to public services distributed by socio-economic position	Is access to basic public services, such as order and security, primary education, clean water, and healthcare, distributed equally according to socioeconomic position? This question asks if socio-economic position is an important cleavage in society for the distribution of public services. Thus, if there are inequalities in access to public services, but these are not mainly due to differentiation between particular socio-economic position, the code should be "4" (equal). The situation could of course vary by type of public service, such that a socio-economic group is denied access to some basic public services but not others. Responses: 0: Extreme. Because of poverty or low income, 75 percent (%) or more of the population lack access to basic public services of good quality. 1: Unequal. Because of poverty or low income, 25 percent (%) or more of the population lack access to basic public services of good quality. 2: Somewhat Equal. Because of poverty or low income, 10 to 25 percent (%) of the population lack access to basic public services of good quality. 3: Relatively Equal. Because of poverty or low income, 5 to 10 percent (%) of the population lack access	V-DEM	174	33	80%	80.65%

Table A.4.1 continued...

Cluster	Indicator	Description	Source	Countries	Years	Complete records in last 5 years	Countries in CTF
		to basic public services of good quality. 4: Equal. Because of poverty or low income, less					
Service Delivery Institutions	Access to public services distributed by gender	Is access to basic public services, such as order and security, primary education, clean water, and healthcare, distributed equally according to gender? This question asks if gender is an important cleavage in society for the distribution of public services. Thus, if there are inequalities in access to public services, but these are not mainly due to differentiation between gender, the code should be "4" (equal). The situation could of course vary by type of public service, such that women are denied access to some basic public services but not others. Please base your response on whether access to most of the aforementioned services are distributed equally or unequally. Responses: 0: Extreme. Because of their gender, 75 percent (%) or more of women lack access to basic public services of good quality. 1: Unequal. Because of their gender, 25 percent (%) or more of women lack access to basic public services of good quality. 2: Somewhat Equal. Because of their gender, 10 to 25 percent (%) of women lack access to basic public services of good quality. 3: Relatively Equal. Because of their gender, 5 to 10 percent (%) of women lack access to basic public services of good quality. 4: Equal. Because of their gender, less than 5 percent (%) of women lack access to basic public services of good quality.	V-DEM	174	33	80%	80.65%
Service Delivery Institutions	Pregnant women receiving prenatal care (%)	Pregnant women receiving prenatal care are the percentage of women attended at least once during pregnancy by skilled health personnel for reasons related to pregnancy.	WDI	169	32	7%	31.80%

Table A.4.1 continued...

Cluster	Indicator	Description	Source	Countries	Years	Complete records in last 5 years	Countries in CTF
Service Delivery Institutions	Births attended by skilled health staff (% of total)	Births attended by skilled health staff are the percentage of deliveries attended by personnel trained to give the necessary supervision, care, and advice to women during pregnancy, labor, and the postpartum period; to conduct deliveries on their own; and to care for newborns. The percentage of births attended by skilled health personnel is calculated as the number of births attended by skilled health personnel (doctor, nurse and/or midwife) expressed as total number of live births in the same period. Births attended by skilled health personnel = (Number of births attended by skilled health personnel / Total number of live births) x 100. In household surveys, such as the Demographic and Health Surveys, the Multiple Indicator Cluster Surveys, and the Reproductive Health Surveys, the respondent is asked about each live birth and who had helped them during childbirth for a period up to five years (or three years) before the interview. Service/facility records could be used where a high proportion of births occur in health facilities	WDI	201	32	20%	57.60%
Service Delivery Institutions	Completeness of birth registration (%)	Completeness of birth registration is the percentage of children under age 5 whose births were registered at the time of the survey. The numerator of completeness of birth registration includes children whose birth certificate was seen by the interviewer or whose mother or caretaker says the birth has been registered.	WDI	178	23	11%	49.77%
Service Delivery Institutions	Pupil-teacher ratio, primary	Primary school pupil-teacher ratio is the average number of pupils per teacher in primary school.	WDI	201	30	9%	49.77%
Service Delivery Institutions	Pupil-teacher ratio, secondary	Secondary school pupil-teacher ratio is the average number of pupils per teacher in secondary school.	WDI	201	30	7%	33.18%

Table A.4.1 continued...

Cluster	Indicator	Description	Source	Countries	Years	Complete records in last 5 years	Countries in CTF
Service Delivery Institutions	Trained teachers in preprimary education (% of total teachers)	Trained teachers in preprimary education are the percentage of preprimary school teachers who have received the minimum organized teacher training (pre-service or in-service) required for teaching in a given country.	WDI	138	25	22%	43.78%
Service Delivery Institutions	Trained teachers in primary education (% of total teachers)	Trained teachers in primary education are the percentage of primary school teachers who have received the minimum organized teacher training (pre-service or in-service) required for teaching in a given country.	WDI	150	25	28%	51.61%
Service Delivery Institutions	Trained teachers in secondary education (% of total teachers)	Trained teachers in secondary education are the percentage of secondary school teachers who have received the minimum organized teacher training (pre-service or in-service) required for teaching in a given country.	WDI	143	25	23%	44.70%
Climate Change and Environment Institutions	Environmental policy	To what extent are environmental concerns effectively taken into account?	BTI	135	9	37%	62.67%
Climate Change and Environment Institutions	National energy efficiency planning	This indicator is created by weighing the sub-indicators: Is there a legal framework in place or a national action plan that aims to increase energy efficiency adoption; Is there an energy efficiency goal or target at the national level; Are there carbon reduction targets in place that include EE for the residential, commercial, transport, industrial, and power sectors; Are targets derived from detailed analysis that is publicly available; Is there a requirement for periodic progress reports tracking data related to the efficiency target(s); Is the EE target linked to international	RISE	140	12	52%	64.98%

Table A.4.1 continued...

Cluster	Indicator	Description	Source	Countries	Years	Complete records in last 5 years	Countries in CTF
		commitments (e.g. nationally determined contribution or regional commitment)					
Climate Change and Environment Institutions	Energy efficiency entities	This indicator is created by weighting indicators on whether there are governmental and/or independent bodies that carry setting EE strategy, standards regulating EE activity of energy consumers, certifying compliance with equipment EE standards, and selecting and/or approving third-party auditors tasked with certifying EE standards; Are energy efficiency programs developed based on market analyses with plans open to public consultation and periodic evaluation?; re there professional certification/accreditation programs mandated for energy efficiency activities?	RISE	140	12	52%	64.98%
Climate Change and Environment Institutions	Incentives and mandates: Industrial and Commercial End users	This indicator is created by weighing these sub-indicators: Are there any EE mandates for large energy users, including targets, mandatory audits, energy management system use, and energy manager in the facility; Are there penalties in place for non-compliance with EE program for large energy users; Is there a requirement for periodic reporting of energy consumption in order to enforce and/or track progress of energy efficiency in large consumers' facilities; Is there a measurement and verification program in place; Is there a program to publicly recognize end users who have achieved significant energy savings measures; Are there awareness programs or publicized case study examples of significant energy savings measures; Does the program offer technical assistance (from a government or independent entity) to end users to identify energy savings investment opportunities; Is there an energy efficiency mandate or incentive program for SMEs	RISE	140	12	52%	64.98%

Table A.4.1 continued...

Cluster	Indicator	Description	Source	Countries	Years	Complete records in last 5 years	Countries in CTF
Climate Change and Environment Institutions	Incentives and mandates: Public sector	This indicator is created by weighing sub-indicators that measure: Are there binding energy savings obligations for public buildings and/or other public facilities (may include water supply, wastewater services, municipal solid waste, street lighting, transportation, and heat supply); Is there a financing mechanism in place to support EE retrofitting in the public and/or private sector; Is there a reporting mechanism to track and enforce energy savings in public sector facilities (either in-house or by a third party); Are there specific policies or mandated guidelines for public procurement of energy-efficient products and services on the nation, region, and municipal levels; Are there guidelines or tools to help identify energy-efficient options for procurement; Do public budgeting regulations and practices allow public entities to retain energy savings at the national, regional, and municipal levels	RISE	140	12	52%	64.98%
Climate Change and Environment Institutions	Incentives and mandates: Energy Utility Programs	This indicator is created by weighing these sub-indicators: Are there utility EE programs for generation, transmission and distribution networks, demand-side management/demand-response, and are there public budget financing, consumer surcharge, and decoupling available for utilities to recover costs associated with or revenue lost from mandated EE activities; Are electricity tariffs cost-reflective; Is there a metering mechanism in place that measures time-of-use with the residential, commercial services, and industrial sectors; Do customers receive a bill or report which compares them to other users in the same region and/or usage class; Do customers receive a bill or report that shows their energy usage compared to previous bills or reports over time; Do electricity customers pay charges for demand and reactive power	RISE	140	12	52%	64.98%

Table A.4.1 continued...

Cluster	Indicator	Description	Source	Countries	Years	Complete records in last 5 years	Countries in CTF
Climate Change and Environment Institutions	Financing mechanisms for energy efficiency	This indicator is created by weighing sub-indicators that measure: Are there “national financial coverage” mechanisms in place for energy efficiency activities in certain sectors?; What is the share of financial and/or non-financial Institutions which offer credit lines for energy efficiency investments in sectors?	RISE	140	12	52%	64.98%
Climate Change and Environment Institutions	Minimum energy efficiency performance standards	This indicator is created by weighing this sub-indicator: Have minimum energy performance standards been adopted for refrigerators, HVAC, lighting equipment, industrial equipment, industrial electric motors, other industrial equipment and/or domestic appliances, and light vehicles	RISE	140	12	52%	64.98%
Climate Change and Environment Institutions	Energy labeling systems	This indicator is created by weight sub-indicators that measure: what appliances and technologies have energy efficiency labeling schemes been adopted, and if those systems are mandatory or voluntary.	RISE	140	12	52%	64.98%
Climate Change and Environment Institutions	Building Energy Codes	This indicator is created by weighing the sub-indicators: What strategies, standards, codes, and regulations are in place for new residential and commercial buildings; What compliance systems are in place; Are renovated buildings in the commercial and residential sectors required to meet a building energy code; Are building EE standards required to be updated as technology advances; Is there a mandatory standardized rating or labeling system for the energy performance of existing buildings; Are commercial and residential buildings required to disclose property energy usage at the point of sale or when leased; Are large commercial and residential buildings required to disclose property energy usage annually; Are there	RISE	140	12	52%	64.98%

Table A.4.1 continued...

