7 Standards for Better Governance

Main messages

- Governments deliver development but too often fall short because of weak foundations in governance. In Ghana, one in three projects financed by local governments, from schools to roads, never gets completed, wasting nearly 20 percent of public investment. The core problem is not corruption, but the mismanagement of people, payments, and procurement. Strengthening the systems for these basic functions is where development begins.
- Governance standards are the hidden wiring of effective states. They codify how governments hire, pay, and procure, turning discretion into discipline. When governments publish budgets and procurement data in line with international standards, as Ukraine did to sustain external financing during crisis, transparency becomes a foundation for trust and stability.
- The hardest part is consistency: making standards stick across every ministry and municipality. Globally, the public sector employs 373 million people, and even within a single government, the share of recruitment based on merit can vary from 20 percent to 100 percent across agencies. Moving from rule of thumb to "rule by standards" involves a quiet revolution that reduces corruption and mismanagement but demands scale, coordination, and realism regarding administrative costs.
- Governments must adapt standards to context, not copy best practice blindly. One-size-fits-all reforms backfire when capacity for implementing them is low. Data from 39 countries show that as nations grow richer, they tighten deadlines for paying contractors but keep the share of on-time payments roughly constant, a sign of learning and calibration. The lesson: measure, listen, and adjust, because standards for governance work best when governments make them their own.
- Performance standards can turn bureaucracies from rule followers into problem solvers. When governments link performance to measurable outcomes, as in the cases of Malaysia's outcome-based budgeting or Chile's evaluation-driven reforms, public sector efficiency increases sharply. In Punjab, Pakistan, performance pay for tax collectors increased revenue collection by about 40 percent in just two years, and in Andhra Pradesh, India, teacher bonuses tied to student learning improved learning outcomes across all subjects. Standards that measure what matters empower bureaucrats to deliver results, not just follow rules.

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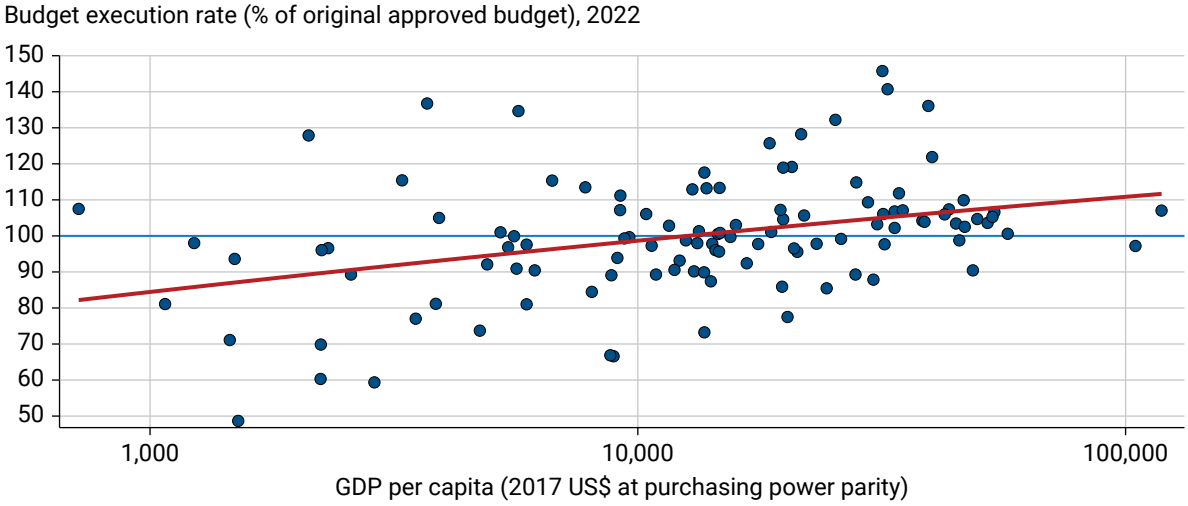
Governance standards: Helping governments deliver on their commitments

Governments are responsible for implementing public policies and delivering public goods and services that are foundational for development. However, they often struggle to deliver on their policy commitments. For example, in Ghana, local governments carry out projects such as building schools and latrines. A study of more than 14,000 such projects found that about one-third were not completed, accounting for nearly one-fifth of local governments' public investments.[1] This country-level case reflects a global issue affecting both local and central governments. Each year, governments allocate financial resources to various projects and programs. Yet in countries with lower levels of economic development, these budgets are frequently underspent, falling short of the countries' original commitments (refer to figure 7.1).

A key factor behind this implementation gap is the limited capacity of public institutions—understood here as formal organizations in the public sector—to fulfill their mandates.[2] For Ghana's local governments, corruption played only a small role in explaining the implementation gap.[3] In fact, unfinished projects resulted in financial losses for both government officials and contractors, outweighing any potential gains from bribes or collusion. Instead, organizational mismanagement of functions such as personnel, payments, and procurement explained most of the gap. Engineers estimated project costs based on inaccurate data, budget and planning functions were not coordinated, and contractors were rarely paid on time.[4] To deliver on their policy commitments, governments have to address these types of organizational challenges.

This chapter argues that standards provide institutional scaffoldings for better governance, understood here as the management of core

Figure 7.1 Countries at lower levels of economic development tend not to spend all the funds they have budgeted



Sources: WDR 2025 team calculations, based on data from Primary Government Expenditures as a Proportion of Original Approved Budget (%) (data portal), World Bank, https://data.worldbank.org/indicator/GF.XPD.BUDG.ZS; Prosperity (dashboard), World Bank, https://data360.worldbank.org/en/prosperity.

Note: "Budget execution rate" refers to expenditure by primary governments as a proportion of originally approved budgets. The blue line represents complete spending of the allocated budget (that is, 100 percent). Values above the blue line represent overspending and those below, underspending. The red line represents the best-fit curve using a quadratic function.

organizational functions of government: personnel, payments, and procurement.[5] The chapter emphasizes institutional variation in governance within the same government and how this affects institutional capacity.[6] Governments should transition from governance based on rule of thumb to governance based on standards. Rule-of-thumb governance relies on the tacit knowledge and personal preferences of decision-makers in the public sector, which can lead the latter to base managerial decisions on imperfect information and biases. At its worst, rule-of-thumb governance leads to capricious decisions that benefit those in power.[7] In contrast, standards-based governance employs codified measurements (rulers) that increase transparency and procedural requirements (rules) that diffuse good practices. These standards, when put into practice consistently and at scale, strengthen governance and enable public institutions to deliver on their commitments.

Governance standards should be implemented gradually, leveraging evidence on the impact of implementation and leaving sufficient space for agency. That is because governance standards are costly to put into practice. For instance, complying with standards forces personnel to divert scarce time from implementation to compliance, reducing the quality of policy implementation.[8] To both reduce the costs of implementation and amplify its benefits, governments need to introduce evidence-based assessments of the organizational impact of standards and implement them through a gradual and priority-driven approach. This requires collecting and analyzing survey and administrative data on organizational processes, as well as listening to feedback from institutions and people in the public sector. This, in turn, enables governments to make pragmatic choices among competing priorities and adapt standards so that they work better for them, rather than pursue general "best practices" that are neither feasible nor suited for their needs.

By examining how standards can serve as a basis for better governance, this chapter emphasizes the organizational and managerial aspects of governance, which are sometimes overlooked. Therefore, the discussion and evidence presented in the chapter highlight operational ways to strengthen governance and enhance policy implementation, complementing debates on the role of political economy and strategic policy making discussed in other *World Development Reports*.[9] In doing so, this chapter emphasizes how implementation can suffer from gaps even when public institutions and personnel are trying to do the right things but need the help of standards to do so well.

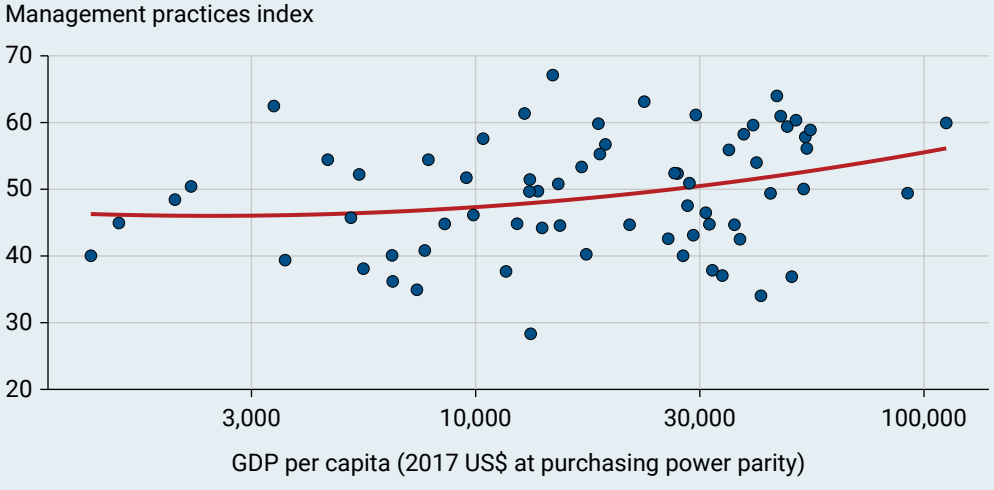
How standards shape the governance of organizational functions

The quality of governance, considered in this chapter to be the management of core organizational functions of government, often varies across public institutions in the same public sector. Some institutions within a government may be "islands of excellence," well managed and capable of consistently delivering on the government's policy commitments.[10] Many are not. Empirical evidence on the private and public sectors shows that variation in the quality of organizational management explains differences in performance and policy implementation (refer to box 7.1). The challenge for governments is how to improve the governance of public institutions that trail behind, making the quality of governance more consistent across the public sector. This involves a capacity-building process that requires a constructive approach. In developmental psychology, the term "instructional scaffolding" refers to a pedagogical method that recognizes the need for a collaborative approach to transferring knowledge to learners.[11] In governance, standards serve as institutional scaffoldings that help institutions and people manage themselves better.

Box 7.1 Recent empirical research on management confirms its impact on organizational performance

A growing body of empirical evidence has documented large and persistent differences in management quality across firms in the private sector, which drive variation in the productivity of these firms.[a] This is true across firms of different sizes and across countries. Building on an empirical agenda derived from this evidence, the World Bank's Enterprise Surveys calculate a management practices index that measures the quality of management at the firm level along a set of dimensions similar to those employed in the World Management Survey.[b] National-level averages of scores on this index suggest that the quality of management of firms increases as countries develop (refer to figure B7.1.1). Empirical studies on management have extended beyond firms, investigating how management practices in organizations such as schools affect student learning. For instance, a study comparing school-level management in Brazil, India, Sweden, the United Kingdom, and the United States found that better strategic leadership and governance, in the form of accountability to school boards, correlated with better outcomes in regard to student learning.[c]

Figure B7.1.1 As countries develop, the quality of management in their firms improves



Sources: WDR 2025 team calculations, based on data from Prosperity (dashboard), World Bank, https://data360.worldbank.org/en/prosperity; World Bank Enterprise Surveys (dashboard), World Bank, https://www.enterprisesurveys.org/en/enterprisesurveys.

Note: Each bullet corresponds to a national-level average of the quality of management in surveyed firms in an individual country. The red line represents the best-fit curve using a quadratic function.

(Box continues next page)

Box 7.1 Recent empirical research on management confirms its impact on organizational performance *(continued)*

At the World Bank, a similar empirical agenda to measure management practices across governments has flourished in the past decade. The World Bank's Bureaucracy Lab surveys public servants, providing evidence-based insights on management practices in the public sector. A key takeaway from a growing body of evidence is that the quality of management varies across institutions in the same government, confirming findings from qualitative research on islands of excellence.[d] This within-government variation in governance has implications for institutional performance. A recent survey of public schools in Lithuania, for instance, finds that schools with a higher quality of management are better able to support their students' mental health.[e] The Global Survey of Public Servants, a research initiative undertaken by a consortium of the World Bank and academic institutions, makes available a globally comparable data set on management practices more broadly and management of human resources management in particular.[f]

Source: WDR 2025 team.

a. Bloom and Van Reenen (2007); Bloom et al. (2010); Scur et al. (2024).
b. For more information, refer to World Bank Enterprise Surveys (dashboard), World Bank, https://www.enterprisesurveys.org/en/enterprisesurveys.
c. Bloom et al. (2015). In particular, a one-standard-deviation increase in scores on a management practices index is correlated with a 0.425-standard-deviation increase in pupil achievement, measured as the percentage of pupils who pass subject examinations and achieve overall and subject-specific examination scores.
d. Schuster et al. (2023).
e. World Bank (2022).
f. For more information, refer to Global Survey of Public Servants, Bureaucracy Lab, Development Impact Group and Governance Global Practice, World Bank, https://www.globalsurveyofpublicservants.org/.

Building on its definition of governance, this chapter defines "governance standards" as the set of standards that codify measurements and procedural requirements that shape how public institutions manage core organizational functions. The chapter focuses on the three core organizational functions noted earlier in the chapter: payments, personnel, and procurement.[12] Each of these functions is commonplace, and how well they are managed shapes institutional capacity, defined here as the ability of governments to implement their policy commitments.[13] Governance standards thus codify measurements and procedural requirements that shape the organizations, systems, and people responsible for policy implementation (refer to chapter 2).

Because adherence to governance standards is often mandatory, they are a subset of laws and policies, in the sense that they set specific rules for the "how" of implementation rather than the "what" of policy. For example, in budget management, a law can incorporate a standard that requires government financial reports to be prepared by budget offices located in government entities and published annually. As the discussion here implies,

standards support the routine application of practices at the level of public institutions, understood here as the formal organizations in the public sector responsible for the implementation of policies. This perspective complements the focus in *World Development Report 2017: Governance and the Law*, which emphasized the governance of the policy arena, particularly the power asymmetries among actors who decide what policies are to be implemented.[14]

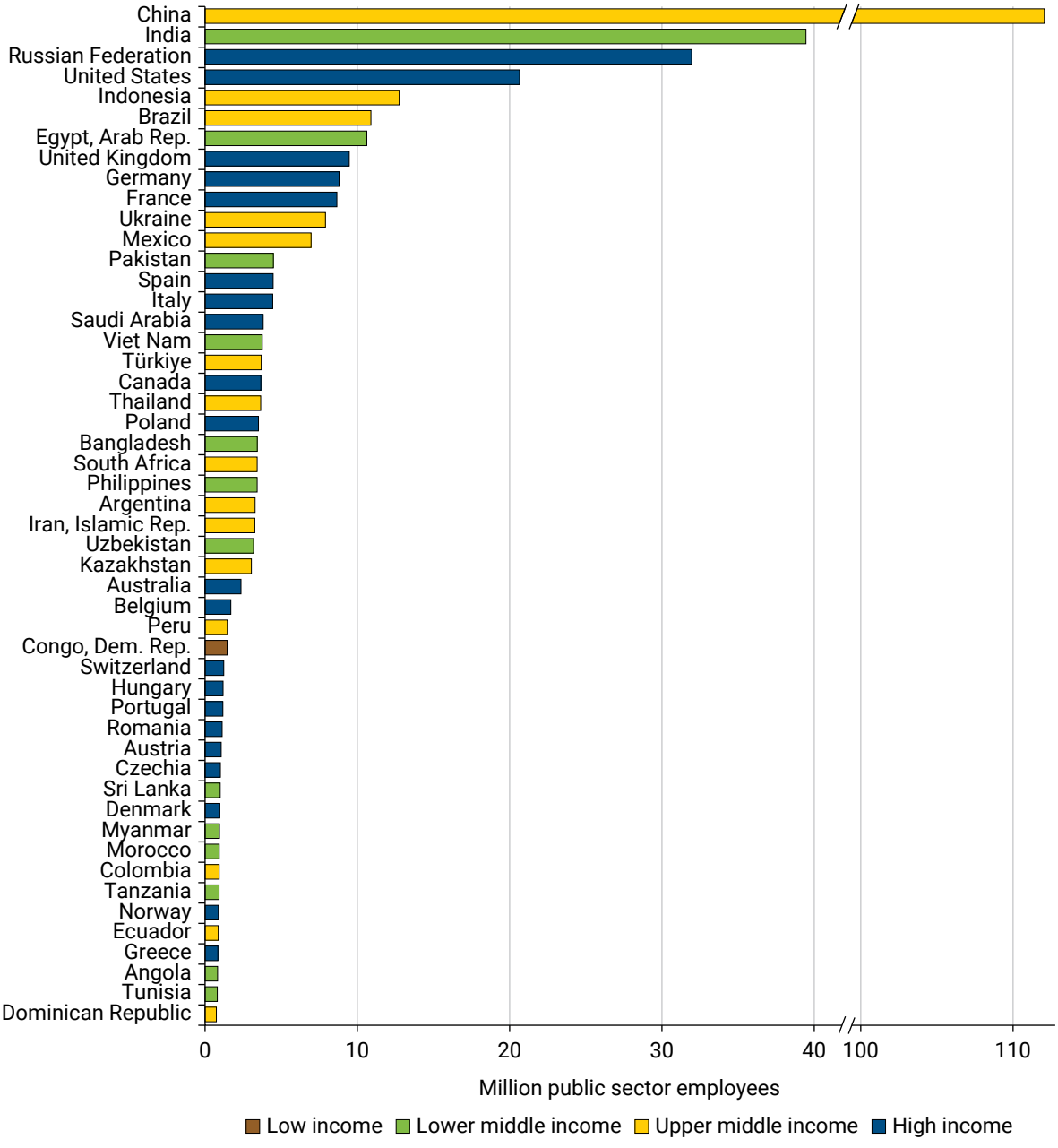
Size and diversity of the public sector

One of the challenges in implementing governance standards is the scale of the public sector itself.[15] The public sector employs 373 million workers across the world, according to World Bank estimates from the Worldwide Bureaucracy Indicators.[16] The 50 largest public sectors account for 361 million public sector employees, or 97 percent of public sector employment across the globe (refer to figure 7.2). Compounding the challenge of scale, the relative size of a country's public sector grows with its level of economic development (refer to figure 7.3). As public sectors grow, governance standards adequate for those of smaller scale break down. For example, a hiring manager can reasonably evaluate five candidates through a job interview. However, if the number of candidates is much larger, the same recruitment standard (that is, a job interview) is no longer feasible. The term "bureaucratic overload" describes contexts in which bureaucracies are unable to keep up with the volume of organizational processes they have to manage.[17] This results in a decline in the quality of organizational governance, which in turn reduces institutional capacity to implement policies.

Addressing challenges related to bureaucratic overload rarely requires governments to codify innovative standards for governance. For example, the international development community has for many decades recommended governance standards such as those related to recruiting candidates through competitive examinations, preparing and publishing annual financial reports, and organizing competitive auctions for procurement.[18] The challenge for governments, rather, is to ensure that the many institutions and people in the public sector put governance standards into practice. That means getting the basics right, consistently and at scale. For instance, evidence collected through surveys of public servants shows that many countries struggle with applying recruitment standards consistently. Indeed, implementation of standards requiring examination-based recruitment can vary from institution to institution within the same government (refer to figure 7.4). According to these surveys, whereas in Brazil's federal government, for instance, public institutions have consistently implemented examination-based recruitment, other governments display greater variation in translating this standard into practice.[19]

There is growing evidence that standards enable better governance by enhancing transparency and codifying practices for institutions and personnel to use in common and repeatedly. In particular, *measurement standards* codify a consistent set of classifications and measurement approaches (rulers) that inform organizational management, thus playing a foundational role in evidence-based policy making.[20] Just measuring, however, is not enough.[21] Governments should improve the quality of governance in the public sector by codifying standards that enhance the quality of organizational processes themselves. *Quality standards* codify how public institutions and personnel should manage institutional processes (rules).[22] As highlighted in the conceptual framework in chapter 2, quality standards enable the diffusion of good practices, reducing the need to reinvent the wheel and enhancing the quality of governance of organizational processes.

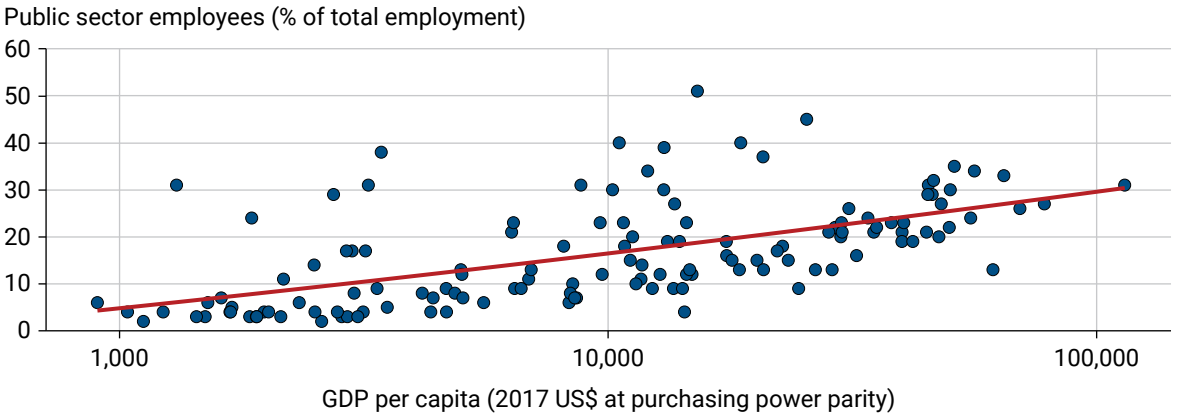
Figure 7.2 The world's 50 largest public sectors employ more than 360 million workers



Sources: WDR 2025 team calculations, based on data from Prosperity (dashboard), World Bank, https://data360.worldbank.org/en/prosperity; Worldwide Bureaucracy Indicators (dashboard), World Bank, https://datacatalog.worldbank.org/search/dataset/0038132/Worldwide-Bureaucracy-Indicators.

Note: The figure reports the latest data available by country. The overall size of public sector employment in a country is the share of public sector employment in total employment times the overall size of the country's labor force, with the unemployment rate accounted for. A country's public sector is the general government and public, or state-owned, enterprises and consists of all institutional units controlled directly or indirectly by the country's central and subnational governments as well as public corporations that are engaged in market-based activities. Income groups are based on World Bank classifications updated in 2025. The share of public sector employment is estimated based on labor force and household surveys harmonized in the World Bank's Worldwide Bureaucracy Indicators. The overall size of the labor force is provided through World Bank education statistics. The unemployment rate is measured in World Bank data on the Sustainable Development Goals.

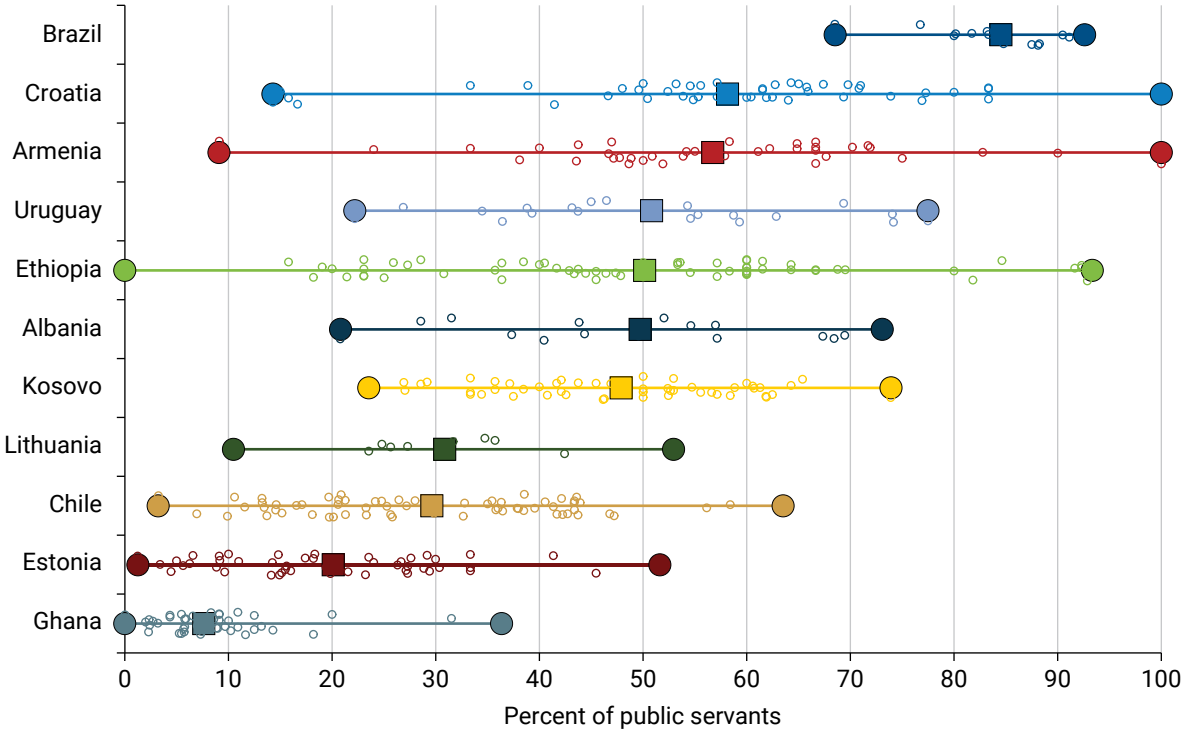
Figure 7.3 The public sector is relatively larger in more highly developed countries



Sources: WDR 2025 team calculations, based on data from Prosperity (dashboard), World Bank, https://data360.worldbank.org/en/prosperity; Worldwide Bureaucracy Indicators (dashboard), World Bank, https://datacatalog.worldbank.org/search/dataset/0038132/Worldwide-Bureaucracy-Indicators.

Note: The figure reports latest data available by country. The share of public sector employment in a country is calculated as the total number of public sector employees in the country divided by the country's total employment. The red line represents the best-fit curve using a quadratic function.

Figure 7.4 Within the same government, public institutions often vary widely in the degree to which they recruit candidates using standardized, merit-based written examinations



Source: WDR 2025 team calculations, based on data from Global Survey of Public Servants, Data Downloads, Bureaucracy Lab, Development Impact Group and Governance Global Practice, World Bank, https://www.globalsurveyofpublicservants.org/data-downloads.

Note: The figure reports the latest data available by country. Each small hollow circle in the figure represents an organization-level share of respondents in a particular country who were selected through a written examination, whereas the range of each horizontal line indicates the minimum and maximum shares (large bullets) observed in organizations in that country. The blocks represent national average shares at the organizational level.