Cluster	Indicator	Description	Source	Countries	Years	Complete records in last 5 years	Countries in CTF
		targets or incentives in place for green buildings? If so, what percentage of buildings are certified green; What % of buildings are actually certified “green” or energy efficient according to the incentive scheme					
Climate Change and Environment Institutions	Legal framework for renewable energy	This indicator is created by weighing the sub-indicators: Does the legal framework allow private sector ownership of renewable energy generation; Does an official renewable energy target exist; Is the target legally binding; Is the RE target linked to international commitments; is there a RE action plan or strategy to attain the target.	RISE	140	12	52%	64.98%
Climate Change and Environment Institutions	Planning for renewable energy expansion	This indicator is created by weighing the sub-indicators: Is there an assessment of the role of renewables in electricity supply; Is there a target for renewables in electricity; Is there an assessment of the needs for heating and cooling in buildings and industry in the country and of how renewables can contribute; Is there a specific target for renewables for heating and cooling; Is there an assessment of the needs for heating and cooling in buildings and industry in the country and of how renewables can contribute; Is there a specific target for renewables for transport; How are Institutions meetings targets; Renewable energy in generation and transmission planning; Resource data and siting	RISE	140	12	52%	64.98%
Climate Change and Environment Institutions	Incentives and regulatory support for renewable energy	This indicator is created by weighing these sub-indicators: What is the financial and regulator support for electricity; How the electricity grid is accessed and dispatched; is there financial and regulatory support for transport; is there financial and regulatory support for heating and cooling	RISE	140	12	52%	64.98%

Table A.4.1 continued...

Cluster	Indicator	Description	Source	Countries	Years	Complete records in last 5 years	Countries in CTF
Climate Change and Environment Institutions	Attributes of financial and regulatory incentives	This indicator is created by weighing the sub-indicators: Is there a schedule for future bids/auctions available for investors; Is there a pre-qualification process to select bidders; Are tariffs indexed (in part or in whole) to an international currency or to inflation; Are there provisions to ensure full and timely project completion (e.g. bid-bonds, project milestones); Are projects awarded through auctions/bids online/on track to be online on stated date; Have auctions/bids met stated target for installations; Can small producers (residential, commercial rooftop PV, etc.) connect to the grid; Are contracts with fixed tariffs available for such producers; Is there a schedule or clear rules (e.g. capacity based limits) for adjusting the tariff level over time; Are different tariffs available for different technologies and sizes of the generation plant; Is there a mechanism to control the capacity built under each tariff; Are tariffs indexed (in part or in whole) to an international currency or to inflation	RISE	140	12	52%	64.98%
Climate Change and Environment Institutions	Carbon Pricing and Monitoring	This indicator is a combination of two sub-indicators. Is there carbon pricing mechanism that covers GHG emissions within the country (Yes/No)? Is there a monitoring, reporting and verification system for GHG emissions in place (Yes/No)? If both sub-indicators are Yes, this indicator has the value 100, if both are No, this indicator has the value 0, and if one is Yes and one is No, this indicator has the value 50	RISE	140	12	52%	64.98%

Source: World Bank Country Level Institutional Assessment and Review (CLIA) Dashboard.

Note: ASPIRE = Atlas of Social Protection Indicators of Resilience and Equity, BTI = Bertelsmann Transformation Index, CLIA = Country Level Institutional Assessment and Review, CSO = Civil Society Organization, EE = Energy Efficient, FMIS = Financial Management Information System, GFDB = Global Financial Database, GHG = Greenhouse Gas, GTMI = GovTech Maturity Index, PEFA = Public Expenditure and Financial Accountability, PFM MIS = Public Financial Management – Management Information System, PMR = Product Market Regulation (OECD Database), RE = Renewable Energy, RISE = Regulatory Indicators for Sustainable Energy, SME = Small and Medium-sized Enterprise, SOE = State-Owned Enterprise, V-DEM = Varieties of Democracy Database, SPI = Statistical Performance Indicators, WBL = Women, Business and the Law, WDI = World Development Indicators, WJP = World Justice Project.

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TABLE A.4.2 - CLIAR Non-Benchmarked Indicators Description and Coverage, By Potential Category

Cluster	Indicator	Description	Source	Countries	Years	Complete records	Complete records in last 5 years
Social Institutions	Civil liberties index	To what extent is civil liberty respected? Clarification: Civil liberty is understood as liberal freedom, where freedom is a property of individuals. Civil liberty is constituted by the absence of physical violence committed by government agents and the absence of constraints of private liberties and political liberties by the government. The index is formed by taking the average of physical violence index (v2x_clphy), political civil liberties index (v2x_clpol), and private civil liberties (v2x_clpriv).	V-DEM	174	33	80%	81%
Social Institutions	Freedom of speech and press	The extent to which freedoms of speech and press are affected by government censorship, including ownership of media outlets. Censorship is any form of restriction that is placed on freedom of the press, speech or expression. Expression may also be in the form of art or music. There are different degrees of censorship. Censorship denies citizens freedom of speech and limits or prevents the media (print, online, or broadcast) to express views challenging the policies of the existing government. In many instances, the government owns and operates all forms of press and media. Component Scale: (0) Complete: If the government, in practice, owns all of any one aspect of the media, such as all radio stations or all television stations. (1) Some: The government places some restrictions yet does allow limited rights to freedom of speech and the press. (2) None: none censorship means the freedom to speak freely and to print opposing opinions without the fear of prosecution. 'None' in no way implies absolute freedom, as there exists in all countries some restrictions on information and/or communication. Even in	GSD	70	12	10%	31%

Table A.4.2 continued..

Cluster	Indicator	Description	Source	Countries	Years	Complete records	Complete records in last 5 years
		democracies there are restrictions placed on freedoms of speech and the press if these rights infringe on the rights of others or in any way endangers the welfare of others. Housed by the Global State of Democracy, from the CIRI Human Rights Data Project .					
Social Institutions	Women Business and the Law Index	The index scores 35 data points across eight indicators composed of four or five binary questions, with each indicator representing a different phase of a woman's life. Indicator-level scores are obtained by calculating the unweighted average of responses to the questions within that indicator and scaling the result to 100. Questions are related to gender equality around mobility, workplace, pay, marriage, parenthood, entrepreneurship, assets, and pension.	WBL	189	32	85%	70%
Absence of Corruption	Firms identifying corruption as a major constraint	Percentage of firms identifying corruption as a "major" or "very severe" obstacle.	Enter-prise Surveys	146	15	4%	5%
Transparency and Accountability Institutions	Audit Office	Does there exist an independent and effective audit office?	SGI	41	8	5%	15%
Transparency and Accountability Institutions	Independent Supervisory Bodies	Measures the existence of the following supervisory bodies: (a) audit office, (b) ombuds office and (3) data protection authority.	SGI	41	8	5%	15%
Justice Institutions	Access to justice	Do citizens enjoy secure and effective access to justice? Estimate the index by averaging two indicators: access to justice for men (v2clacjstm) and women (v2clacjstw).	V-DEM	174	33	80%	81%

Table A.4.2 continued..

Cluster	Indicator	Description	Source	Countries	Years	Complete records	Complete records in last 5 years
Justice Institutions	Firms identifying the courts system as a major constraint	Percent of firms identifying the courts system as a major constraint	Enterprise Surveys	146	15	4%	5%
Public Financial Management Institutions	Firms identifying tax administration as a major constraint	Percentage of firms identifying tax administration as a "major" or "very severe" obstacle.	Enterprise Surveys	146	15	4%	5%
Public Financial Management Institutions	Is there a Debt Management System (DMS) in place? (foreign and domestic debt)	Survey question Is there a Debt Management System (DMS) in place? (foreign and domestic debt). This indicator is measured with the scale 0= No, 1= Implementation in progress, 2= Yes (in use)	GTMI	196	1	3%	18%
Public Financial Management Institutions	Is there a Public Investment Management System (PIMS) in place?	Survey question: Is there a Public Investment Management System (PIMS) in place? Measured by 0= No, 1= Implementation in progress, 2= Yes (in use)	GTMI	196	1	3%	18%
Public Financial Management Institutions	Is there a Tax Management Information System in place?	Survey question: Is there a Tax Management Information System in place? Measured with scale 0= No, 1= Implementation in progress, 2= Yes (in use)	GTMI	196	1	3%	18%
Public Financial Management Institutions	Is there a TSA supported by FMIS to automate payments and bank reconciliation?	Survey question: Is there a TSA supported by FMIS to automate payments and bank reconciliation? Measured with the scale 0= No, 1= Implementation in progress, 2= Yes (in use)	GTMI	196	1	3%	18%

Table A.4.2 continued..

Cluster	Indicator	Description	Source	Countries	Years	Complete records	Complete records in last 5 years
Public Financial Management Institutions	Is there an operational FMIS in place to support core PFM functions?	Survey question: Is there an operational FMIS in place to support core PFM functions? This is measured on the scale 0= No/Unknown, 1= Implementation in progress, 2= Yes (in use)	GTMI	196	1	3%	18%
Public Human Resource Management Institutions	Public sector employment, as a share of formal employment	Number of public sector paid employees/ Number of formal employees. Formal employment is defined by having access to at least one of following benefits (contract, health insurance, union membership, or social security)	WWBI	100	21	11%	4%
Public Human Resource Management Institutions	Wage bill as a percentage of public Expenditure	The data sources used to construct the harmonized series of wage bill are IMF's World Economic Outlook (WEO) and Government Finance Statistics (GFS), OECD's General Government Accounts, and EUROSTAT's Annual Government Finance Statistics and AMECO. For earlier data for a few countries the main source is Cusack, Thomas R., 2006, "Public Finance Data for 20 OECD Countries". For the harmonized government employment series, the main sources include the ILO's LABORSTA data (public sector employment and employment of general government sector), ILOSTAT (employment by institutional sector), as well as data from individual countries.	WWBI	184	21	51%	49%
Public Human Resource Management Institutions	Females, as a share of public paid employees	NA	WWBI	129	21	13%	4%
Public Human Resource Management Institutions	Females, as a share of public paid employees by occupation: Managers	NA	WWBI	98	20	10%	3%

Table A.4.2 continued..

Cluster	Indicator	Description	Source	Countries	Years	Complete records	Complete records in last 5 years
Public Financial Management Institutions	Pay compression ratio in public sector (ratio of 90th/10th percentile earners)	NA	WWBI	108	20	11%	3%
Public Human Resource Management Institutions	Public sector wage premium (compared to all private employees)	NA	WWBI	113	20	12%	3%
Public Human Resource Management Institutions	Wage bill as a percentage of GDP	NA	WWBI	185	21	51%	49%
Public Human Resource Management Institutions	Individuals with tertiary education as a share of public paid employees	Number of public (private) paid employees with tertiary education (no education, primary education, secondary education / Total number of public (private) paid employees	WWBI	121	21	12%	4%
Business Environment	Complexity of regulatory procedures	Simple average of two components: (i) Use of one-stop-shops and the silence is consent rule for issuing licenses and accepting notifications, (ii) The governments communication strategy and efforts to reduce and simplify the administrative burden of interacting with the government.	OECD PMR	49	1	1%	5%
Business Environment	Explicit barriers to trade and investment	Simple average of two components: (i) Restrictiveness of a country's FDI rules in 22 sectors in terms of foreign equity limitations, screening or approval mechanisms, restrictions on the employment of foreigners as key personnel and	OECD PMR	49	1	1%	5%

Table A.4.2 continued..

Cluster	Indicator	Description	Source	Countries	Years	Complete records	Complete records in last 5 years
		operational restrictions (e.g. restrictions on branching and on capital repatriation or on land ownership), (ii) Simple cross-product average of effectively applied tariffs.					
Business Environment	Firms identifying business licensing and permits as a major constraint	Percentage of firms identifying business licensing and permits as “major” or “very severe” obstacle.	Enter-prise Surveys	146	15	4%	5%
Business Environment	Firms identifying customs and trade regulations as a major constraint	Percentage of firms identifying customs and trade regulations as a “major” or “very severe” obstacle.	Enter-prise Surveys	146	15	4%	5%
Business Environment	Central bank independence	Index of de jure Central Bank Independence. Values range from 0 (minimum score) to 1 (maximum score). Method based in Cukierman, Webb, and Neyapti (1992).	Romelli (2022)	152	28	57%	0%
Business Environment	Firms identifying access to finance as a major constraint	Percentage of firms identifying access/cost of finance as a “major” or “very severe” obstacle.	Enter-prise Surveys	146	15	4%	5%
Business Environment	Private Credit by deposit money banks to GDP (%)	The financial resources provided to the private sector by domestic money banks as a share of GDP. Domestic money banks comprise commercial banks and other financial institutions that accept transferable deposits, such as demand deposits.	GFDD	186	32	75%	60%
Labor and Social Protection Institutions	Firms identifying labor regulations as a major constraint	Percentage of firms identifying labor regulations as a “major” or “very severe” obstacle.	Enter-prise Surveys	145	15	4%	5%

Table A.4.2 continued..

Cluster	Indicator	Description	Source	Countries	Years	Complete records	Complete records in last 5 years
Service Delivery Institutions	Adjusted net enrollment rate, primary (% of primary school age children)	Adjusted net enrollment is the number of pupils of the school-age group for primary education, enrolled either in primary or secondary education, expressed as a percentage of the total population in that age group.	WDI	192	30	42%	7%
Service Delivery Institutions	Hospital beds (per 1,000 people)	Hospital beds include inpatient beds available in public, private, general, and specialized hospitals and rehabilitation centers. In most cases beds for both acute and chronic care are included.	WDI	195	30	41%	4%
Service Delivery Institutions	Completeness of birth registration, rural (%)	Completeness of birth registration is the percentage of children under age 5 whose births were registered at the time of the survey. The numerator of completeness of birth registration includes children whose birth certificate was seen by the interviewer or whose mother or caretaker says the birth has been registered.	WDI	118	22	5%	5%
Service Delivery Institutions	Completeness of birth registration, urban (%)	Completeness of birth registration is the percentage of children under age 5 whose births were registered at the time of the survey. The numerator of completeness of birth registration includes children whose birth certificate was seen by the interviewer or whose mother or caretaker says the birth has been registered.	WDI	118	22	5%	5%
Service Delivery Institutions	Compulsory education, duration (years)	Duration of compulsory education is the number of years that children are legally obliged to attend school.	WDI	196	27	61%	72%
Service Delivery Institutions	Current education expenditure, primary (% of total expenditure)	Current expenditure is expressed as a percentage of direct expenditure in public educational Institutions (instructional and non-instructional) of the specified level of education. Financial aid to students and other transfers	WDI	164	25	22%	18%

Table A.4.2 continued..

Cluster	Indicator	Description	Source	Countries	Years	Complete records	Complete records in last 5 years
	in primary public Institutions)	are excluded from direct expenditure. Current expenditure is consumed within the current year and would have to be renewed if needed in the following year. It includes staff compensation and current expenditure other than for staff compensation (ex. on teaching materials, ancillary services and administration).					
Service Delivery Institutions	Current education expenditure, secondary (% of total expenditure in secondary public Institutions)	Current expenditure is expressed as a percentage of direct expenditure in public educational Institutions (instructional and non-instructional) of the specified level of education. Financial aid to students and other transfers are excluded from direct expenditure. Current expenditure is consumed within the current year and would have to be renewed if needed in the following year. It includes staff compensation and current expenditure other than for staff compensation (ex. on teaching materials, ancillary services and administration).	WDI	168	25	22%	17%
Service Delivery Institutions	Current education expenditure, tertiary (% of total expenditure in tertiary public Institutions)	Current expenditure is expressed as a percentage of direct expenditure in public educational Institutions (instructional and non-instructional) of the specified level of education. Financial aid to students and other transfers are excluded from direct expenditure. Current expenditure is consumed within the current year and would have to be renewed if needed in the following year. It includes staff compensation and current expenditure other than for staff compensation (ex. on teaching materials, ancillary services and administration).	WDI	163	25	21%	18%
Service Delivery Institutions	Current education expenditure, total (% of total	Current expenditure is expressed as a percentage of direct expenditure in public educational Institutions (instructional and non-instructional) of the specified level	WDI	170	25	22%	17%

Table A.4.2 continued..

Cluster	Indicator	Description	Source	Countries	Years	Complete records	Complete records in last 5 years
	expenditure in public Institutions)	of education. Financial aid to students and other transfers are excluded from direct expenditure. Current expenditure is consumed within the current year and would have to be renewed if needed in the following year. It includes staff compensation and current expenditure other than for staff compensation (ex. on teaching materials, ancillary services and administration).					
Service Delivery Institutions	Current health expenditure (% of GDP)	Level of current health expenditure expressed as a percentage of GDP. Estimates of current health expenditures include healthcare goods and services consumed during each year. This indicator does not include capital health expenditures such as buildings, machinery, IT and stocks of vaccines for emergency or outbreaks.	WDI	189	22	55%	53%
Service Delivery Institutions	Domestic general government health expenditure (% of GDP)	Public expenditure on health from domestic sources as a share of the economy as measured by GDP.	WDI	189	22	55%	52%
Service Delivery Institutions	Government expenditure on education, total (% of GDP)	General government expenditure on education (current, capital, and transfers) is expressed as a percentage of GDP. It includes expenditure funded by transfers from international sources to government. General government usually refers to local, regional and central governments.	WDI	202	32	53%	51%
Service Delivery Institutions	Government expenditure on education, total (% of government expenditure)	General government expenditure on education (current, capital, and transfers) is expressed as a percentage of total general government expenditure on all sectors (including health, education, social services, etc.). It includes expenditure funded by transfers from international	WDI	200	33	51%	64%

Table A.4.2 continued..

Cluster	Indicator	Description	Source	Countries	Years	Complete records	Complete records in last 5 years
		sources to government. General government usually refers to local, regional and central governments.					
Service Delivery Institutions	Government expenditure per student, primary (% of GDP per capita)	Government expenditure per student is the average general government expenditure (current, capital, and transfers) per student in the given level of education, expressed as a percentage of GDP per capita.	WDI	171	23	22%	2%
Service Delivery Institutions	Government expenditure per student, secondary (% of GDP per capita)	Government expenditure per student is the average general government expenditure (current, capital, and transfers) per student in the given level of education, expressed as a percentage of GDP per capita.	WDI	166	23	20%	2%
Service Delivery Institutions	Government expenditure per student, tertiary (% of GDP per capita)	Government expenditure per student is the average general government expenditure (current, capital, and transfers) per student in the given level of education, expressed as a percentage of GDP per capita.	WDI	167	24	20%	1%
Service Delivery Institutions	Out-of-pocket expenditure (% of current health expenditure)	Share of out-of-pocket payments of total current health expenditures. Out-of-pocket payments are spending on health directly out-of-pocket by households.	WDI	189	22	55%	52%
Service Delivery Institutions	Out-of-pocket expenditure per capita, PPP (current international \$)	Health expenditure through out-of-pocket payments per capita in international dollars at purchasing power parity.	WDI	189	22	55%	53%

Table A.4.2 continued..

Cluster	Indicator	Description	Source	Countries	Years	Complete records	Complete records in last 5 years
Service Delivery Institutions	Percent of firms identifying electricity as a major constraint	NA	Enterprise Surveys	145	15	4%	5%
Service Delivery Institutions	Physicians (per 1,000 people)	Physicians include generalist and specialist medical practitioners.	WDI	203	31	46%	25%
Service Delivery Institutions	Pupil-teacher ratio, tertiary	Tertiary school pupil-teacher ratio is the average number of pupils per teacher in tertiary school.	WDI	189	30	34%	5%
Service Delivery Institutions	Trained teachers in lower secondary education (% of total teachers)	Trained teachers in lower secondary education are the percentage of lower secondary school teachers who have received the minimum organized teacher training (pre-service or in-service) required for teaching in a given country.	WDI	119	25	12%	16%
Service Delivery Institutions	Trained teachers in upper secondary education (% of total teachers)	Trained teachers in upper secondary education are the percentage of upper secondary school teachers who have received the minimum organized teacher training (pre-service or in-service) required for teaching in a given country.	WDI	119	25	11%	15%
Service Delivery Institutions	Mortality rate, under-5 (per 1,000 live births)	Under-five mortality rate is the probability per 1,000 that a newborn baby will die before reaching age five, if subject to age-specific mortality rates of the specified year.	WDI	194	32	87%	72%
Service Delivery Institutions	Maternal mortality ratio (modeled estimate, per 100,000 live births)	Maternal mortality ratio is the number of women who die from pregnancy-related causes while pregnant or within 42 days of pregnancy termination per 100,000 live births. The data are estimated with a regression model using information on the proportion of maternal deaths among non-AIDS deaths in women ages 15-49, fertility, birth	WDI	183	21	54%	52%

Table A.4.2 continued..

Cluster	Indicator	Description	Source	Countries	Years	Complete records	Complete records in last 5 years
		attendants, and GDP measured using purchasing power parities (PPPs).					
Service Delivery Institutions	Mortality rate, adult, male (per 1,000 male adults)	Adult mortality rate, male, is the probability of dying between the ages of 15 and 60—that is, the probability of a 15-year-old male dying before reaching age 60, if subject to age-specific mortality rates of the specified year between those ages.	WDI	206	32	92%	72%
Service Delivery Institutions	Mortality rate, adult, female (per 1,000 female adults)	Adult mortality rate, female, is the probability of dying between the ages of 15 and 60—that is, the probability of a 15-year-old female dying before reaching age 60, if subject to age-specific mortality rates of the specified year between those ages.	WDI	206	32	92%	72%
Service Delivery Institutions	Literacy rate, adult total (% of people ages 15 and above)	Adult literacy rate is the percentage of people ages 15 and above who can both read and write with understanding a short simple statement about their everyday life.	WDI	160	32	13%	19%
Service Delivery Institutions	Literacy rate, adult male (% of males ages 15 and above)	Adult literacy rate is the percentage of people ages 15 and above who can both read and write with understanding a short simple statement about their everyday life.	WDI	160	32	13%	19%
Service Delivery Institutions	Literacy rate, adult female (% of females ages 15 and above)	Adult literacy rate is the percentage of people ages 15 and above who can both read and write with understanding a short simple statement about their everyday life.	WDI	160	32	13%	19%
General Indicators	Armed forces personnel (% of total labor force)	Armed forces personnel are active duty military personnel, including paramilitary forces if the training, organization, equipment, and control suggest they may be used	WDI	170	31	70%	46%

Table A.4.2 continued..