Leveraging standards for better governance

Governments and their institutions are partly blind to their own organizational structures and processes, particularly when they lack "a measure, a metric, that would allow [them] to 'translate' what [they know] into a common standard necessary for a synoptic view."[23] Governance standards provide standard classifications and measurements that increase the transparency of the public sector and its organizational processes. This addresses the problem of information asymmetry identified in the Report's conceptual framework (refer to chapter 2). Consider, for example, budget expenditure. Unless two public institutions classify their expenditures using a consistent approach to measurement, their expenditures cannot be compared or aggregated. In these instances, a measurement standard such as the United Nations' Classification of the Functions of Government is useful. Such a standard establishes a consistent approach for measuring and classifying government expenditures based on their function (like education or health), helping produce information on public financial management that is precise, consistent, and comparable. A standardized approach to measurement also ensures that information is visible from higher levels of a bureaucratic hierarchy. That improves governance, because high-level managers are often distant from everyday organizational processes.[24]

Another function of governance standards is to codify good practices and make them available for common and repeated use, organizing the functioning of the public sector. Such standards—quality standards—codify procedural requirements and guidelines for organizational processes that public institutions and their personnel carry out.[25] For example, a procurement standard can specify that procurement tenders must involve a competitive bidding process.[26] Codification of quality standards makes management practices available for common and repeated use, facilitating their diffusion and, as a consequence, institutional learning regarding management practices.

Quality standards address organizational risks such as corruption. For example, the routine publication of procurement tenders through electronic procurement systems enables governments and firms to analyze in real time the transactions that procurement offices engage in and track potential misconduct. Studies have found that such practices are associated with reductions in corruption in procurement.[27]

The vision of better organizational governance based on standards presented here traces its origins to the Second Industrial Revolution. In that time period, a concerted effort to standardize manufacturing, codifying standards that improve production processes, drove efficiency gains in manufacturing firms (for recent examples from the East Asian miracles, refer to spotlight 1). This effort found an intellectual movement in the *The Principles of Scientific Management*, authored by Frederick Taylor.[28] A guiding principle in this movement was to transition away from management by rule of thumb.[29] Rule-of-thumb management is characterized by decisions based primarily on the individual knowledge and authority of decision-makers. The limitation of such an approach is that rules of thumb are based on heuristics that are personal, which can lead to inconsistencies and biases.[30] In some cases, such an approach also personally benefits those with the power to make decisions with their "thumbs." In contrast, governance based on standards relies on codified rulers and rules: classifications, measurements, and good practices that are written down and tested. As Taylor puts it, a standards-based approach to governance enables governments to apply "standard implements and methods which represent the best knowledge of the world up to date, [enabling] originality and ingenuity to make *real additions to the world's knowledge, instead of reinventing things which are old.*"[31]

A Taylorist approach to organizational management can be counterproductive, however, when pushed to the extreme. Taylor often assumed there was one best standard for specific production techniques (such as how to carry pig iron), which

is rarely the case in complex organizational contexts such as the public sector. Instead, it might be better to consider a choice among multiple good options rather than a single best. Nor does recent empirical evidence on management bear out that workers should simply follow the direct orders of their managers, without room for agency.[32] Instead, governance should leverage standards as tools for public institutions and their personnel to use, while preserving space for autonomy and judgment.[33] These critiques nonwithstanding, the scientific management movement carved space for rethinking how to approach organizational management: an approach less based on rule-of-thumb authority and experience and more reliant on standards that codify measurements, empirical testing, and continuous improvement of organizational functioning.

Governance standards primarily reshape *how* public institutions are managed and operate, not necessarily what policies they are mandated to implement and what goods and services they are required to offer. This chapter's emphasis on implementation rather than policy making complements *World Development Report 2017*, which outlines how reforming the policy arena—that is, the political and social settings in which individuals and groups interact—can reduce power asymmetries and improve both the design and implementation of policies.[34] The policy arena determines the process through which the content of policies is set. Governance standards, on the other hand, determine how the responsible institutions and people will put policies into practice (refer to box 7.2). As such, this chapter reconnects with a strand of literature on governance explored in *World Development Report 1997: The State in a Changing World*, bringing to the fore the operational underpinnings of the state and the issues relating to institutional capacity that constrain it.[35]

Box 7.2 How standards enable strategic policies to be implemented

Governments often adopt policies that set broad objectives, such as gender policies that seek to reduce disparities between men and women in education, employment, or access to public services and promote equality among genders. However, turning policy commitments into concrete outcomes requires operational standards that guide day-to-day implementation. These include specific procedures, responsibilities, and measurement tools that translate high-level goals into institutional action.

Gender budgeting provides an example of how standards can help put policies into practice. In Canada, mandatory use of Gender-Based Analysis Plus across federal departments supports the government's strategic commitment to gender equality. This operational tool requires Canada's ministries to assess how budget proposals affect different groups of women, men, and gender-diverse people. The findings inform resource allocation and are published annually in the federal *Gender Report*, ensuring that strategic goals are embedded in concrete budget decisions.[a] Budget 2024, the fifth consecutive budget for which the *Gender Report* has been published, used Gender-Based Analysis Plus to assess the effects of more than 70 percent of the new budget measures included in the budget in the early or middle stages, and it leveraged

(Box continues next page)

Box 7.2 How standards enable strategic policies to be implemented *(continued)*

existing analysis in regard to at least another 12 percent.[b] In Mexico, the federal government has made significant progress in instituting gender-based budgeting.[c] This includes an explicit recognition of gender equality as a budget principle in the country's Federal Budget and Fiscal Responsibility Law. The country's Ministry of Finance issues budgetary guidelines for integrating gender perspectives into policies and programs, as well as preparing reports on budget execution that disaggregate program beneficiaries by gender.

Empirical studies have focused on the adoption of gender budgeting, and rigorous evaluations of the impact of gender budgeting on outcomes (such as gender disparities and accountability) are limited.[d] Evaluation of the effects of gender budgeting on outcomes such as gender inequality in access to health services requires greater access to granular survey and administrative data that allows effects to be disaggregated by gender.

Source: WDR 2025 team.

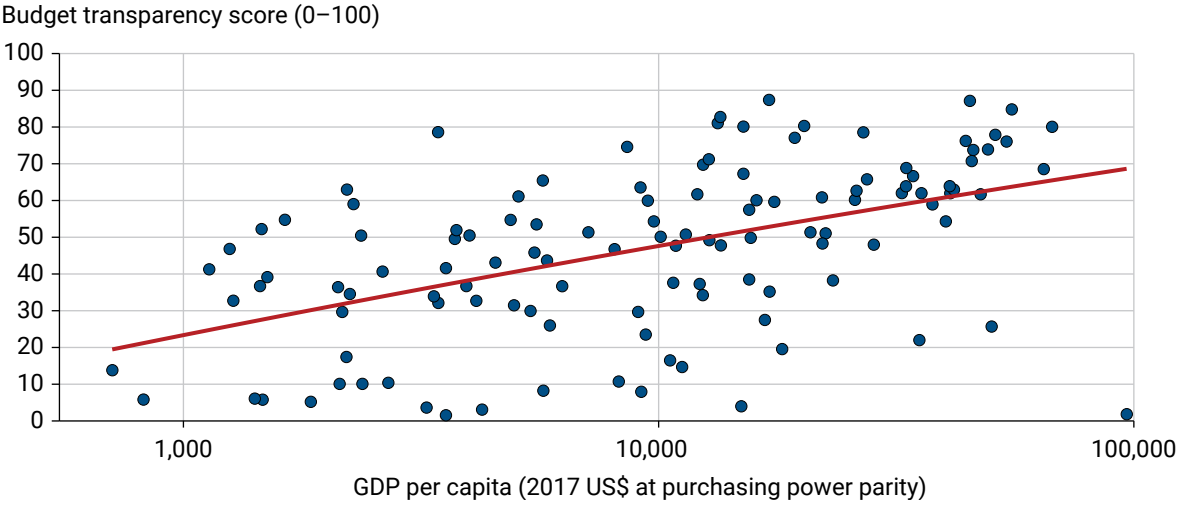
a. WAGE (2025).
b. Department of Finance Canada (2024).
c. IMF (2023).
d. Polzer et al. (2023).

Empirical evidence on the adoption and impact of governance standards

As countries transition from low to high income, they implement governance standards more often (refer to figure 7.5). Standards that enhance budget transparency, such as the annual publication of budget documents (like budget proposals and year-end reports), are one example. For instance, Georgia, consistently rated among the top performers in the International Budget Partnership's Open Budget Survey,[36] publishes comprehensive fiscal documents, including a citizens' budget and regular statements regarding fiscal risk, that have bolstered public trust and fiscal discipline.[37] In Ukraine, the timely publication of budget execution and debt statistics aligned with international standards has enhanced transparency and has been critical in securing external financing and sustaining market confidence during periods of instability.[38]

A similar pattern is evident in regard to management of human resources. In particular, as countries develop, they more commonly recruit personnel through merit-based standards such as written examinations (refer to figure 7.6).[39] A notable example is Japan. In the 1970s, the country's Ministry of International Trade and Industry (MITI) began requiring candidates to enter the application process through a highly competitive standardized examination.[40] This examination-based recruitment practice was foundational for building the competency of personnel while strengthening MITI's autonomy in respect to political interference, a bureaucratic model that became associated with the developmental state in Japan. The Republic of Korea; Taiwan, China; and other Asian Tigers also follow this model.[41]

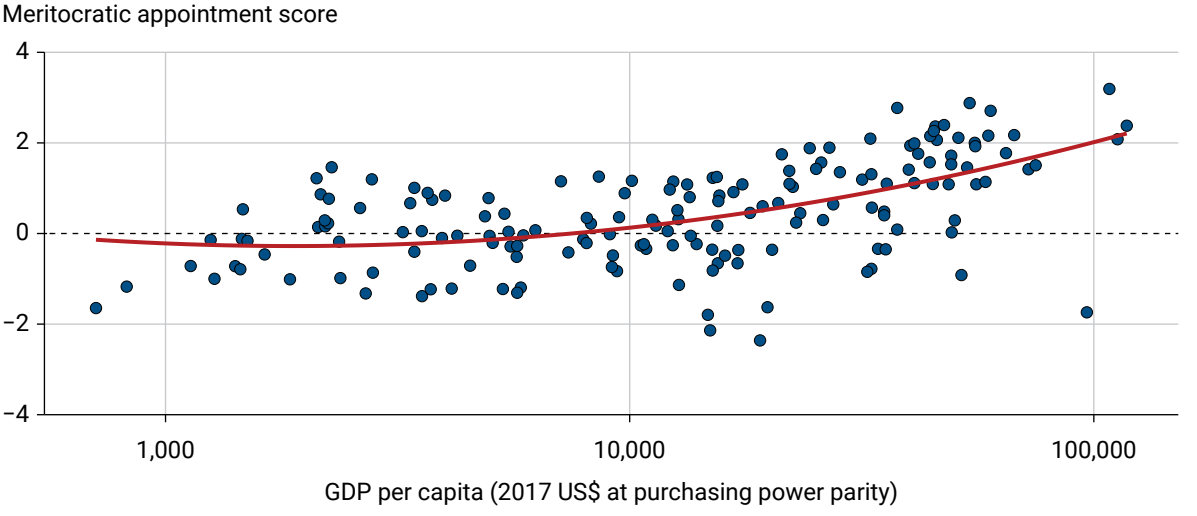
Figure 7.5 As countries develop, they put into practice more standards regarding budget transparency



Sources: WDR 2025 team calculations, based on data from Open Budget Survey (dashboard), International Budget Partnership, https://internationalbudget.org/open-budget-survey; Prosperity (dashboard), World Bank, https://data360.worldbank.org/en/prosperity.

Note: The red line represents the best-fit curve using a quadratic function. The International Budget Partnership's Open Budget Survey's budget transparency score measures the extent to which countries, in practice, make documents available to the public, as well as the comprehensiveness of the budget information provided in publicly available documents.

Figure 7.6 Highly developed countries make greater use of merit-based recruitment standards



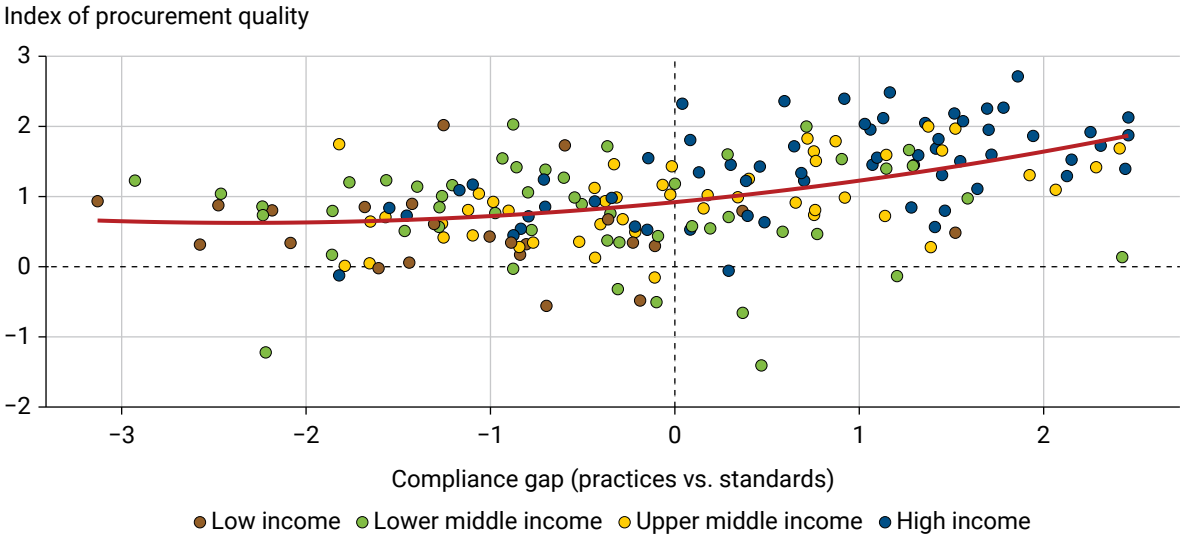
Sources: WDR 2025 team calculations, based on data from Prosperity (dashboard), World Bank, https://data360.worldbank.org/en/prosperity; V-Dem (Varieties of Democracy) (data set), V-Dem Institute, Department of Political Science, University of Gothenburg, https://www.v-dem.net/data/the-v-dem-dataset/country-year-v-dem-fullothers-v14/.

Note: Meritocratic criteria for appointment scores are based on expert-based surveys that ask the question "To what extent are appointment decisions in the state administration based on personal and political connections, as opposed to skills and merit?" Scores are computed based on a Bayesian item response theory that aggregates across expert responses. For more information on the scoring methodology, refer to V-Dem Institute (2024). The red line represents the best-fit curve using a quadratic function.

It is important to distinguish between standards and their implementation in organizational practices. That is because simply codifying standards does not mean public institutions and personnel will put them into practice. As noted in *World Development Report 2017*, countries often write stringent laws but fail to effectively reshape the practices of organizations and firms in the private sector.[42] The same applies for the public sector. For instance, a government may set standards, in law, that require procurement entities to make documents and materials or standard contracts publicly available. In practice, however, these entities may fail to disclose these documents and contracts.[43] Such a mismatch between what is codified into standards and what is put into practice, or *compliance gap*, is commonplace in the management of personnel, payments, and procurement.[44]

Reducing compliance gaps requires governments to move beyond isomorphic mimicry: that is, situations in which they codify governance standards into law but are unable to enforce the standards.[45] For example, a government might pass an administrative law that codifies transparency standards, such as a requirement for annual publication of a budget report, but struggle to publish such reports annually and at scale. Similarly, recruitment standards may require candidates to be assessed through a written examination, but public institutions may fall short of applying this standard in practice. Reducing such compliance gaps is beneficial. In public procurement, governments with a smaller gap between practices and standards in procurement tend to have reduced delays in implementation, reduced cost overruns, and better overall project quality (refer to figure 7.7).

Figure 7.7 Reducing the compliance gap improves the quality of government procurement

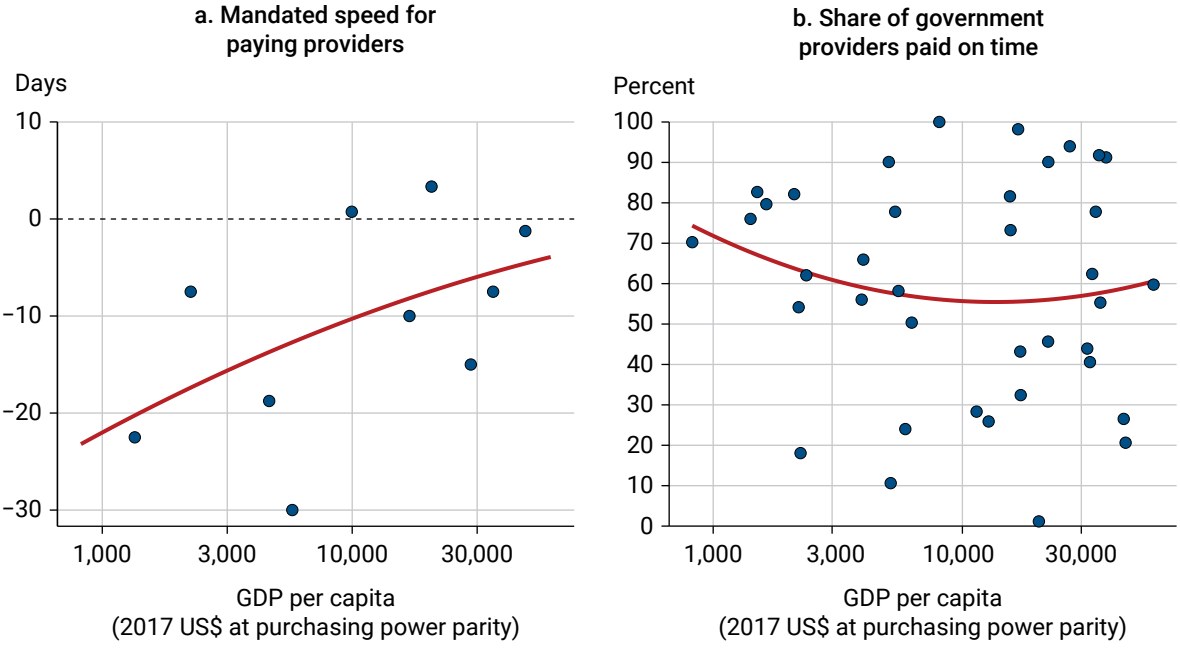


Sources: WDR 2025 team calculations, based on data from Bosio et al. 2022; Data and Code for Public Procurement in Law and Practice, OPENICPSR, Inter-University Consortium for Political and Social Research, Institute for Social Research, University of Michigan, https://www.openicpsr.org/openicpsr/project/153181/version/V1/view.

Note: The index of procurement quality used in the figure measures time to commence work, budget overruns, and overall quality of projects. "Practices" and "standards" measure different aspects of managing procurement processes, including transparency, competition, limits to exclusion, and integrity of contract. Higher scores on the index indicate a smaller compliance gap, with positive scores indicating practice scores greater than codified standards, and negative scores indicating the opposite. The red line represents the best-fit curve using a quadratic function. Income groups are based on World Bank classifications updated in 2025 (Metreau et al. 2025).

As discussed in the conceptual framework for this Report in chapter 2 (and illustrated in figure 2.5), governments should match the ambition of their standards to their ability to put those standards into practice. This helps public institutions and personnel, as well as citizens and firms, have realistic expectations about whether standards will be upheld in practice. Figure 7.8 presents evidence that calibration of this type occurs in the area of public procurement with respect to payments to firms that provide goods, services, and work under government contracts. As countries develop, they tend to increase the stringency of the grace periods they give themselves to pay providers, making their deadlines (in number of days) shorter (refer to figure 7.8, panel a). As a result of this adjustment, the percentage of providers paid on time remains relatively constant across levels of country income (refer to figure 7.8, panel b).

Figure 7.8 As countries develop, they shorten the grace periods government agencies have to pay providers



Sources: Panel a: WDR 2025 team calculations, based on data collected from national procurement regulations across 39 countries by the World Bank Enterprise Surveys team. Panel b: World Bank Enterprise Surveys (database), Full Survey Data, World Bank, https://www.enterprisesurveys.org/en/enterprisesurveys.

Note: In panel a, the speed mandated for paying providers under a country's procurement rules is defined as 30 days minus the maximum number of days allowed based on the national regulation; thus higher scores indicate shorter payment deadlines. Bullets correspond to binned stringency averages by deciles based on GDP per capita. Panel b reports, as a measure of compliance with the grace periods mandated in national procurement rules, the percentage of firms in a country that had a government contract that were paid on time. Whereas data from the World Bank Enterprise Surveys correspond to 2025, data on GDP per capita correspond to 2022, the latest year for which data are available. The red lines represent the best-fit curve using a quadratic function.

Reducing corruption and organizational mismanagement through governance standards

Governance based on standards reduces two types of organizational waste: that resulting from corruption and that resulting from organizational mismanagement.[46] The first of these results when public institutions and people generate waste by personally benefiting from public office.[47] For example, in the absence of recruitment standards, managers can appoint personnel who are loyal but incompetent, embezzle public funds, and award procurement contracts to politically connected firms. Waste through organizational mismanagement, in contrast, does not personally benefit any organization or people. Rather, it results from management that is of low quality, because institutions and people lack the proper information or technical know-how. For example, public officials might delay the processing of an application for social security because they simply forget about it or pay higher prices for procurement because they lack the skills to search effectively for contractors with better rates.[48]

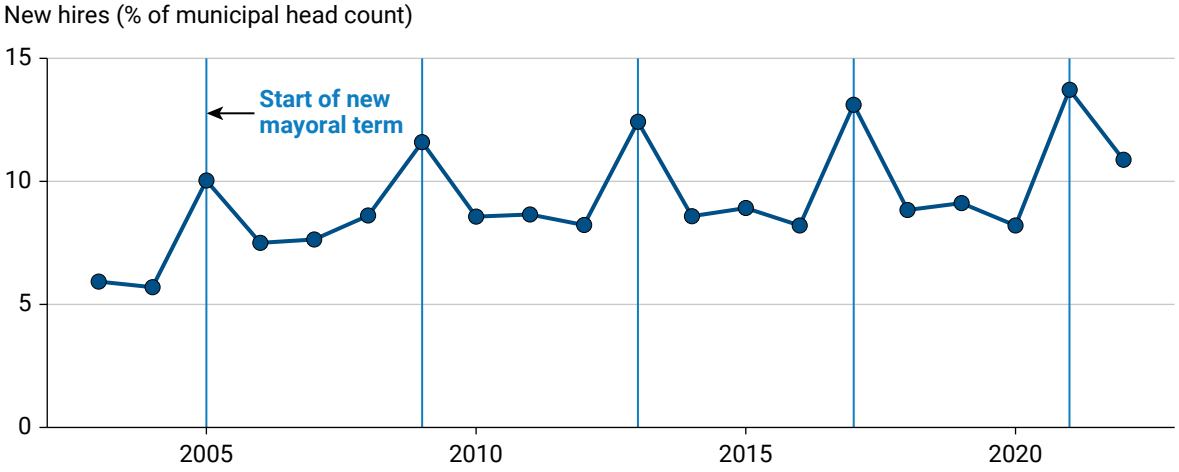
Corruption is particularly salient in the management of payments and procurement, in which organizations and their staff members can directly benefit from public funds. The lack of robust budget standards heightens the risk of financial malpractice such as embezzlement or fraud. In a study conducted in Indonesia, financial reports produced by the responsible entities failed to account for 24 percent of road construction costs, with evidence of corruption in the form of embezzlement.[49] Rooting out corruption in procurement presents particular challenges because contractors may collude with one another to secure government contracts.[50] A study of procurement auctions found evidence of collusion by construction firms in projects from Japan's Ministry of Land, Infrastructure, Transport, and Tourism; bidding patterns indicated likely coordination among firms for 37 percent of analyzed projects.[51]

In management of human resources, corruption takes place through patronage, when policy makers and other senior-level officials recruit loyalists to extract personal gains from office and further their careers. This practice is commonplace in both developed and developing countries.[52] For example, in municipal-level governments in Brazil, campaign donors and copartisans of elected mayors are more likely to be employed in the public sector after the mayors take office.[53] Spoils systems of this type go beyond cabinet positions, affecting recruitment in the municipal government as a whole. Hiring spikes at the start of mayoral terms, in cycles of political and bureaucratic turnover, reflect such recruitment patterns (refer to figure 7.9).[54]

Personnel recruited through patronage channels tend to be less competent.[55] They also generally have lower levels of education than are required for their roles, and workers transitioning from the private to the public sector tend to have lower skills than their counterparts.

As noted earlier, in contrast to corruption, organizational mismanagement does not directly benefit any official or organization in the public sector. For example, budget officers may intend to produce consistent financial reports but lack standardized forms for doing so, resulting in financial data that are inconsistent and unreliable.[56] This inconsistency and lack of reliability limits management's and stakeholders' ability to obtain a clear and accurate overview of the public sector's financial system, leading to misinformed decisions related to budget management. For example, before Nigeria adopted a Treasury Single Account, the lack of standardized practices for reporting across ministries, departments, and agencies led to fragmented data and duplicate accounts, making

Figure 7.9 Hiring in municipal governments of Brazil rises and falls around elections



Source: WDR 2025 team calculations, based on data from *Relação Anual de Informações Sociais [Annual Report of Social Information]*, Labor Secretariat, Ministry of the Economy of Brazil, made available by Data Basis (Dahis et al. 2022).

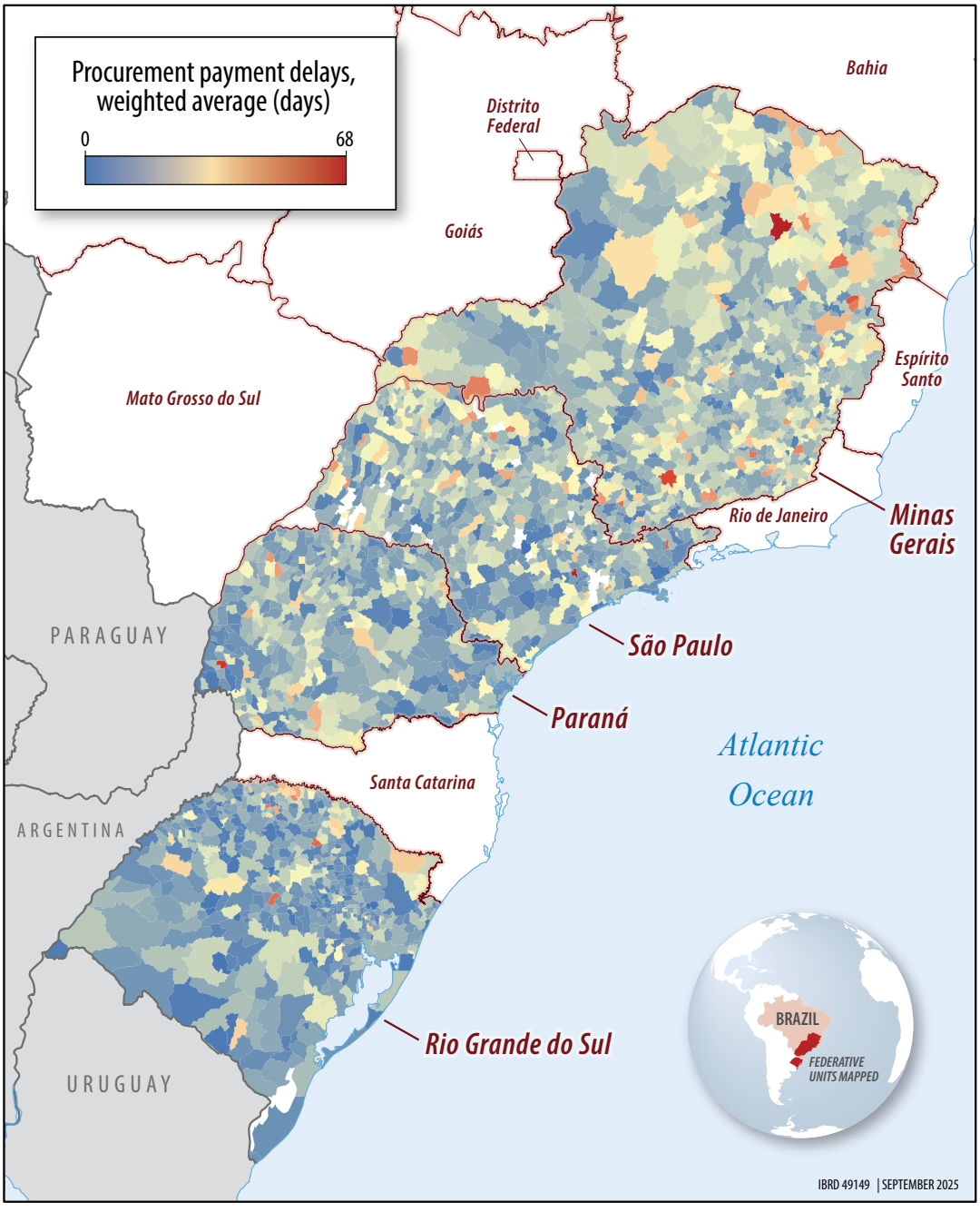
Note: The share of new hires (as a percentage of head count) for municipal governments of Brazil is weighted by the total municipal head count. Vertical blue lines indicate the start of a new mayoral term (for example, 2005–09).

it difficult to reconcile financial information and detect leakages.[57] Establishing a unified accounting standard for the Treasury improved the quality of reporting and reduced fiscal risks.