Cluster	Indicator	Description	Source	Countries	Years	Complete records	Complete records in last 5 years
		to support or replace regular military forces. Labor force comprises all people who meet the International Labour Organization's definition of the economically active population.					
General Indicators	Central government debt, total (% of GDP)	Debt is the entire stock of direct government fixed-term contractual obligations to others outstanding on a particular date. It includes domestic and foreign liabilities such as currency and money deposits, securities other than shares, and loans. It is the gross amount of government liabilities reduced by the amount of equity and financial derivatives held by the government. Because debt is a stock rather than a flow, it is measured as of a given date, usually the last day of the fiscal year.	WDI	120	32	26%	22%
General Indicators	CO2 emissions (kg per 2017 PPP \$ of GDP)	Carbon dioxide emissions are those stemming from the burning of fossil fuels and the manufacture of cement. They include carbon dioxide produced during consumption of solid, liquid, and gas fuels and gas flaring.	WDI	182	31	76%	51%
General Indicators	Current account balance (% of GDP)	Current account balance is the sum of net exports of goods and services, net primary income, and net secondary income.	WDI	198	33	75%	75%
General Indicators	Expense (% of GDP)	Expense is cash payments for operating activities of the government in providing goods and services. It includes compensation of employees (such as wages and salaries), interest and subsidies, grants, social benefits, and other expenses such as rent and dividends.	WDI	155	32	46%	45%
General Indicators	Exports of goods and services (% of GDP)	Exports of goods and services represent the value of all goods and other market services provided to the rest of the world. They include the value of merchandise, freight, insurance, transport, travel, royalties, license fees, and	WDI	195	33	79%	79%

Table A.4.2 continued..

Cluster	Indicator	Description	Source	Countries	Years	Complete records	Complete records in last 5 years
		other services, such as communication, construction, financial, information, business, personal, and government services. They exclude compensation of employees and investment income (formerly called factor services) and transfer payments.					
General Indicators	External debt stocks (% of GNI)	Total external debt stocks to gross national income. Total external debt is debt owed to nonresidents repayable in currency, goods, or services. Total external debt is the sum of public, publicly guaranteed, and private nonguaranteed long-term debt, use of IMF credit, and short-term debt. Short-term debt includes all debt having an original maturity of one year or less and interest in arrears on long-term debt. GNI (formerly GNP) is the sum of value added by all resident producers plus any product taxes (less subsidies) not included in the valuation of output plus net receipts of primary income (compensation of employees and property income) from abroad.	WDI	121	32	51%	44%
General Indicators	Final consumption expenditure (% of GDP)	Final consumption expenditure (formerly total consumption) is the sum of household final consumption expenditure (private consumption) and general government final consumption expenditure (general government consumption). This estimate includes any statistical discrepancy in the use of resources relative to the supply of resources.	WDI	188	33	76%	75%
General Indicators	Foreign direct investment, net inflows (% of GDP)	Foreign direct investment are the net inflows of investment to acquire a lasting management interest (10 percent or more of voting stock) in an enterprise operating in an economy other than that of the investor. It is the sum of equity capital, reinvestment of earnings, other long-term	WDI	199	33	85%	88%

Table A.4.2 continued..

Cluster	Indicator	Description	Source	Countries	Years	Complete records	Complete records in last 5 years
		capital, and short-term capital as shown in the balance of payments. This series shows net inflows (new investment inflows less disinvestment) in the reporting economy from foreign investors, and is divided by GDP.					
General Indicators	Foreign direct investment, net outflows (% of GDP)	Foreign direct investment refers to direct investment equity flows in an economy. It is the sum of equity capital, reinvestment of earnings, and other capital. Direct investment is a category of cross-border investment associated with a resident in one economy having control or a significant degree of influence on the management of an enterprise that is resident in another economy. Ownership of 10 percent or more of the ordinary shares of voting stock is the criterion for determining the existence of a direct investment relationship. This series shows net outflows of investment from the reporting economy to the rest of the world, and is divided by GDP.	WDI	195	33	76%	81%
General Indicators	GDP (constant 2015 US\$)	GDP at purchaser's prices is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources. Data are in constant 2015 prices, expressed in U.S. dollars. Dollar figures for GDP are converted from domestic currencies using 2015 official exchange rates. For a few countries where the official exchange rate does not reflect the rate effectively applied to actual foreign exchange transactions, an alternative conversion factor is used.	WDI	210	33	90%	93%

Table A.4.2 continued..

Cluster	Indicator	Description	Source	Countries	Years	Complete records	Complete records in last 5 years
General Indicators	GDP deflator (base year varies by country)	The GDP implicit deflator is the ratio of GDP in current local currency to GDP in constant local currency. The base year varies by country.	WDI	212	33	91%	93%
General Indicators	GDP deflator: linked series (base year varies by country)	The GDP implicit deflator is calculated as the ratio of GDP in current local currency to GDP in constant local currency. This series has been linked to produce a consistent time series to counteract breaks in series over time due to changes in base years, source data and methodologies. Thus, it may not be comparable with other national accounts series in the database for historical years. The base year varies by country.	WDI	211	33	91%	93%
General Indicators	GDP growth (annual %)	Annual percentage growth rate of GDP at market prices based on constant local currency. Aggregates are based on constant 2015 prices, expressed in U.S. dollars. GDP is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources.	WDI	212	33	91%	93%
General Indicators	GDP per capita (constant 2015 US\$)	GDP per capita is gross domestic product divided by midyear population. GDP is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources. Data are in constant 2015 U.S. dollars.	WDI	210	33	90%	93%

Table A.4.2 continued..

Cluster	Indicator	Description	Source	Countries	Years	Complete records	Complete records in last 5 years
General Indicators	GDP per capita growth (annual %)	Annual percentage growth rate of GDP per capita based on constant local currency. GDP per capita is gross domestic product divided by midyear population. GDP at purchaser's prices is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources.	WDI	212	33	90%	93%
General Indicators	GDP per capita, PPP (constant 2017 international \$)	GDP per capita based on purchasing power parity (PPP). PPP GDP is gross domestic product converted to international dollars using purchasing power parity rates. An international dollar has the same purchasing power over GDP as the U.S. dollar has in the United States. GDP at purchaser's prices is the sum of gross value added by all resident producers in the country plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources. Data are in constant 2017 international dollars.	WDI	194	33	86%	89%
General Indicators	GDP, PPP (constant 2017 international \$)	PPP GDP is gross domestic product converted to international dollars using purchasing power parity rates. An international dollar has the same purchasing power over GDP as the U.S. dollar has in the United States. GDP is the sum of gross value added by all resident producers in the country plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation	WDI	194	33	86%	89%

Table A.4.2 continued..

Cluster	Indicator	Description	Source	Countries	Years	Complete records	Complete records in last 5 years
General Indicators	General government final consumption expenditure (% of GDP)	<p>of natural resources. Data are in constant 2017 international dollars.</p> <p>General government final consumption expenditure (formerly general government consumption) includes all government current expenditures for purchases of goods and services (including compensation of employees). It also includes most expenditures on national defense and security, but excludes government military expenditures that are part of government capital formation.</p>	WDI	187	33	75%	75%
General Indicators	GNI (constant 2015 US\$)	<p>GNI (formerly GNP) is the sum of value added by all resident producers plus any product taxes (less subsidies) not included in the valuation of output plus net receipts of primary income (compensation of employees and property income) from abroad. Data are in constant 2015 prices, expressed in U.S. dollars.</p>	WDI	199	33	59%	65%
General Indicators	GNI growth (annual %)	<p>GNI (formerly GNP) is the sum of value added by all resident producers plus any product taxes (less subsidies) not included in the valuation of output plus net receipts of primary income (compensation of employees and property income) from abroad.</p>	WDI	163	33	58%	64%
General Indicators	GNI per capita (constant 2015 US\$)	<p>GNI per capita is gross national income divided by midyear population. GNI (formerly GNP) is the sum of value added by all resident producers plus any product taxes (less subsidies) not included in the valuation of output plus net receipts of primary income (compensation of employees and property income) from abroad. Data are in constant 2015 U.S. dollars.</p>	WDI	199	33	58%	65%

Table A.4.2 continued..

Cluster	Indicator	Description	Source	Countries	Years	Complete records	Complete records in last 5 years
General Indicators	GNI per capita growth (annual %)	Annual percentage growth rate of GNI per capita based on constant local currency. Aggregates are based on constant 2010 U.S. dollars. GNI per capita is gross national income divided by midyear population. GNI (formerly GNP) is the sum of value added by all resident producers plus any product taxes (less subsidies) not included in the valuation of output plus net receipts of primary income (compensation of employees and property income) from abroad.	WDI	166	33	58%	66%
General Indicators	GNI per capita, PPP (constant 2017 international \$)	GNI per capita based on purchasing power parity (PPP). PPP GNI is gross national income (GNI) converted to international dollars using purchasing power parity rates. An international dollar has the same purchasing power over GNI as a U.S. dollar has in the United States. GNI is the sum of value added by all resident producers plus any product taxes (less subsidies) not included in the valuation of output plus net receipts of primary income (compensation of employees and property income) from abroad. Data are in constant 2017 international dollars.	WDI	194	33	58%	66%
General Indicators	GNI, PPP (constant 2017 international \$)	PPP GNI (formerly PPP GNP) is gross national income (GNI) converted to international dollars using purchasing power parity rates. An international dollar has the same purchasing power over GNI as a U.S. dollar has in the United States. Gross national income is the sum of value added by all resident producers plus any product taxes (less subsidies) not included in the valuation of output plus net receipts of primary income (compensation of employees and property income) from abroad. Data are in constant 2017 international dollars.	WDI	194	33	58%	66%

Table A.4.2 continued..

Cluster	Indicator	Description	Source	Countries	Years	Complete records	Complete records in last 5 years
General Indicators	Gross capital formation (% of GDP)	Gross capital formation (formerly gross domestic investment) consists of outlays on additions to the fixed assets of the economy plus net changes in the level of inventories. Fixed assets include land improvements (fences, ditches, drains, and so on); plant, machinery, and equipment purchases; and the construction of roads, railways, and the like, including schools, offices, hospitals, private residential dwellings, and commercial and industrial buildings. Inventories are stocks of goods held by firms to meet temporary or unexpected fluctuations in production or sales, and "work in progress." According to the 1993 SNA, net acquisitions of valuables are also considered capital formation.	WDI	186	33	76%	74%
General Indicators	Gross domestic savings (% of GDP)	Gross domestic savings are calculated as GDP less final consumption expenditure (total consumption).	WDI	188	33	76%	75%
General Indicators	Gross fixed capital formation (% of GDP)	Gross fixed capital formation (formerly gross domestic fixed investment) includes land improvements (fences, ditches, drains, and so on); plant, machinery, and equipment purchases; and the construction of roads, railways, and the like, including schools, offices, hospitals, private residential dwellings, and commercial and industrial buildings. According to the 1993 SNA, net acquisitions of valuables are also considered capital formation.	WDI	181	33	73%	73%
General Indicators	Gross national expenditure (% of GDP)	Gross national expenditure (formerly domestic absorption) is the sum of household final consumption expenditure (formerly private consumption), general government final consumption expenditure (formerly general government consumption), and gross capital formation (formerly gross domestic investment).	WDI	186	33	75%	74%

Table A.4.2 continued..