In procurement, mismanagement often manifests itself in the form of high prices and procurement delays. Evidence from a study on procurement in Italy suggests that most variation in prices in procurement actions is due to mismanagement, not corruption.[58] Procurement officers simply lack the expertise and know-how to secure lower prices for procured goods and services. In the federal government of the United States, an analysis of more than 122,000 completed projects found that whereas the average expected duration was 244 days in procurement contracts, projects themselves, including implementation delays, actually lasted 486 days, on average.[59] In addition, overruns increased costs from an initial award price of US$65.2 billion to US$103.9 billion.[60]

Time from procurement to payment also varies across institutions within the same country. In Brazil, municipal governments decide how to procure goods and services. Although national law requires them to pay contractors within 30 days of billing for services or goods provided, 15 percent of all payments do not comply with that standard.[61] This municipal-level variation in the speed with which payments are made is substantial (refer to map 7.1). Budget standards can reduce this type of organizational mismanagement, ensuring that commitment amounts are properly tracked and payments to contractors are made on time.

Map 7.1 Municipal governments in Brazil vary in the speed with which they pay for goods and services procured



Sources: WDR 2025 team calculations, based on data from Dahis et al. 2023; Reproducibility Package for MiDES: New Data and Facts from Local Procurement and Budget Execution in Brazil (Reproducible Research Repository), World Bank, https://reproducibility.worldbank.org/catalog/72.

Note: Colors vary from blue (high speed) to red (low speed) to show increases in the average number of days municipal governments take to pay their contractors. The averages are weighted, at the tender level, by the monetary size of the commitment. Data on municipal-level procurement were collected for the states of Minas Gerais, Paraná, Rio Grande do Sul, and São Paulo. White areas indicate locations for which no data were collected.

Standards increase transparency and reduce information asymmetries

Governance standards improve the accuracy and availability of information on organizational processes, strengthening transparency and reducing information asymmetries. For example, budget standards ensure consistency in how budget processes are measured across organizations in the public sector.[62] In the absence of standards, different departments may use varying formats, definitions, and measurements to prepare their budgets, which can lead to confusion, errors, and inconsistencies. Standards reduce this type of variation by establishing a unified approach, requiring organizations to use the same templates, budget categories, naming conventions, and reporting schedules.[63] For instance, in Tunisia, reforms under the Organic Law on the State Budget (Loi Organique du Budget de l'État) introduced a common framework for measurement and standardized indicators across ministries, which increase the comparability and improve the quality of expenditure tracking.[64] The consistency provided by the framework and indicators ensures that financial data collected from various sources can be compiled, compared, and analyzed without extensive reformatting or clarification.

Accounting standards enable transparent and reliable financial reporting, a foundational principle for budget governance. An example of global accounting standards is the International Public Sector Accounting Standards (IPSAS), issued by the IPSAS Board, which provide a comprehensive framework for preparing financial statements on an accrual basis.[65] As of 2020, 49 countries had adopted standards for accounting on an accrual basis.[66] Implementation of IPSAS increases investor confidence by ensuring that governments offer a more accurate and comprehensive picture of their financial positions.[67] Accounting standards can also be leveraged to strengthen the corporate governance of state-owned enterprises, improving their financial performance and service delivery. The Organisation for Economic Co-operation and Development (OECD) Guidelines on Corporate Governance of State-Owned Enterprises provide international standards in this area.[68] These standards strengthen the ownership role of government and increase transparency by requiring publication of regular portfolio reports and audited financial statements. The guidelines also call for the application of strong standards for accounting and reporting, including sustainability reporting, in state-owned enterprises.

Establishing measurement standards also enhances the planning functions of government and enables it to be more forward looking. For example, when they measure budgetary processes using standardized methods, governments are able to forecast budget revenues and expenditures.[69] That is because these methods enable them to consolidate and analyze data to project costs, revenues, and resource needs.[70] Over time, such a forward-looking approach enables strategic financial planning and results in fewer unexpected budget shortfalls, reducing organizational mismanagement. In March 2025, the United Nations Statistical Commission unanimously recommended that member countries adopt the most recent update of its System of National Accounts.[71] The system, used as the global standard for national accounts, sets benchmarks for defining key economic indicators such as GDP. Significantly, the most recent revision of the system incorporates important advances in accounting for natural resources and other aspects of sustainability.

Procurement often involves information asymmetries, because contractors have more information on the value of their goods and services than procurement entities and officers have. This asymmetry, in turn, generates uncertainty in price negotiation between contractors and procurement officers. Electronic government procurement systems—with standardized measurements and classifications (for prices, goods, and services, among other things) that are consistent and comparable across procurement transactions—are important tools that reduce information asymmetries and enhance the transparency of the procurement process.[72] Leveraging standards for measurement in procurement can lead to efficiency gains. In Brazil, for instance, the subnational government of Rio Grande do Sul calculated market-based reference prices on medicines, as reflected in electronic invoices for business-to-business transactions in the state.[73] These reference prices were then provided as information to multiple procurement officers, who used the prices as inputs to set their own reference prices for auctions during the tendering process. The adoption of this novel procurement practice, enabled through measurement standards, empowered procurement officers to set more competitive prices, as well as shifting relationships away from contractors who charged more for their medicines than the government's reference prices supported.

Standards codify and diffuse good practices that improve organizational efficiency and effectiveness

Putting quality standards into practice increases institutional capacity. For example, recruitment standards such as those implied in civil service examinations improve both the efficiency and effectiveness of public services. In Brazil, prospective judges are required to complete written and oral examinations that assess their knowledge of existing law, as well as the quality of the judicial decisions they might make.[74] Candidates are ranked according to their examination scores; top performers are selected based on the number of available positions.[75] Judges who score higher on the examinations perform better in their judicial duties, resolving a higher volume of cases without reducing the quality of their rulings.[76] In Colombia, college students graduating from professional programs, such as those intended to prepare students to be physicians, must complete a standardized examination that assesses their professional skills. Novice physicians who score higher in the health-specific modules of their examinations are generally more competent and deliver better health care services, particularly in the area of reducing health complications at birth among vulnerable mothers.[77]

Beyond the recruiting of competent personnel, quality standards can also increase the efficiency and effectiveness of procurement processes. A study of public procurement in the Russian Federation found that individual procurement officers and organizations explained 39 percent of the variation in procurement prices.[78] In particular, *how* the procurement process was managed drove the variation. Procurement officers and organizations who adhered to quality standards in the procurement process were able to procure goods and services at better prices. During the tendering process, more effective procurement officers and entities completed documentation accurately, specifying both product names and classification codes correctly more often; conducted more auctions; and recruited larger pools of bidders. Beyond improving operational efficiency, standards can also strengthen the effectiveness of government, ensuring that organizational processes support policy priorities more broadly (refer to box 7.3).

Box 7.3 Putting environmental standards into action: Green budgeting in France and green procurement around the world

The introduction of a green budgeting framework in 2021 marked a major shift in France.[a] Since then, all budget programs at the national level have been systematically assessed for their impacts on climate and the environment using a standardized methodology inspired by the European Union's classification system.[b] Expenditures are categorized as positive (contributing significantly to climate-related or environmental objectives), neutral (having no significant climate-related or environmental impacts), negative (having potentially harmful effects on the climate, the environment, or both), or mixed (including both positive and negative components). The classification standard embedded in the categorization scheme supports more informed decisions related to budgeting and greater coherence between the budget and the broader strategy of attaining climate and environmental goals. Between 2023 and 2024, environmental expenditures categorized as positive increased from €32 billion to €38.6 billion, and expenditures deemed mixed rose from €2.7 billion to €3.1 billion.[c]

In the area of procurement, an emerging set of standards is referred to as "green public procurement." There is growing evidence that environmental standards of this type have positive effects on firms. A recent study in the United States finds that obtaining green contracts reduces emissions relative to firm size, even in the long term.[d] Those firms that have higher revenues from green contracts reduce their emissions more (13 percent versus 4.6 percent) than those with lower revenues from such contracts. A study of German firms finds that the probability a small or medium enterprise will introduce green-friendly products increases by 20 percentage points if the firm is awarded a contract using environmental criteria for selection and by 25 percentage points if it wins green contracts.[e]

Many countries face difficulties in implementing green public procurement because they lack consistent standards for doing so. The World Bank and international development partners have played an important role in the design and implementation of policies for green public procurement in a number of countries across regions, helping set up and codify standards that define the scope of green procurement, as well as designing and detailing steps to roll out the standards.[f] Areas covered include how to set criteria for selecting the product used to pilot the standards, develop a monitoring system to track compliance with the standards and measure the system's effectiveness, and embed standards for green procurement within an existing electronic government procurement system.

Source: WDR 2025 team.

a. MEFSIN (2020).
b. EU (2020).
c. MEFSIN (2023).
d. Chiappinelli et al. (2025).
e. Krieger and Zipperer (2022).
f. World Bank (2021a).

Performance management integrates both measurement standards and quality standards

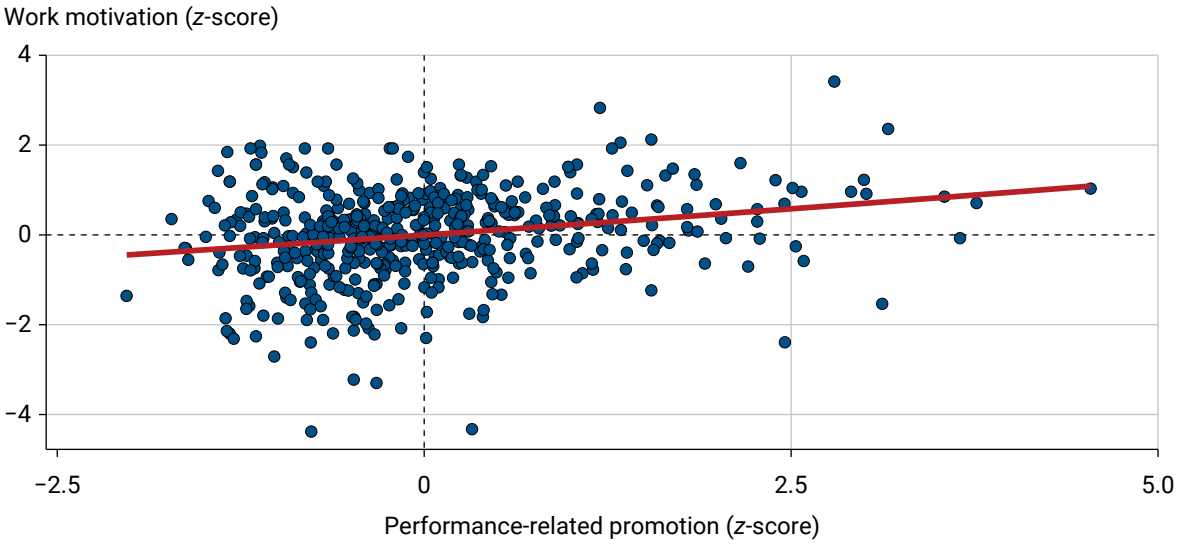
Performance management integrates elements of both measurement and quality standards, offering a useful tool for enhancing organizational efficiency and effectiveness. A key feature of performance management is the codification of measurement standards (such as key performance indicators) and incentives that can help organizations and personnel continuously improve the quality of their practices by linking their actions to measurable results. Performance standards also ensure that organizations and personnel understand what tasks align with organizational goals and policy priorities, as well as how their own performance will be measured.[79] In addition, performance standards set mechanisms to make personnel accountable for either achieving or falling short of expected results.[80]

Performance-based budgeting codifies targets for service delivery, efficiency benchmarks, and quality metrics to inform budget management. Integrating performance measurement into budget processes significantly enhances public sector performance, particularly when linked to strategic planning and evaluation systems.[81] Experiences of individual countries support these findings. For instance, Malaysia's outcome-based budgeting framework ties ministry budgets to specific outputs and outcomes,[82] and Chile's evaluation-driven budgeting approach uses program performance to guide adjustments and institutional reform.[83]

Performance management can also be leveraged to grant greater autonomy to public institutions in how they allocate funds, so long as they meet performance targets. Such an arrangement encourages a balance between autonomy and control, granting managers the space to adapt operations while ensuring transparency through results monitoring. For example, a study conducted in Zambia found that performance-based budgeting led to increases in self-reported autonomy of health facilities driven by improved choice regarding what health care services to provide.[84]

In management of human resources, performance standards increase the accountability of personnel and make institutional goals transparent to them.[85] Empirical evidence suggests that public servants generally welcome performance management, particularly when evaluations are linked to incentives such as payments and promotions.[86] A study conducted in the province of Punjab, Pakistan, found that the introduction of performance pay for tax collectors based on revenues generated led to an increase in collection of tax revenue by about 40 percent after two years.[87] In the Indian state of Andhra Pradesh, a study found that giving teachers financial bonuses based on improvements in student test scores increased learning outcomes both in subjects that the incentives targeted (such as mathematics and language) and in subjects that they did not (such as science and social studies).[88] There is also evidence that performance management positively affects the mission orientation and work motivation of personnel.[89] For example, public institutions that more frequently reward high performance with promotions also show greater motivation among workers (refer to figure 7.10).[90]

Figure 7.10 Public servants have higher levels of motivation in public institutions with stronger performance-based incentives



Source: WDR 2025 team calculations, based on data from Global Survey of Public Servants, Data Downloads, Bureaucracy Lab, Development Impact Group and Governance Global Practice, World Bank, https://www.globalsurveyofpublicservants.org/data-downloads.