Cluster	Indicator	Description	Source	Countries	Years	Complete records	Complete records in last 5 years
General Indicators	Gross savings (% of GDP)	Gross savings are calculated as gross national income less total consumption, plus net transfers.	WDI	178	33	65%	65%
General Indicators	Imports of goods and services (% of GDP)	Imports of goods and services represent the value of all goods and other market services received from the rest of the world. They include the value of merchandise, freight, insurance, transport, travel, royalties, license fees, and other services, such as communication, construction, financial, information, business, personal, and government services. They exclude compensation of employees and investment income (formerly called factor services) and transfer payments.	WDI	195	33	79%	79%
General Indicators	Inflation, GDP deflator (annual %)	Inflation as measured by the annual growth rate of the GDP implicit deflator shows the rate of price change in the economy as a whole. The GDP implicit deflator is the ratio of GDP in current local currency to GDP in constant local currency.	WDI	212	33	90%	93%
General Indicators	Inflation, GDP deflator: linked series (annual %)	Inflation as measured by the annual growth rate of the GDP implicit deflator shows the rate of price change in the economy as a whole. This series has been linked to produce a consistent time series to counteract breaks in series over time due to changes in base years, source data and methodologies. Thus, it may not be comparable with other national accounts series in the database for historical years.	WDI	211	33	90%	93%
General Indicators	Manufacturing, value added (% of GDP)	Manufacturing refers to industries belonging to ISIC divisions 15-37. Value added is the net output of a sector after adding up all outputs and subtracting intermediate inputs. It is calculated without making deductions for depreciation of fabricated assets or depletion and	WDI	202	33	78%	80%

Table A.4.2 continued..

Cluster	Indicator	Description	Source	Countries	Years	Complete records	Complete records in last 5 years
		degradation of natural resources. The origin of value added is determined by the International Standard Industrial Classification (ISIC), revision 3. Note: For VAB countries, gross value added at factor cost is used as the denominator.					
General Indicators	Military expenditure (% of GDP)	Military expenditures data from SIPRI are derived from the NATO definition, which includes all current and capital expenditures on the armed forces, including peacekeeping forces; defense ministries and other government agencies engaged in defense projects; paramilitary forces, if these are judged to be trained and equipped for military operations; and military space activities. Such expenditures include military and civil personnel, including retirement pensions of military personnel and social services for personnel; operation and maintenance; procurement; military research and development; and military aid (in the military expenditures of the donor country). Excluded are civil defense and current expenditures for previous military activities, such as for veterans' benefits, demobilization, conversion, and destruction of weapons. This definition cannot be applied for all countries, however, since that would require much more detailed information than is available about what is included in military budgets and off-budget military expenditure items. (For example, military budgets might or might not cover civil defense, reserves and auxiliary forces, police and paramilitary forces, dual-purpose forces such as military and civilian police, military grants in kind, pensions for military personnel, and social security contributions paid by one part of government to another.)	WDI	162	33	67%	70%

Table A.4.2 continued..

Cluster	Indicator	Description	Source	Countries	Years	Complete records	Complete records in last 5 years
General Indicators	Mineral rents (% of GDP)	Mineral rents are the difference between the value of production for a stock of minerals at world prices and their total costs of production. Minerals included in the calculation are tin, gold, lead, zinc, iron, copper, nickel, silver, bauxite, and phosphate.	WDI	213	32	90%	75%
General Indicators	Multilateral debt service (% of public and publicly guaranteed debt service)	Multilateral debt service is the repayment of principal and interest to the World Bank, regional development banks, and other multilateral agencies. public and publicly guaranteed debt service is the sum of principal repayments and interest actually paid in currency, goods, or services on long-term obligations of public debtors and long-term private obligations guaranteed by a public entity.	WDI	122	32	51%	44%
General Indicators	Natural gas rents (% of GDP)	Natural gas rents are the difference between the value of natural gas production at regional prices and total costs of production.	WDI	200	32	85%	72%
General Indicators	Net lending (+) / net borrowing (-) (% of GDP)	Net lending (+) / net borrowing (-) equals government revenue minus expense, minus net investment in nonfinancial assets. It is also equal to the net result of transactions in financial assets and liabilities. Net lending/net borrowing is a summary measure indicating the extent to which government is either putting financial resources at the disposal of other sectors in the economy or abroad, or utilizing the financial resources generated by other sectors in the economy or from abroad.	WDI	155	32	46%	44%
General Indicators	Net ODA received (% of GNI)	Net official development assistance (ODA) consists of disbursements of loans made on concessional terms (net of repayments of principal) and grants by official agencies of the members of the Development Assistance Committee (DAC), by multilateral Institutions, and by	WDI	160	32	61%	48%

Table A.4.2 continued..

Cluster	Indicator	Description	Source	Countries	Years	Complete records	Complete records in last 5 years
		non-DAC countries to promote economic development and welfare in countries and territories in the DAC list of ODA recipients. It includes loans with a grant element of at least 25 percent (calculated at a rate of discount of 10 percent).					
General Indicators	Oil rents (% of GDP)	Oil rents are the difference between the value of crude oil production at regional prices and total costs of production.	WDI	199	33	77%	86%
General Indicators	Personal remittances, received (% of GDP)	Personal remittances comprise personal transfers and compensation of employees. Personal transfers consist of all current transfers in cash or in kind made or received by resident households to or from nonresident households. Personal transfers thus include all current transfers between resident and nonresident individuals. Compensation of employees refers to the income of border, seasonal, and other short-term workers who are employed in an economy where they are not resident and of residents employed by nonresident entities. Data are the sum of two items defined in the sixth edition of the IMF's Balance of Payments Manual: personal transfers and compensation of employees.	WDI	199	33	77%	86%
General Indicators	Poverty gap at \$2.15 a day (2017 PPP) (%)	Poverty gap at \$2.15 a day (2017 PPP) is the mean shortfall in income or consumption from the poverty line \$2.15 a day (counting the nonpoor as having zero shortfall), expressed as a percentage of the poverty line. This measure reflects the depth of poverty as well as its incidence.	WDI	167	33	26%	22%
General Indicators	Poverty gap at \$3.65 a day (2017 PPP) (%)	Poverty gap at \$3.65 a day (2017 PPP) is the mean shortfall in income or consumption from the poverty line \$3.65 a day (counting the nonpoor as having zero	WDI	167	33	26%	22%

Table A.4.2 continued..

Cluster	Indicator	Description	Source	Countries	Years	Complete records	Complete records in last 5 years
		shortfall), expressed as a percentage of the poverty line. This measure reflects the depth of poverty as well as its incidence.					
General Indicators	Poverty gap at \$6.85 a day (2017 PPP) (%)	Poverty gap at \$6.85 a day (2017 PPP) is the mean shortfall in income or consumption from the poverty line \$6.85 a day (counting the nonpoor as having zero shortfall), expressed as a percentage of the poverty line. This measure reflects the depth of poverty as well as its incidence.	WDI	167	33	26%	22%
General Indicators	Poverty headcount ratio at \$2.15 a day (2017 PPP) (% of population)	Poverty headcount ratio at \$2.15 a day is the percentage of the population living on less than \$2.15 a day at 2017 purchasing power adjusted prices. As a result of revisions in PPP exchange rates, poverty rates for individual countries cannot be compared with poverty rates reported in earlier editions.	WDI	167	33	26%	22%
General Indicators	Poverty headcount ratio at \$3.65 a day (2017 PPP) (% of population)	Poverty headcount ratio at \$3.65 a day is the percentage of the population living on less than \$3.65 a day at 2017 international prices.	WDI	167	33	26%	22%
General Indicators	Poverty headcount ratio at \$6.85 a day (2017 PPP) (% of population)	Poverty headcount ratio at \$6.85 a day is the percentage of the population living on less than \$6.85 a day at 2017 international prices.	WDI	167	33	26%	22%
General Indicators	Poverty headcount ratio at national	National poverty headcount ratio is the percentage of the population living below the national poverty line(s). National estimates are based on population-weighted	WDI	157	23	14%	24%

Table A.4.2 continued..

Cluster	Indicator	Description	Source	Countries	Years	Complete records	Complete records in last 5 years
	poverty lines (% of population)	subgroup estimates from household surveys. For economies for which the data are from EU-SILC, the reported year is the income reference year, which is the year before the survey year.					
General Indicators	Public and publicly guaranteed debt service (% of GNI)	Public and publicly guaranteed debt service is the sum of principal repayments and interest actually paid in currency, goods, or services on long-term obligations of public debtors and long-term private obligations guaranteed by a public entity.	WDI	122	32	51%	44%
General Indicators	Revenue, excluding grants (% of GDP)	Revenue is cash receipts from taxes, social contributions, and other revenues such as fines, fees, rent, and income from property or sales. Grants are also considered as revenue but are excluded here.	WDI	156	32	47%	45%
General Indicators	Services, value added (% of GDP)	Services correspond to ISIC divisions 50-99 and they include value added in wholesale and retail trade (including hotels and restaurants), transport, and government, financial, professional, and personal services such as education, health care, and real estate services. Also included are imputed bank service charges, import duties, and any statistical discrepancies noted by national compilers as well as discrepancies arising from rescaling. Value added is the net output of a sector after adding up all outputs and subtracting intermediate inputs. It is calculated without making deductions for depreciation of fabricated assets or depletion and degradation of natural resources. The industrial origin of value added is determined by the International Standard Industrial Classification (ISIC), revision 3 or 4.	WDI	203	33	81%	85%

Table A.4.2 continued..

Cluster	Indicator	Description	Source	Countries	Years	Complete records	Complete records in last 5 years
General Indicators	Short-term debt (% of exports of goods, services and primary income)	Short-term external debt is defined as debt that has an original maturity of one year or less. Available data permit no distinction between public and private nonguaranteed short-term debt.	WDI	119	32	45%	40%
General Indicators	Short-term debt (% of total external debt)	Short-term debt includes all debt having an original maturity of one year or less and interest in arrears on long-term debt. Total external debt is debt owed to nonresidents repayable in currency, goods, or services. Total external debt is the sum of public, publicly guaranteed, and private nonguaranteed long-term debt, use of IMF credit, and short-term debt.	WDI	121	32	53%	45%
General Indicators	Short-term debt (% of total reserves)	Short-term debt includes all debt having an original maturity of one year or less and interest in arrears on long-term debt. Total reserves includes gold.	WDI	111	32	46%	37%
General Indicators	Social contributions (% of revenue)	Social contributions include social security contributions by employees, employers, and self-employed individuals, and other contributions whose source cannot be determined. They also include actual or imputed contributions to social insurance schemes operated by governments.	WDI	156	32	47%	44%
General Indicators	Tax revenue (% of GDP)	Tax revenue refers to compulsory transfers to the central government for public purposes. Certain compulsory transfers such as fines, penalties, and most social security contributions are excluded. Refunds and corrections of erroneously collected tax revenue are treated as negative revenue.	WDI	157	32	48%	45%

Table A.4.2 continued..