Note: Values are *z*-scores, computed based on the share of survey respondents who agree that they feel motivated to work and that performance has a positive impact on promotions. Shares are converted into *z*-scores by subtracting the mean and dividing by the standard deviation of agency level responses for each economy. The red line represents the best-fit curve using a quadratic function. Survey data were collected in Albania, Brazil, Chile, Colombia, Croatia, Estonia, Ethiopia, Kosovo, and the Slovak Republic.

Standards impose administrative costs: Adjusting their stringency helps

Because standards in the public sector are primarily mandatory and enforceable by law, they often impose changes in management through coercive methods (such as audits and legal sanctions).[91] This coercive aspect of standards means that they unilaterally impose costs on institutions and personnel responsible for implementing them. An administrative cost of standards is the time and effort staff members spend completing administrative tasks to document and verify that they are complying with rules (refer to box 7.4). For example, studies of time use have found that bureaucrats allocate 20–30 percent of their work time to compliance tasks such as recordkeeping.[92] Because failing to comply with standards involves negative consequences such as sanctions, reducing time spent on compliance is not an option.

Because work time is fixed (and scarce), time spent on compliance with procedural requirements is time not spent in the delivery of services or implementation of policies.[93] Excessive growth in the amount of paperwork required to document and verify compliance can paralyze governments, transforming them into "paper tigers": powerful in writing, but ineffective in practice.[94] For example, in 2006 a leopard attacked villagers in the Himalayan town of Gopeshwar in India. Local officials took two months to comply with the paperwork required to classify the leopard as a man-eater and thus obtain the hunting permit that would allow the leopard to be legally killed.[95]

Box 7.4 The administrative costs of implementing a recruitment standard in India

In India, more than 3 million candidates applied for 3,500 positions advertised by the Union Public Service Commission in 2021. Organizing an examination for millions of candidates is a complex task. At the state level, the commission relies on an extensive bureaucratic machinery to conduct examinations. These bureaus are often understaffed: in one state with a population of 240 million, 78 senior officials and 300 junior officers were responsible for the entire recruitment process. In another state, the commission had vacancies for 50 percent of its own listed positions.[a]

Understaffing compromises the integrity of recruitment examinations and undermines their legitimacy to candidates. Litigation initiated by candidates, which delays the recruitment process, shows the effects of this. For instance, legal challenges can arise from the misapplication of eligibility criteria. In one example, litigants challenged a master of arts in economics as a position qualification, arguing that a master of science in economics was equivalent and could thus be accepted. Another category of challenges deals with positions reserved for members of certain castes and the validity of those reservations. Moreover, related "document verification" for selected candidates is often difficult. Educational certificates, caste certificates, and other paperwork do not incorporate standard evaluation criteria and as such require validation by individual officers. As groups get added or removed from reserved categories, the criteria evolve as well. This creates confusion in implementation, with clerical errors landing in court for weeks or months on end.

Source: Misra 2025.

a. Refer to Annual Reports (portal), Andhra Pradesh Public Service Commission, https://portal-psc.ap.gov.in/HomePages/AnnualReports; Recruitment Dashboard, Public Service Commission, Uttar Pradesh, https://uppsc.up.nic.in/.

In addition, because the institutions designing and enforcing standards as procedural requirements are different from those responsible for implementing them, such top-down standards can reduce motivation and limit agency.[96] As such, institutions that set standards should consult with public institutions that implement them, incorporating real-world experience and advice—and realistic expectations about compliance, as discussed in chapter 2 and earlier in this chapter. For example, a survey of public servants conducted in Ghana found that personnel had suggestions on how to put procedural standards into organizational practice that could enhance their effectiveness. When implemented this way, standards create space for agency in institutions and among bureaucrats, ensuring the latter can exercise judgment in complying with rules rather than blindly complying with rules designed by others.

Indeed, there is growing evidence that adjusting the stringency of standards can improve organizational performance. A study of public servants in the federal government of Brazil, for instance, found that the relationship between organizational performance and procedural rules follows

an inverted U-curve. Too few and too many rules are both associated with lower organizational performance, whereas a moderate number of rules is conducive to better performance.[97] Another study in Ghana found that personnel who were given greater autonomy and discretion completed their assigned tasks more often.[98] This positive effect on performance was particularly strong for tasks for which it was difficult to clarify and codify targets before completion (such as complex tasks), rather than administrative tasks the completion of which was easier to verify (such as organizing a review meeting).[99] A separate study on public procurement in Pakistan found that a policy intervention that increased the autonomy of procurement officers lowered prices of procured goods by 9 percent, reduced procurement delays, and had no observable impact on the quality of purchased goods or likelihood of corruption.[100] The positive effects were particularly great when the senior officers responsible for overseeing procurement were likely to be corrupt.

Policy recommendations: Adaptation of governance standards based on evidence and empowerment

As the discussion in this chapter indicates, there is an abundance of standards for better governance, many enshrined in *World Development Reports* much like this one.[101] Governments and practitioners should consider which governance standards solve specific problems they are experiencing and adapt standards to their specific institutional and national contexts. Taking an empirical approach to what standards work (or do not) and paying greater attention to the trade-offs among standards can make the growing number of standards more manageable. Such an approach also empowers public institutions and personnel who implement the standards, moving from a normative (standards as intrinsically good) to an empirical approach in which governance standards are evaluated according to their impact on organizational functioning.

1. Consider administrative costs when adapting standards

There is a large and growing volume of standards available for governments to adopt. For instance, the 2024 edition of IPSAS comprises three volumes of a thousand pages each. Because of the volume of standards IPSAS includes, governments often exert considerable efforts to put them into practice in the public sector. Doing so can cost them time, money, resources—and foregone opportunities for other activities. When governments acknowledge such implementation costs, they can then carefully adapt standards based on evidence. The World Bank's Public Expenditure and Financial Accountability framework offers an evidence-based approach to assessing the effective application of standards for public financial management in practice.[102] The framework draws on policy reviews, data analysis, and engagement with government officials to provide a credible and evidence-based diagnostic for public financial management. Findings from application of the framework help highlight gaps between formal standards and actual implementation, supporting targeted reforms to improve the effectiveness of public financial management.[103]

- Viet Nam's government demonstrated a pragmatic approach to reform by adapting IPSAS through a tailored national framework: the Viet Nam Public Sector Accounting Standards.[104] Recognizing the significant implementation costs and complexity of a full-scale overhaul of accounting in the country's public sector, the government rolled out new accounting standards gradually over multiple years. This phased implementation involved introducing different modules sequentially, from standards regarding assets to the effects of changes in foreign exchange. Institutionalizing these

standards required substantial investment in training for public sector accountants and establishing new mechanisms for monitoring, such as audits, to ensure compliance.

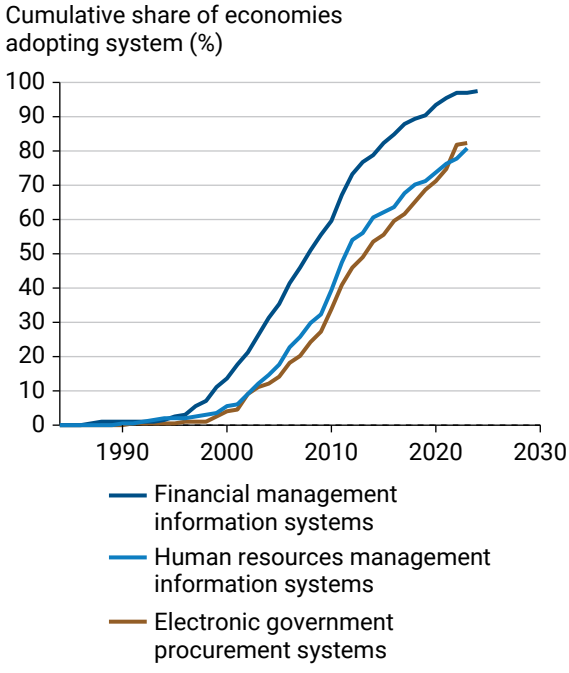
2. Leverage administrative data to gauge the effectiveness of standards

Governments are better positioned today to leverage data to evaluate the impact of governance standards on the functioning of public institutions.[105] This is in large part because of the proliferation of administrative data from management information systems for finance, e-government procurement, and human resources (refer to figure 7.11). This greater availability of data is enhanced by a growing global agenda to harmonize data, as exemplified by the Open Contracting Partnership's Open Contracting Data Standard, as well as standardized procurement taxonomies like the United Nations Standard Products and Services Code and the European Commission's Common Procurement Vocabulary, which enable data on procurement processes and outcomes to be collected in a standardized manner.[106]

But just collecting reliable and standardized data is not enough; the use of data to inform diagnostics and make projections remains limited, as seen in regions like Latin America and among countries adopting standards for accounting on an accrual basis.[107] It is therefore critical for governments to move beyond data collection to analysis. By doing so, they can increase the information available to help them understand the real-world impact that standards have on management and performance, recognizing that governance approaches must be tailored to specific institutional and national contexts to be effective.

- In Brazil, the subnational government of Rio Grande do Sul leveraged administrative data to improve procurement outcomes. The government analyzed electronic invoices from business-to-business transactions to calculate market-based reference prices for medicines. This information enabled procurement officers to set more competitive prices and shift away from contractors who charged rates higher than the market indicated. Such diagnostic use of data is a notable exception to the broader trend

Figure 7.11 Management information systems for public finance, procurement, and human resources are diffusing rapidly around the world



Source: WDR 2025 team calculations, based on data from GovTech Maturity Index 2022 Update (dashboard), World Bank, https://www.worldbank.org/en/programs/govtech/2022-gtmi.

Note: Each curve in the figure measures the cumulative share of countries that have adopted each type of management information system. "Financial management information systems" corresponds to systems that collect information on public financial management. "Electronic government procurement systems" refers to systems that collect information on public procurement. "Human resources management informations systems" shows systems that collect information on management of human resources. The data include 189 countries surveyed for the World Bank's GovTech Maturity Index initiative.

in Latin America, where only 40 percent of countries use information regarding procurement to analyze whether policies are having their intended effects.[108] That figure declines to only 29 percent of countries when data on human resources are considered, and it is still rare to find both diagnostic and strategic use of budget data in countries adopting standards for accounting on an accrual basis.[109]

3. Use standards to empower organizations and people to apply good governance practices on their own

Standards can play the role of instructional scaffoldings, providing information that can be acted upon and codifying good practices. The ultimate goal of the instruction offered through these scaffoldings is to empower organizations and people to apply good governance practices on their own and exercise their own judgment.[110] There is an opportunity to leverage standards to confer more agency on institutions and people that put them into practice. This can happen in two ways. First, governments should codify standards for adoption by institutions in the public sector and, upon verification and accreditation (refer to chapter 3), transfer responsibilities to those institutions to grant autonomy for management. Second, governments should listen to feedback from the institutions and bureaucrats who have to put standards into practice. This transforms the codification of standards for governance from a one-off event into a dynamic, learning-oriented process that can adapt to changing circumstances and the needs of its users.

- In the Philippines, the Civil Service Commission (CSC) plays an oversight and capacity-building role in scaling up of good practices in the area of managing human resources. The commission classifies institutions according to four maturity levels under its Program to Institutionalize Meritocracy and Excellence in Human Resource Management. Level 1 agencies perform basic, transactional functions related to human resources with minimal strategic value, whereas level 2 agencies have consistently implemented commission-compliant, documented systems across core areas in management of human resources. At level 3, agencies adopt integrated, competency-based systems for managing human resources aligned with organizational goals. Level 4 agencies demonstrate strategic, innovative, and evidence-based practices for managing human resources that drive organizational transformation. CSC accredits agencies that meet the standards at level 2 or higher, which empowers them to decide on appointments and to establish and implement their own mechanisms for managing human resources without prior approval from the CSC.[111]
- In Ghana, a survey and focus group involving public servants showed that many of them had concrete proposals about how to better implement standardized processes.[112] Rather than clashing with existing standards, these employees' ideas sought to reinforce and strengthen application of the standards. However, managers generally silenced the voices of their own staff members and often failed to create spaces for lower- and middle-level officers to express their proposals. Putting standards into practice requires conferring more agency on institutions and bureaucrats responsible for making the public sector operate.