Cluster	Indicator	Description	Source	Countries	Years	Complete records	Complete records in last 5 years
General Indicators	Total debt service (% of exports of goods, services and primary income)	Total debt service to exports of goods, services and primary income. Total debt service is the sum of principal repayments and interest actually paid in currency, goods, or services on long-term debt, interest paid on short-term debt, and repayments (repurchases and charges) to the IMF.	WDI	121	32	47%	41%
General Indicators	Total debt service (% of GNI)	Total debt service is the sum of principal repayments and interest actually paid in currency, goods, or services on long-term debt, interest paid on short-term debt, and repayments (repurchases and charges) to the IMF.	WDI	121	32	50%	44%
General Indicators	Total natural resources rents (% of GDP)	Total natural resources rents are the sum of oil rents, natural gas rents, coal rents (hard and soft), mineral rents, and forest rents.	WDI	121	32	50%	44%
General Indicators	Total reserves (% of total external debt)	International reserves to total external debt stocks.	WDI	111	32	46%	37%
General Indicators	Trade (% of GDP)	Trade is the sum of exports and imports of goods and services measured as a share of gross domestic product.	WDI	195	33	79%	79%
General Indicators	Unemployment, total (% of total labor force) (modeled ILO estimate)	Unemployment refers to the share of the labor force that is without work but available for and seeking employment.	WDI	185	32	83%	85%
General Indicators	Unemployment, total (% of total labor force) (national estimate)	Unemployment refers to the share of the labor force that is without work but available for and seeking employment. Definitions of labor force and unemployment differ by country.	WDI	185	32	83%	85%

Table A.4.2 continued..

Cluster	Indicator	Description	Source	Countries	Years	Complete records	Complete records in last 5 years
General Indicators	CPIA building human resources rating (1=low to 6=high)	Building human resources assesses the national policies and public and private sector service delivery that affect the access to and quality of health and education services, including prevention and treatment of HIV/AIDS, tuberculosis, and malaria.	WDI	87	18	19%	34%
General Indicators	CPIA business regulatory environment rating (1=low to 6=high)	Business regulatory environment assesses the extent to which the legal, regulatory, and policy environments help or hinder private businesses in investing, creating jobs, and becoming more productive.	WDI	87	18	19%	34%
General Indicators	CPIA debt policy rating (1=low to 6=high)	Debt policy assesses whether the debt management strategy is conducive to minimizing budgetary risks and ensuring long-term debt sustainability.	WDI	87	18	19%	34%
General Indicators	CPIA economic management cluster average (1=low to 6=high)	The economic management cluster includes macroeconomic management, fiscal policy, and debt policy.	WDI	87	18	19%	34%
General Indicators	CPIA efficiency of revenue mobilization rating (1=low to 6=high)	Efficiency of revenue mobilization assesses the overall pattern of revenue mobilization--not only the de facto tax structure, but also revenue from all sources as actually collected.	WDI	87	18	19%	34%
General Indicators	CPIA equity of public resource use rating (1=low to 6=high)	Equity of public resource use assesses the extent to which the pattern of public expenditures and revenue collection affects the poor and is consistent with national poverty reduction priorities.	WDI	87	18	19%	34%
General Indicators	CPIA financial sector rating (1=low to 6=high)	Financial sector assesses the structure of the financial sector and the policies and regulations that affect it.	WDI	87	18	19%	34%

Table A.4.2 continued..

Cluster	Indicator	Description	Source	Countries	Years	Complete records	Complete records in last 5 years
General Indicators	CPIA fiscal policy rating (1=low to 6=high)	Fiscal policy assesses the short- and medium-term sustainability of fiscal policy (taking into account monetary and exchange rate policy and the sustainability of the public debt) and its impact on growth.	WDI	87	18	19%	34%
General Indicators	CPIA gender equality rating (1=low to 6=high)	Gender equality assesses the extent to which the country has installed Institutions and programs to enforce laws and policies that promote equal access for men and women in education, health, the economy, and protection under law.	WDI	87	18	19%	34%
General Indicators	CPIA macroeconomic management rating (1=low to 6=high)	Macroeconomic management assesses the monetary, exchange rate, and aggregate demand policy framework.	WDI	87	18	19%	34%
General Indicators	CPIA policies for social inclusion/equity cluster average (1=low to 6=high)	The policies for social inclusion and equity cluster includes gender equality, equity of public resource use, building human resources, social protection and labor, and policies and Institutions for environmental sustainability.	WDI	86	18	19%	34%
General Indicators	CPIA policy and Institutions for environmental sustainability rating (1=low to 6=high)	Policy and Institutions for environmental sustainability assess the extent to which environmental policies foster the protection and sustainable use of natural resources and the management of pollution.	WDI	87	18	19%	34%
General Indicators	CPIA property rights and rule-based	Property rights and rule-based governance assess the extent to which private economic activity is facilitated by an effective legal system and rule-based governance	WDI	87	18	19%	34%

Table A.4.2 continued..

Cluster	Indicator	Description	Source	Countries	Years	Complete records	Complete records in last 5 years
	governance rating (1=low to 6=high)	structure in which property and contract rights are reliably respected and enforced.					
General Indicators	CPIA public sector management and Institutions cluster average (1=low to 6=high)	The public sector management and Institutions cluster includes property rights and rule-based governance, quality of budgetary and financial management, efficiency of revenue mobilization, quality of public administration, and transparency, accountability, and corruption in the public sector.	WDI	87	18	19%	34%
General Indicators	CPIA quality of budgetary and financial management rating (1=low to 6=high)	Quality of budgetary and financial management assesses the extent to which there is a comprehensive and credible budget linked to policy priorities, effective financial management systems, and timely and accurate accounting and fiscal reporting, including timely and audited public accounts.	WDI	87	18	19%	34%
General Indicators	CPIA quality of public administration rating (1=low to 6=high)	Quality of public administration assesses the extent to which civilian central government staff is structured to design and implement government policy and deliver services effectively.	WDI	87	18	19%	34%
General Indicators	CPIA social protection rating (1=low to 6=high)	Social protection and labor assess government policies in social protection and labor market regulations that reduce the risk of becoming poor, assist those who are poor to better manage further risks, and ensure a minimal level of welfare to all people.	WDI	85	18	19%	34%
General Indicators	CPIA structural policies cluster average (1=low to 6=high)	The structural policies cluster includes trade, financial sector, and business regulatory environment.	WDI	85	18	19%	34%

Table A.4.2 continued...

Cluster	Indicator	Description	Source	Countries	Years	Complete records	Complete records in last 5 years
General Indicators	CPIA trade rating (1=low to 6=high)	Trade assesses how the policy framework fosters trade in goods.	WDI	87	18	19%	34%
General Indicators	CPIA transparency, accountability, and corruption in the public sector rating (1=low to 6=high)	Transparency, accountability, and corruption in the public sector assess the extent to which the executive can be held accountable for its use of funds and for the results of its actions by the electorate and by the legislature and judiciary, and the extent to which public employees within the executive are required to account for administrative decisions, use of resources, and results obtained. The three main dimensions assessed here are the accountability of the executive to oversight Institutions and of public employees for their performance, access of civil society to information on public affairs, and state capture by narrow vested interests.	WDI	87	18	19%	34%

Source: World Bank Country Level Institutional Assessment and Review (CLiar) Dashboard.

Note: CPIA = Country Policy and Institutional Assessment, FDI = Foreign Direct Investment, FMIS = Financial Management Information System, GDP = Gross Domestic Product, GNI = Gross Domestic Income, GSD = Global State of Democracy, GTMI = GovTech Maturity Index, PMR = Product Market Regulation (OECD Database), PPP = Purchasing Power Parity, SGI = Sustainable Governance Indicators, V-DEM = Varieties of Democracy Database, WBL = Women, Business and the Law.

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TABLE A.4.3 - Static CTF Scores Indicators Coverage, by Country

Country	CTF Indicators coverage (%)	Country	CTF Indicators coverage (%)
Afghanistan	40.7	Botswana	75
Albania	44.3	Brazil	77.9
Algeria	72.1	British Virgin Islands	2.1
American Samoa	0	Brunei Darussalam	15.7
Andorra	11.4	Bulgaria	74.3
Angola	70.7	Burkina Faso	75.7
Antigua and Barbuda	30	Burundi	57.9
Argentina	95	Cabo Verde	40
Armenia	58.6	Cambodia	72.9
Aruba	0	Cameroon	73.6
Australia	69.3	Canada	69.3
Austria	68.6	Cayman Islands	3.6
Azerbaijan	57.1	Central African Republic	55
Bahamas, The	31.4	Chad	72.9
Bahrain	57.9	Channel Islands	0
Bangladesh	74.3	Chile	75.7
Barbados	53.6	China	71.4
Belarus	75.7	Colombia	80.7
Belgium	67.9	Comoros	37.1
Belize	31.4	Congo, Dem. Rep.	74.3
Benin	75	Congo, Rep.	70
Bermuda	2.1	Costa Rica	80.7
Bhutan	45.7	Croatia	74.3
Bolivia	75	Curaçao	0.7
Bosnia and Herzegovina	71.4	Cyprus	56.4

Table A.4.3 continued...

Country	CTF Indicators coverage (%)	Country	CTF Indicators coverage (%)
Czechia	75.7	Greece	68.6
Côte d'Ivoire	90.7	Greenland	0
Denmark	68.6	Grenada	30
Djibouti	45	Guam	0
Dominica	29.3	Guatemala	87.9
Dominican Republic	75.7	Guinea	90.7
Ecuador	75.7	Guinea-Bissau	44.3
Egypt, Arab Rep.	72.9	Guyana	53.6
El Salvador	92.9	Haiti	69.3
Equatorial Guinea	42.1	Honduras	72.1
Eritrea	53.6	Hong Kong SAR, China	51.4
Estonia	65	Hungary	75.7
Eswatini	42.1	Iceland	42.1
Ethiopia	89.3	India	73.6
Faroe Islands	0	Indonesia	95
Fiji	57.1	Iran, Islamic Rep.	67.9
Finland	68.6	Iraq	45
France	69.3	Ireland	67.9
French Polynesia	0	Isle of Man	0
Gabon	59.3	Israel	52.1
Gambia, The	64.3	Italy	69.3
Georgia	90	Jamaica	73.6
Germany	69.3	Japan	69.3
Ghana	92.9	Jordan	75
Gibraltar	0.7	Kazakhstan	94.3

Table A.4.3 continued...