These policy recommendations recognize that bureaucracies are dynamic and respond to governance standards in sometimes unintended and undesirable ways. Bureaucracies, as institutions, and bureaucrats, as people, are agents who change their behaviors in response to such standards.[113] The organizational complexity that results means that standards, particularly good governance standards, are and should be part of an "evolving and inevitably imperfect system of governance."[114] There is no one-size-fits-all in

regard to governance standards. Instead, governments should consider what constitutes good governance for the institutions and people they manage. Doing so enables the public sector as a whole to function more efficiently and effectively, ensuring governments have the capacity to deliver on their policy commitments and serve the public in promoting development.

Notes

1. Williams (2017).
2. Andrews et al. (2017).
3. On the issue of corruption, a canonical study found that in Indonesia, financial reports produced by implementation units failed to account for about 24 percent of the costs of road construction (Olken 2007). Although the study concludes that theft likely drove most of the expenditures missing from the reports, the author acknowledges that lack of capacity at the local level might account for them.
4. Ayagiba (2022).
5. *World Development Report 2017: Governance and the Law* defines governance as "the process through which state and nonstate actors interact to design and implement policies within a given set of formal and informal rules that shape and are shaped by power" (World Bank 2017, 3). This chapter's definition focuses on the implementation of policies, particularly the set of formal organizational rules that shape the process of policy implementation.
6. Besley et al. (2022); Best et al. (2023); Schuster et al. (2023).
7. Grindle (2012).
8. Dasgupta and Kapur (2020); Muralidharan (2024).
9. For an in-depth treatment on the issues of political economy and how political economy affects both what and how policies are implemented, refer to *World Development Report 2017: Governance and the Law* (World Bank 2017).
10. Bersch et al. (2017); Geddes (1994).
11. Gonulal and Loewen (2018).
12. Each of these management systems has standards specific to its functioning. Standards in payment management refer to the codified rules and procedures that structure the preparation, execution, and monitoring of public budgets. Budget standards establish consistent requirements for budget classifications, timelines, reporting, and expenditure controls. Standards for managing human resources set the norms, rules, and procedures that govern how personnel are managed in a government. Standards for public procurement organize how governments transact with markets. They consist of codified rules, procedures, and criteria that govern the acquisition of goods, services, and work.
13. Besley et al. (2022); Williams (2021).
14. World Bank (2017).
15. Muralidharan (2024).
16. Estimate based on data from Worldwide Bureaucracy Indicators Dashboard, World Bank, https://datacatalog.worldbank.org/search/dataset/0038132/Worldwide-Bureaucracy-Indicators. "Public sector employee" denotes any worker who is currently employed by the public sector, which includes both the central and subnational governments, as well as security forces. The methodology for estimation is available in the reproducibility package on the Report's website, World Development Report 2025 (dashboard), World Bank, www.worldbank.org/wdr2025.
17. Dasgupta and Kapur (2020); Muralidharan (2024). On the burden of procedural requirements, refer to Bagley (2019); Pahlka (2025).
18. IEG (2008).
19. Public servants included in these surveys are generally mapped to their national governments.
20. World Bank (2021b).
21. Bridges and Woolcock (2023).
22. Rogger and Schuster (2023); Sousa and Voss (2002).
23. Scott (2020, 2).
24. Rogger and Somani (2023).
25. de Vries (1999); Sousa and Voss (2002).
26. A "procurement tender" is a government's official request inviting suppliers to submit bids to provide goods and services.
27. Jiménez et al. (2022); Puspita and Gultom (2024).
28. Taylor (1919). For more information, refer to the discussion on the Second Industrial Revolution in chapter 1.
29. The following quote illustrates the principles of scientific management:

    > It is true that with scientific management the [employee] is not allowed to use whatever implements and methods [they see] fit in the daily practice of [their] work. Every encouragement, however, should be given them to suggest improvements, both in methods and in implements. And whenever [an employee] proposes an improvement, it should be the policy of management to make a careful analysis of the new method, and, if necessary, conduct a *series of experiments* to determine accurately the relative merit of the new suggestion and of the *old standard*. And whenever the new method is found to be markedly superior to the old, it should be adopted as *the standard for the whole establishment* (Taylor 1919, 128, emphases added).

30. Conlisk (1996).
31. Taylor (1919, 126, emphasis added). This quote is in the context of a description of how surgeons

should leverage the best available evidence in their practices and how scientific management mimics this approach, but for organizational management. There is an interesting parallel between this description and the evidence-based medicine movement. Refer to Tenny and Varacallo (2024).

32. In an emblematic example, Taylor (1919, 59) describes workers derogatorily as "so stupid that the word 'percentage' has no meaning to [them], and [they] must consequently be trained by a man more intelligent than [themselves] into the habit of working in accordance with the laws of this science before [they] can be successful."
33. Honig (2018).
34. World Bank (2017).
35. World Bank (1997).
36. IBP (2024).
37. Rial et al. (2024).
38. IMF (2024).
39. Besley et al. (2022); Evans and Rauch (1999).
40. Johnson (1982).
41. Amsden (1989); Evans (1995); Johnson (1982); Kohli (2004); Woo-Cumings (1999).
42. World Bank (2017).
43. Bosio et al. (2022).
44. In political science, this gap between rules and compliance in practice is generally referred to as "institutional weakness" (Levitsky and Murillo 2009). A rich empirical literature has explored the conditions under which institutional actors both comply with and alter the content of rules themselves, particularly electoral and constitutional rules. Such behavior is beyond the scope of this chapter.
45. Andrews et al. (2017).
46. Bandiera et al. (2009).
47. Rose-Ackerman (1975).
48. Best et al. (2023); Slough and Fariss (2021).
49. Olken (2007).
50. Fazekas and Kocsis (2020).
51. Kawai and Nakabayashi (2022).
52. Bersch et al. (2017); Brierley et al. (2023); Grindle (2012).
53. Colonnelli et al. (2020).
54. Akhtari et al. (2022).
55. Colonnelli et al. (2020).
56. Chan (2003).
57. Zubairu (2019).
58. Bandiera et al. (2009). Data for the study were collected from a survey of procurement agencies administered by the Italian Statistical Agency between 2003 and 2005.
59. Decarolis et al. (2020). Data for the study were collected from the General Services Administration's Federal Procurement Data System and correspond to 2010–15. Descriptive statistics are calculated based on 122,533 completed projects. Expected duration refers to the duration, in days, written in the procurement contract. Actual duration includes both the expected duration and additional days due to implementation delays.
60. Decarolis et al. (2020).
61. Dahis et al. (2023).
62. Fukuda-Parr et al. (2011).
63. Allen et al. (2013).
64. PEFA (2023).
65. Accrual accounting is based on two concepts. The first is recognition of economic events when they occur, rather than when related cash transactions happen (that is, cash basis accounting). The second is recognition of assets and liabilities, as opposed to what takes place in accounting on a cash basis, which typically accounts only for cash and cash equivalents and does not necessarily include depreciation, revaluation, and impairments (World Bank 2024).
66. World Bank (2024).
67. Chan (2006).
68. These guidelines were updated in 2024.
69. World Bank (2024).
70. Horngren et al. (2009).
71. UNSD (2025).
72. Wu Chebili et al. (2021).
73. Martinez-Carrasco et al. (2023).
74. Dahis et al. (2025).
75. Rank-based approaches to examination-based recruitment of this type are standard around the world and trace their historical origins to imperial China (Fukuyama 2017).
76. The quality of rulings is measured as whether or not litigating parties repeal the rulings to an upper court. Dahis et al. (2025).
77. Posso et al. (2024).
78. Best et al. (2023).
79. Rodgers and Hunter (1992).
80. Van Dooren et al. (2015).
81. Robinson and Brumby (2005).
82. Tuan Zainun et al. (2023); World Bank (2010).
83. World Bank (2005).
84. Chama-Chiliba et al. (2022).
85. Boland and Fowler (2000).
86. Meyer-Sahling et al. (2018).
87. Khan et al. (2016).
88. Muralidharan and Sundararaman (2011).
89. Meyer-Sahling et al. (2018).
90. Results of an ordinary least squares regression of work motivation on performance-related promotion are consistent with this linear trend, and the coefficient is statistically significant.
91. World Bank (2017).
92. Muralidharan (2024).
93. Ganimian et al. (2024).
94. Mathur (2016).
95. Mathur (2016). The leopard attack occurred in the town of Gopeshwar in Uttarakhand, India (Mathur 2014).
96. Honig (2018).
97. Bersch and Fukuyama (2025).
98. Rasul et al. (2021).
99. It might be the case that these menial tasks are more likely to be subject to rules because they are easier to verify.
100. Bandiera et al. (2021).

101. Grindle (2004).
102. Many Public Expenditure and Financial Accountability assessments are publicly available. For more information, refer to Public Expenditure and Financial Accountability (website), World Bank, https://www.pefa.org/.
103. PEFA assessments themselves do not include policy recommendations.
104. World Bank (2024).
105. Rogger and Schuster (2023).
106. Refer to Common Procurement Vocabulary (dashboard), European Commission, https://single-market-economy.ec.europa.eu/single-market/public-procurement/digital-procurement/common-procurement-vocabulary_en; United Nations Standard Products and Services Code (portal), United Nations Development Programme, https://www.undp.org/unspsc.
107. Santini et al. (2024); World Bank (2024).
108. Santini et al. (2024).
109. World Bank (2024).
110. Honig (2018).
111. CSC (2021).
112. Williams and Yecalo-Tecle (2020).
113. Moreira and Pérez (2024).
114. Moynihan et al. (2011).

References

Akhtari, Mitra, Diana Moreira, and Laura Trucco. 2022. "Political Turnover, Bureaucratic Turnover, and the Quality of Public Services." *American Economic Review* 112 (2): 442–93.

Allen, Richard, Richard Hemming, and Barry H. Potter, eds. 2013. *The International Handbook of Public Financial Management*. Palgrave Macmillan. https://doi.org/10.1057/9781137315304.

Amsden, Alice Hoffenberg. 1989. *Asia's Next Giant: South Korea and Late Industrialization.* Oxford University Press.

Andrews, Matt J., Lant H. Pritchett, and Michael Woolcock. 2017. *Building State Capability: Evidence, Analysis, Action*. Oxford University Press. https://library.oapen.org/handle/20.500.12657/31857.

Ayagiba, Lawrence Ndaago. 2022. "Consolidated Performance Audit Report of the Auditor-General on Capital Projects of 30 Selected MMDAs Funded Through the DACF-RFG." Ghana Audit Service. https://audit.gov.gh/files/audit_reports/Consolidated_Performance_Audit_Report_of_the_Auditor-General_on_Capital_projects_of_30_selected_MMDAs_funded_through_the_DACF-RFG.pdf.

Bagley, Nicholas. 2019. "The Procedure Fetish." *Michigan Law Review* 118 (3): 345–402.

Bandiera, Oriana, Michael Carlos Best, Adnan Qadir Khan, and Andrea Prat. 2021. "The Allocation of Authority in Organizations: A Field Experiment with Bureaucrats." *Quarterly Journal of Economics* 136 (4): 2195–242.

Bandiera, Oriana, Andrea Prat, and Tommaso Valletti. 2009. "Active and Organizational Mismanagement in Government Spending: Evidence from a Policy Experiment." *American Economic Review* 99 (4): 1278–308.

Bersch, Katherine, and Francis Fukuyama. 2025. "Calibrating Autonomy: How Bureaucratic Autonomy Influences Government Quality in Brazil." *Governance* 38 (1): e12865.

Bersch, Katherine, Sérgio Praça, and Matthew M. Taylor. 2017. "State Capacity, Bureaucratic Politicization, and Corruption in the Brazilian State." *Governance* 30 (1): 105–24.

Besley, Timothy J., Robin S. L. Burgess, Adnan Khan, and Guo Xu. 2022. "Bureaucracy and Development." *Annual Review of Economics* 14 (August): 397–424.

Best, Michael Carlos, Jonas Hjort, and David Szakonyi. 2023. "Individuals and Organizations as Sources of State Effectiveness." *American Economic Review* 113 (8): 2121–67.

Bloom, Nicholas, Renata Lemos, Raffaella Sadun, and John Michael Van Reenen. 2015. "Does Management Matter in Schools?" *Economic Journal* 125 (584): 647–74.

Bloom, Nicholas, Raffaella Sadun, and John Michael Van Reenen. 2010. "Recent Advances in the Empirics of Organizational Economics." *Annual Review of Economics* 2 (September): 105–37.

Bloom, Nicholas, and John Michael Van Reenen. 2007. "Measuring and Explaining Management Practices Across Firms and Countries." *Quarterly Journal of Economics* 122 (4): 1351–408.

Boland, Tony, and Alan Fowler. 2000. "A Systems Perspective of Performance Management in Public Sector Organisations." *International Journal of Public Sector Management* 13 (5): 417–46.

Bosio, Erica, Simeon Djankov, Edward Ludwig Glaeser, and Andrei Shleifer. 2022. "Public Procurement in Law and Practice." *American Economic Review* 112 (4): 1091–117.

Bridges, Kate, and Michael Woolcock. 2023. "Measuring What Matters: Principles for a Balanced Data Suite That Prioritizes Problem Solving and Learning." In *The Government Analytics Handbook: Leveraging Data to Strengthen Public Administration*, edited by Daniel Rogger and Christian Schuster. World Bank. http://hdl.handle.net/10986/39857.