Country	CTF Indicators coverage (%)	Country	CTF Indicators coverage (%)
Kenya	87.9	Mexico	79.3
Kiribati	14.3	Micronesia, Fed. Sts.	12.9
Korea, Rep.	77.1	Moldova	75
Kosovo	67.9	Monaco	8.6
Kuwait	56.4	Mongolia	91.4
Kyrgyz Republic	92.1	Montenegro	71.4
Lao PDR	75	Morocco	74.3
Latvia	66.4	Mozambique	89.3
Lebanon	69.3	Myanmar	90.7
Lesotho	45.7	Namibia	60
Liberia	90	Nauru	7.9
Libya	42.1	Nepal	75.7
Liechtenstein	6.4	Netherlands	67.9
Lithuania	65	New Caledonia	0
Luxembourg	57.1	New Zealand	69.3
Macao SAR, China	9.3	Nicaragua	69.3
Madagascar	92.9	Niger	72.9
Malawi	90	Nigeria	92.1
Malaysia	72.9	North Macedonia	71.4
Maldives	65.7	Northern Mariana Islands	0
Mali	90	Norway	68.6
Malta	58.6	Oman	57.9
Marshall Islands	12.1	Pakistan	75.7
Mauritania	91.4	Palau	9.3
Mauritius	62.1	Panama	71.4

Table A.4.3 continued...

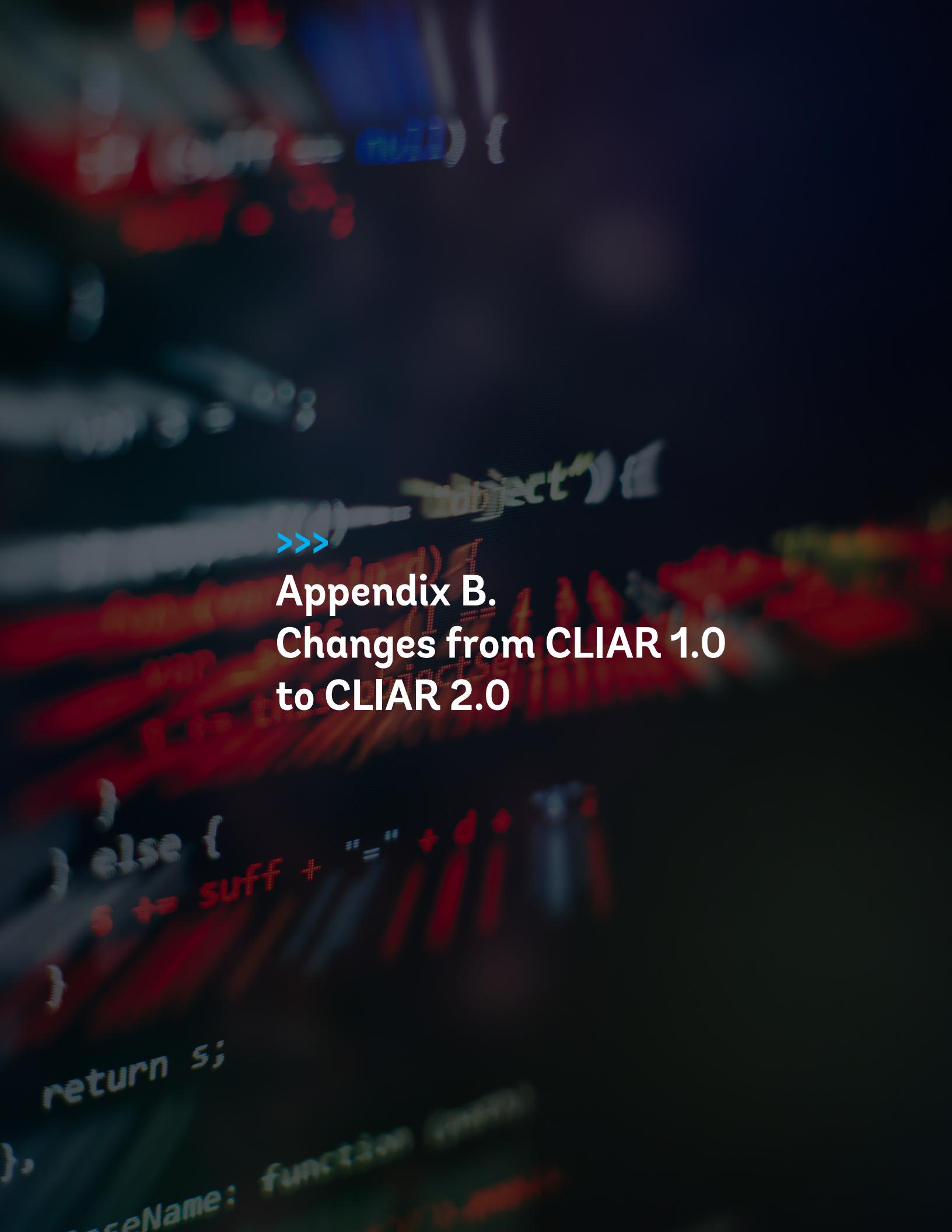
Country	CTF Indicators coverage (%)	Country	CTF Indicators coverage (%)
Papua New Guinea	55.7	South Sudan	52.9
Paraguay	72.9	Spain	71.4
Peru	75	Sri Lanka	72.9
Philippines	71.4	St. Kitts and Nevis	27.9
Poland	77.9	St. Lucia	31.4
Portugal	71.4	St. Martin (French part)	0
Puerto Rico	3.6	St. Vincent and the Grenadines	29.3
Qatar	58.6	Sudan	69.3
Romania	75.7	Suriname	54.3
Russian Federation	75.7	Sweden	68.6
Rwanda	75.7	Switzerland	52.1
Samoa	14.3	Syrian Arab Republic	41.4
San Marino	12.9	São Tomé and Príncipe	35.7
Saudi Arabia	58.6	Taiwan, China	37.9
Senegal	92.1	Tajikistan	54.3
Serbia	90	Tanzania	70.7
Seychelles	37.1	Thailand	76.4
Sierra Leone	92.9	Timor-Leste	60.7
Singapore	72.1	Togo	72.9
Sint Maarten (Dutch part)	1.4	Tonga	30
Slovak Republic	76.4	Trinidad and Tobago	60.7
Slovenia	65	Tunisia	73.6
Solomon Islands	47.1	Turkmenistan	52.9
Somalia	56.4	Turks and Caicos Islands	7.1
South Africa	73.6	Tuvalu	14.3

Table A.4.3 continued...

Country	CTF Indicators coverage (%)	Country	CTF Indicators coverage (%)
Türkiye	78.6	Vanuatu	45.7
Uganda	70.7	Venezuela, RB	68.6
Ukraine	90.7	Vietnam	72.9
United Arab Emirates	72.1	Virgin Islands (U.S.)	0
United Kingdom	68.6	West Bank and Gaza	64.3
United States	71.4	Yemen, Rep.	52.9
Uruguay	72.9	Zambia	72.1
Uzbekistan	91.4	Zimbabwe	92.9

Source: World Bank Country Level Institutional Assessment and Review (CLiar) Dashboard.

Note: CTF = Closeness to Frontier.



>>> Appendix B. Changes from CLiar 1.0 to CLiar 2.0

This section outlines the changes from CLIAR 1.0 to the current version CLIAR 2.0. Changes can be classified under three broad categories, namely, (1) changes in institutional clusters, (2) changes in indicators, and (3) new and additional features.

The structure of institutional clusters has been modified from CLIAR 1.0. CLIAR 2.0 increased the number of institutional clusters from nine to thirteen. This new version includes two additional new clusters (Service Delivery and Climate Change Institutions). Previous clusters are unpacked: the Public Sector cluster has been disaggregated into Public Finance, Public HRM, and Digital and Data Institutions; and the Accountability cluster has been disaggregated into Absence of Corruption and Transparency and Accountability Institutions. The disaggregation of the former Accountability cluster is needed given that one focuses on the absence or presence of corruption (which would arguably represent an outcome in and of itself), and the other focuses on the institutions (transparency and accountability) that allow for the denunciation and control of malfeasance. The Financial

Market Institutions cluster was merged into Business and Trade Environment, which is now called Business Environment; and Labor Market Institutions is now broader and encompasses Social Protection.

The set of benchmarking indicators, including their mapping onto institutional clusters, has also been modified. The previous version of CLIAR relied on 82 indicators, with the new version using 138. Table B1 shows a cluster-by-cluster comparison of indicators of CLIAR 1.0 versus CLIAR 2.0. Moreover, as discussed in section 2.1.1, the indicator validation process was strengthened and further institutionalized vis-à-vis CLIAR 1.0. In particular, CLIAR 1.0 relied on several ad hoc stakeholder consultations with data experts to validate the data curation, while CLIAR 2.0 created and institutionalized the process. In addition, the data Extract, Transform, Load (ETL) process and data pipeline was further strengthened by further documentation and compartmentalizing the code, including robust and automated integrity tests.

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TABLE B.1 - CLIAR 1.0 vs. CLIAR 2.0 Indicator Comparison

CLIAR 1.0 Institutional Cluster	CLIAR 1.0 Indicators Included (82 indicators)	CLIAR 2.0 Institutional Cluster	CLIAR 2.0 Indicators Included (138 indicators)
1. Political institutions	11 indicators: (1) Freedom in the world: political rights; (2) freedom in the world: civil liberties; (3) Institutionalized democracy – institutionalized autocracy; (4) political power distributed by socio-economic position; (5) political power distributed by social group; (6) political power distributed by gender; (7) lower chamber gender quota; (8) lower chamber female legislator; (9) order and security; (10) fundamental rights; (11) constraints on government powers.	 1. Political institutions	11 indicators: (1) Democracy Status (BTI); (2) Constraints on Gov. Powers (WJP); (3) Separation of powers (BTI); (4) Legislative constraints on the executive index (V-DEM); (5) Free and fair elections (BTI); (6) Political Rights (Freedom House); (7) Power distributed by socio-economic position (V-DEM); (8) Power distributed by social group (V-DEM); (9) Power distributed by gender (V-DEM); (10) Lower chamber gender quota (V-DEM); (11) Women political empowerment index (V-DEM).
2. Social institutions	7 indicators: (1) public trust in politicians; (2) civil society participation index; (3) core civil society index; (4) engaged society; (5) CSO entry and exit; (6) Freedom of academic and cultural expression; (7) Freedom of opinion and expression	 2. Social institutions	16 indicators: (1) Civil Liberties (Freedom House); (2) Association and assembly rights (BTI); (3) Political polarization (V-DEM); (4) Press Freedom Index (Press Freedom Index); (5) Civil society participation (V-DEM); (6) CSO entry and exit (V-DEM);

Table B.1 continued...

CLIA 1.0 Institutional Cluster	CLIA 1.0 Indicators Included (82 indicators)	CLIA 2.0 Institutional Cluster	CLIA 2.0 Indicators Included (138 indicators)
			(7) CSO repression (V-DEM); (8) Engaged society (V-DEM); (9) Freedom of assembly and association (WJP); (10) Freedom of academic and cultural expression (V-DEM); (11) Freedom of belief and religion (WJP); (12) Freedom of opinion and expression (WJP); (13) Freedom from arbitrary interference with privacy (WJP); (14) Freedom of discussion for men (V-DEM); (15) Freedom of discussion for women (V-DEM); (16) Women's Social Equality Index (CLIA).
3. Anticorruption, Transparency and Accountability	10 indicators: (1) Irregular payments and bribes; (2) Complaint mechanisms; (3) Diversion of public funds; (4) Absence of corruption; (5) GovTech Maturity Index (GTMI); (6) Publicized laws and government data; (7) Right to information; (8) Rigorous and impartial public administration; (9) Transparency of government policymaking; (10) Open government	 3. Absence of Corruption	5 indicators: (1) Absence of Corruption (WJP); (2) Public Sector Corruption (V-DEM); (3) Executive Corruption (V-DEM); (4) Legislative Corruption (V-DEM); (5) Government regulations are applied and enforced without improper influence (WJP).
4. Justice institutions	7 indicators: (1) Corruption/Percent of firms identifying the courts system as a major constraint; (2) People can access and afford civil justice; (3) Efficiency of legal framework in challenging regs; (4) Efficiency of legal framework in settling disputes; (5) Judicial accountability; (6) Integrity of the legal system; (7) Criminal justice.	 4. Trans. and Acc. institutions	5 indicators: (1) Right to information (WJP); (2) Publicized laws and government data (WJP); (3) Open Budget Index (Open Budget Survey); (4) Complaint mechanisms (WJP); (5) Digital Citizen Engagement Index score (GTMI).
		 5. Justice institutions	17 indicators: (1) Judicial accountability (V-DEM); (2) Independent judiciary (BTI); (3) High court independence (V-DEM); (4) Judicial branch corruption (WJP); (5) Lower court independence (V-DEM); (6) Fair trial (Global State of Democracy); (7) Expropriation without lawful process and adequate compensation (WJP); (8) Due process of law and rights of the accused (WJP); (9) Alternative dispute resolution mechanisms (WJP); (10) People can access and afford civil justice (WJP); (11) Civil justice is effectively enforced

Table B.1 continued...

CLIA 1.0 Institutional Cluster	CLIA 1.0 Indicators Included (82 indicators)	CLIA 2.0 Institutional Cluster	CLIA 2.0 Indicators Included (138 indicators)
			(WJP); (12) Civil justice is not subject to unreasonable delays (WJP); (13) Criminal adjudication system is timely and effective (WJP); (14) Criminal investigation system is effective (WJP); (15) Criminal system is impartial (WJP); (16) Access to justice for men (V-DEM); (17) Access to justice for women (V-DEM).
5. Public Sector Performance institutions	7 indicators: (1) Efficient government spending; (2) Procurement; (3) Regulatory enforcement; (4) Criteria for appointment decisions in the state administration; (5) Centre of Government, influence; (6) Regulatory governance; (7) Impartial Public Administration	 6. Public Finance institutions	29 indicators: (1) Monetary stability (BTI); (2) Fiscal stability (BTI); (3) Debt Transparency Index (CLIA); (4) PFM Management Information Systems (CLIA); (5) Budget Documentation (PEFA); (6) Transfers to subnational governments (PEFA), (7) Performance information for service delivery (PEFA), (8) Fiscal risk reporting (PEFA); (9) Public investment management (PEFA); (10) Public asset management (PEFA); (11) Debt management (PEFA); (12) Macroeconomic and fiscal forecasting (PEFA); (13) Fiscal strategy (PEFA); (14) Medium term perspective in expenditure budgeting (PEFA); (15) Budget preparation process (PEFA); (16) Legislative scrutiny of budgets (PEFA); (17) Revenue administration (PEFA); (18) Accounting for revenues (PEFA); (19) Predictability of in-year resource allocation (PEFA); (20) Expenditure arrears (PEFA); (21) Payroll controls (PEFA); (22) Procurement (PEFA); (23) Internal controls on nonsalary expenditure (PEFA); (24) Internal audit effectiveness (PEFA); (25) Financial data integrity (PEFA); (26) In-year budget reports (PEFA); (27) Annual financial reports (PEFA); (28) External audit (PEFA); (29) Public procurement of energy efficiency products (RISE).

Table B.1 continued...

CLIA 1.0 Institutional Cluster	CLIA 1.0 Indicators Included (82 indicators)	CLIA 2.0 Institutional Cluster	CLIA 2.0 Indicators Included (138 indicators)
		 7. Public HRM institutions	5 indicators: (1) Rigorous and impartial public administration (V-DEM); (2) Efficient use of assets (BTI); (3) Criteria for appointment decisions in the state administration (V-DEM); (4) Access to state jobs by political group (V-DEM); (5) Access to state jobs by socio-economic position (V-DEM).
		 8. Digital and Data institutions	5 indicators: (1) Core Government Systems Index (CGSI) (GTMI); (2) GovTech Enablers Index (GTEI) (GTMI); (3) Public Service Delivery Index (PSDI) (GTMI); (4) Censuses and Surveys (SPI); (5) Standards and Methods (SPI).
6. Business Environment and Trade	14 indicators: (1) Administrative burdens on startups; (2) Explicit barriers to trade and investment; (3) Other barriers to trade; (4) Complexity of regulatory procedures; (5) Burden of customs procedures; (6) Effectiveness of antimonopoly policy; (7) Burden of government regulation; (8) Efficiency of the clearance process; (9) Extent of market dominance; (10) Property rights; (11) Regulatory protection of incumbents; (12) Border clearance efficiency; (13) Freedom of foreigners to visit; (14) Non-tariffs trade barriers	 9. Business Environment	6 indicators: (1) Property rights (V-DEM); (2) Competition Policy (BTI); (3) Regulatory enforcement (WJP); (4) Efficiency of the clearance process (WB LPI); (5) Bank concentration (%) (GFDB); (6) Women, Business and Law Entrepreneurship Index (WBL).
7. Financial	8 indicators: (1) Foreign Currency Regulations; (2) Capital controls; (3) Foreign Investment Restrictions; (4) Central bank independence; (5) Competition regulation; (6) Supervision efficiency-banking; (7) Supervision efficiency-financial; (8) Credit market regulations		

Table B.1 continued...

CLIA 1.0 Institutional Cluster	CLIA 1.0 Indicators Included (82 indicators)	CLIA 2.0 Institutional Cluster	CLIA 2.0 Indicators Included (138 indicators)		
8. SOE corporate governance institutions	11 indicators: (1) Use of command and control regulation; (2) Direct control over business enterprises; (3) Governance of SOEs; (4) Government involvement in network sectors; (5) Price controls; (6) Scope of SOEs; (7) SOE-government transfers governance rule; (8) SOE board of directors independence; (9) SOE annual report disclosure requirement; (10) SOE financial audit requirement; (11) SOE report legislative review requirement	 10. SOE corporate governance institutions	6 indicators: (1) Scope of state-owned enterprises (OECD PMR); (2) Government involvement in network sectors (OECD PMR); (3) Direct control over business enterprises (OECD PMR); (4) Governance of state-owned enterprises (OECD PMR); (5) Price controls (OECD PMR); (6) Use of command and control regulation (OECD PMR).		
9. Labor market	7 indicators: (1) labor market regulations; (2) collective bargaining coverage rate; (3) employment protection legislation index, permanent workers; (4) employment protection legislation index, temporary workers; (5) trade union density; (6) ratio of minimum to mean wages; (7) Hiring and firing practices	 11. Labor and Social Protection institutions	7 indicators: (1) Fundamental labor rights are effectively guaranteed (WJP); (2) Workers' rights Index (Global State of Democracy); (3) Employment protection, regular (OECD); (4) Employment protection, temp. (OECD); (5) Women's Labor Equality Index (CLIA); (6) Social Protection Coverage (ASPIRE); (7) Adequacy of Social Protection benefits (ASPIRE).	 12. Service Delivery institutions	11 indicators: (1) Access to public services distributed by political group (V-DEM); (2) Access to public services distributed by socio-economic position (V-DEM); (3) Access to public services distributed by gender (V-DEM); (4) Pregnant women receiving prenatal care (%) (WDI); (5) Births attended by skilled health staff (% of total) (WDI); (6) Completeness of birth registration (%) (WDI); (7) Pupil-teacher ratio, primary (WDI); (8) Pupil-teacher ratio, secondary (WDI); (9) Trained teachers in preprimary education (% of total teachers) (WDI); (10) Trained teachers in primary education (% of total teachers) (WDI); (11) Trained teachers in secondary education (% of total teachers) (WDI).

Table B.1 continued...

CLIA 1.0 Institutional Cluster	CLIA 1.0 Indicators Included (82 indicators)	CLIA 2.0 Institutional Cluster	CLIA 2.0 Indicators Included (138 indicators)
		 13. Climate Change and Environment institutions	<p>15 indicators: (1) Environmental policy (BTI); (2) National energy efficiency planning (RISE); (3) Energy efficiency entities (RISE); (4) Incentives and mandates: Industrial and Commercial End users (RISE); (5) Incentives and mandates: Public sector (RISE); (6) Incentives and mandates: Energy Utility Programs (RISE); (7) Financing mechanisms for energy efficiency (RISE); (8) Minimum energy efficiency performance standards (RISE); (9) Energy labeling systems (RISE); (10) Building Energy Codes (RISE); (11) Legal framework for renewable energy (RISE); (12) Planning for renewable energy expansion (RISE); (13) Incentives and regulatory support for renewable energy (RISE); (14) Attributes of financial and regulatory incentives (RISE); (15) Carbon Pricing and Monitoring (RISE).</p>

Source: World Bank Country Level Institutional Assessment and Review (CLIA) Dashboard.

Note: ASPIRE = Atlas of Social Protection Indicators of Resilience and Equity, BTI = Bertelsmann Transformation Index, CLIA = Country Level Institutional Assessment and Review, CSO = Civil Society Organization, GFDB = Global Financial Database, GTMI = GovTech Maturity Index, PEFA = Public Expenditure and Financial Accountability, PMR = Product Market Regulation (OECD Database), RISE = Regulatory Indicators for Sustainable Energy, SOE = State-Owned Enterprise, SPI = Statistical Performance Indicators, V-DEM = Varieties of Democracy Database, WDI = World Development Indicators, WJP = World Justice Project.

This new version of CLIA includes several new features to the methodology. While the core methodological approach is maintained, enhancements and additional analysis are now provided, summarized as follows:

1. estimation of country-cluster-level averages (and their country-level dispersion),
2. time-varying CTF and benchmarking, and
3. curation on non-benchmarked data.