Brierley, Sarah, Kenneth Lowande, Rachel Augustine Potter, and Guillermo Toral. 2023. "Bureaucratic Politics: Blind Spots and Opportunities in Political Science." *Annual Review of Political Science* 26 (June): 271–90.

Chama-Chiliba, Chitalu Miriam, Peter Hangoma, Collins Chansa, and Mulenga Chonzi Mulenga. 2022. "Effects of Performance Based Financing on Facility Autonomy and Accountability: Evidence from Zambia." *Health Policy OPEN* 3 (December): 100061.

Chan, James L. 2003. "Government Accounting: An Assessment of Theory, Purposes and Standards." *Public Money and Management* 23 (1): 13–20.
Chan, James L. 2006. "IPSAS and Government Accounting Reform in Developing Countries." In *Accounting Reform in the Public Sector: Mimicry, Fad, or Necessity*, edited by Evelyne Lande and Jean-Claude Scheid. Experts Comptables Media.
Chiappinelli, Olga, Ambrogio Dalò, Leonardo M. Giuffrida, and Vitezslav Titl. 2025. "The Greener, the Better? Evidence from Government Contractors." CESifo Working Paper 11696, Munich Society for the Promotion of Economic Research, Center for Economic Studies, Ludwig Maximilian University and Ifo Institute for Economic Research.
Colonnelli, Emanuele, Mounu Prem, and Edoardo Teso. 2020. "Patronage and Selection in Public Sector Organizations." *American Economic Review* 110 (10): 3071–99.
Conlisk, John. 1996. "Why Bounded Rationality?" *Journal of Economic Literature* 34 (2): 669–700.
CSC (Civil Service Commission, Philippines). 2021. "Revised Guidelines on the Conferment of HR Recognition and Award." CSC Memorandum Circular 1, series 2021, CSC. https://www.csguide.org/files/original/9f73c46f2eb0ac5a7718514cdd7c4b88.pdf.
Dahis, Ricardo, Joao Carabetta, Fernanda Scovino, Frederico Israel, and Diego Oliveira. 2022. "Data Basis (Base dos Dados): Universalizing Access to High-Quality Data." SSRN.
Dahis, Ricardo, Bernardo Ricca, Thiago Scot, Nathalia Sales, and Lucas Nascimento. 2023. "MiDES: New Data and Facts from Local Procurement and Budget Execution in Brazil." SoDa Laboratories Working Paper 2023-02, SoDa Laboratories, Monash University. https://ideas.repec.org/p/ajr/sodwps/2023-02.html.
Dahis, Ricardo, Laura Schiavon, and Thiago Scot. 2025. "Selecting Top Bureaucrats: Admission Exams and Performance in Brazil." *Review of Economics and Statistics* 107 (2): 408–25.
Dasgupta, Aditya, and Devesh Kapur. 2020. "The Political Economy of Bureaucratic Overload: Evidence from Rural Development Officials in India." *American Political Science Review* 114 (4): 1316–34.
Decarolis, Francesco, Leonardo M. Giuffrida, Elisabetta Iossa, Vincenzo Mollisi, and Giancarlo Spagnolo. 2020. "Bureaucratic Competence and Procurement Outcomes." *Journal of Law, Economics, and Organization* 36 (3): 537–97.
Department of Finance Canada. 2024. *Budget 2024: Statement and Impacts Report on Gender, Diversity, and Inclusion*. Department of Finance. https://budget.canada.ca/2024/report-rapport/gdql-egdqv-en.pdf.
de Vries, Henk J. 1999. "Classification of Standards." In *Standardization: A Business Approach to the Role of National Standardization Organizations*. Springer. https://doi.org/10.1007/978-1-4757-3042-5_9.
EU (European Union). 2020. "Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the Establishment of a Framework to Facilitate Sustainable Investment and Amending Regulation (EU) 2019/2088 (Text with EEA Relevance)." *Official Journal of the European Union* L 198/13 (June 22). https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32020R0852.
Evans, Peter B. 1995. *Embedded Autonomy: States and Industrial Transformation*. Princeton University Press. https://doi.org/10.1515/9781400821723.
Evans, Peter B., 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 (5): 748–65.
Fazekas, Mihály, and Gábor Kocsis. 2020. "Uncovering High-Level Corruption: Cross-National Objective Corruption Risk Indicators Using Public Procurement Data." *British Journal of Political Science* 50 (1): 155–64.
Fukuda-Parr, Sakiko, Patrick Guyer, and Terra Lawson-Remer. 2011. "Does Budget Transparency Lead to Stronger Human Development Outcomes and Commitments to Economic and Social Rights?" IBP Working Paper 4, International Budget Partnership.
Fukuyama, Francis. 2017. *State-Building: Governance and World Order in the 21st Century*. Profile Books.
Ganimian, Alejandro J., Karthik Muralidharan, and Christopher R. Walters. 2024. "Augmenting State Capacity for Child Development: Experimental Evidence from India." *Journal of Political Economy* 132 (5): 1565–602.
Geddes, Barbara. 1994. *Politician's Dilemma: Building State Capacity in Latin America*. University of California Press.
Gonulal, Talip, and Shawn Loewen. 2018. "Scaffolding Technique." In *The TESOL Encyclopedia of English Language Teaching*, edited by John I. Liontas. John Wiley and Sons. https://doi.org/10.1002/9781118784235.eelt0180.
Grindle, Merilee Serrill. 2004. "Good Enough Governance: Poverty Reduction and Reform in Developing Countries." *Governance* 17 (4): 525–48.
Grindle, Merilee Serrill. 2012. *Jobs for the Boys: Patronage and the State in Comparative Perspective*. Harvard University Press. https://doi.org/10.4159/harvard.9780674065185.
Honig, Dan. 2018. *Navigation by Judgment: Why and When Top-Down Management of Foreign Aid Doesn't Work*. Oxford University Press.
Horngren, Charles Thomas, Srikant M. Datar, George Foster, Madhav Rajan, and Christopher Ittner. 2009. *Cost Accounting: A Managerial Emphasis.* 13th ed. Pearson Education India.
IBP (International Budget Partnership). 2024. "Georgia: Open Budget Survey 2023." IBP. https://internationalbudget.org/open-budget-survey/country-results/2023/georgia.
IEG (Independent Evaluation Group). 2008. *Public Sector Reform: What Works and Why? An IEG Evaluation of World Bank Support*. World Bank. https://openknowledge.worldbank.org/server/api/core/bitstreams/fa5b49ac-2af2-54da-a6a7-2bedb124ec6b/content.
IMF (International Monetary Fund). 2023. "Mexico: Selected Issues." IMF Country Report 23/357, IMF. https://doi.org/10.5089/9798400258893.002.A001.

IMF (International Monetary Fund). 2024. "Ukraine: Fourth Review of the Extended Arrangement Under the Extended Fund Facility, Request for Modifications of a Performance Criterion, and Financing Assurances Review: Press Release, Staff Report, and Statement by the Executive Director for Ukraine." IMF Country Report 24/199, IMF. https://doi.org/10.5089/9798400282386.002.

Jiménez, Alfredo, Julien Hanoteau, and Ralf Barkemeyer. 2022. "E-Procurement and Firm Corruption to Secure Public Contracts: The Moderating Role of Governance Institutions and Supranational Support." *Journal of Business Research* 149 (October): 640–50.

Johnson, Chalmers A. 1982. *MITI and the Japanese Miracle: The Growth of Industrial Policy, 1925–1975*. Stanford University Press.

Kawai, Kei, and Jun Nakabayashi. 2022. "Detecting Large-Scale Collusion in Procurement Auctions." *Journal of Political Economy* 130 (5): 1364–411.

Khan, Adnan Q., Asim Ijaz Khwaja, and Benjamin A. Olken. 2016. "Tax Farming Redux: Experimental Evidence on Performance Pay for Tax Collectors." *Quarterly Journal of Economics* 131 (1): 219–71.

Kohli, Atul. 2004. *State-Directed Development: Political Power and Industrialization in the Global Periphery*. Cambridge University Press.

Krieger, Bastian, and Vera Zipperer. 2022. "Does Green Public Procurement Trigger Environmental Innovations?" *Research Policy* 51 (6): 104516.

Levitsky, Steven, and María Victoria Murillo. 2009. "Variation in Institutional Strength." *Annual Review of Political Science* 12 (June): 115–33.

Martinez-Carrasco, José, Otávio Canozzi Conceição, and Ana Lucia Dezolt. 2023. "More Information, Lower Price? Access to Market-Based Reference Prices and Gains in Public Procurement Efficiency." IDB Working Paper IDB-WP-1441, Inter-American Development Bank. https://www.econstor.eu/handle/10419/289950.

Mathur, Nayanika. 2014. "Petitioning to Kill and Claim: Governing Man-Eaters in Uttarakhand, India." Paper presented at the workshop "Petitions and Political Culture in South Asia," Center for History and Economics, Magdalene College, University of Cambridge, June 4–5, 2014. https://www.histecon.magd.cam.ac.uk/petitions/papers/Mathur.pdf.

Mathur, Nayanika. 2016. *Paper Tiger: Law, Bureaucracy, and the Developmental State in Himalayan India*. Cambridge University Press.

MEFSIN (Ministry for the Economy, Finance, and Industrial and Digital Sovereignty, France). 2020. *Report on the Environmental Impact of the Central Government Budget*. PLF2021 (September 2020). MEFSIN. https://www.budget.gouv.fr/files/uploads/extract/2021/PLF_2021/report_environmental_impact_french_central_government_budget_2021.pdf.

MEFSIN (Ministry for the Economy, Finance, and Industrial and Digital Sovereignty, France). 2023. *Report on the Environmental Impact of the Central Government Budget*. 2024 Budget Bill (October 2023). MEFSIN. https://www.budget.gouv.fr/documentation/file-download/23475.

Metreau, Eric, Kathryn Elizabeth Young, and Shwetha Grace Eapen. 2025. "Understanding Country Income: World Bank Group Income Classifications for FY26 (July 1, 2025–June, 2026)." *Data Blog*, July 1. https://blogs.worldbank.org/en/opendata/understanding-country-income--world-bank-group-income-classifica.

Meyer-Sahling, Jan-Hinrik, Christian Schuster, and Kim Sass Mikkelsen. 2018. "Civil Service Management in Developing Countries: What Works? Evidence from a Survey with 23,000 Civil Servants in Africa, Asia, Eastern Europe, and Latin America." Report for the UK Department for International Development. https://forskning.ruc.dk/en/publications/civil-service-management-in-developing-countries-what-works-evide.

Misra, Prakhar. 2025. "State-Building in Developing Countries: Challenges of Meritocratic Recruitment." Paper presented at the Western Political Science Association's 78th Annual Meeting (WPSA 2025), Seattle, April 17–19, 2025. https://www.dropbox.com/scl/fi/fagsyg5yzbm9k45i5iral/Misra_Paper_Website.pdf?rlkey=y7eakqzukyww2yp8poyl8p43t&dl=0.

Moreira, Diana, and Santiago Pérez. 2024. "Civil Service Exams and Organizational Performance: Evidence from the Pendleton Act." *American Economic Journal: Applied Economics* 16 (3): 250–91.

Moynihan, Donald P., Sergio Fernandez, Soonhee Kim, et al. 2011. "Performance Regimes Amidst Governance Complexity." *Journal of Public Administration Research and Theory* 21 (suppl. 1): i141–i155.

Muralidharan, Karthik. 2024. *Accelerating India's Development: A State-Led Roadmap for Effective Governance*. Penguin Random House India.

Muralidharan, Karthik, and Venkatesh Sundararaman. 2011. "Teacher Performance Pay: Experimental Evidence from India." *Journal of Political Economy* 119 (1): 39–77.

Olken, Benjamin A. 2007. "Monitoring Corruption: Evidence from a Field Experiment in Indonesia." *Journal of Political Economy* 115 (2): 200–49.

Pahlka, Jennifer. 2025. *Recoding America: Why Government Is Failing in the Digital Age and How We Can Do Better*. Henry Holt and Company.

PEFA (Public Expenditure and Financial Accountability Program). 2023. *Rapport sur la performance de la gestion des finances publiques de la Tunisie: Selon le cadre méthodologique PEFA* 2016 [Report on Public Financial Management in Tunisia: Following the PEFA 2016 Methodology]. Tunisia 2023 Agile Report. PEFA Secretariat. https://www.pefa.org/node/5201.

Polzer, Tobias, Isabella M. Nolte, and Johann Seiwald. 2023. "Gender Budgeting in Public Financial Management: A Literature Review and Research Agenda." *International Review of Administrative Sciences* 89 (2): 450–66.

Posso, Christian, Jorge Tamayo, Arlen Guarín, and Estefanía Saravia. 2024. "Luck of the Draw: The Causal Effect of Physicians on Birth Outcomes." *Borradores de Economía* 1269. https://repositorio.banrep.gov

.co/bitstream/handle/20.500.12134/10782/be_1269.pdf.
Puspita, Anastasia Citra, and Yohanna M. L. Gultom. 2024. "The Effect of E-Procurement Policy on Corruption in Government Procurement: Evidence from Indonesia." *International Journal of Public Administration* 47 (2): 117–29.
Rasul, Imran, Daniel Rogger, and Martin J. Williams. 2021. "Management, Organizational Performance, and Task Clarity: Evidence from Ghana's Civil Service." *Journal of Public Administration Research and Theory* 31 (2): 259–77.
Rial, Isabel, Arturo Navarro, David Gentry, Viera Karolova, Mary Betley, and Rimantas Večkys. 2024. "Georgia: Fiscal Transparency Evaluation." Technical Assistance Report 24/024, Fiscal Affairs Department, International Monetary Fund. https://doi.org/10.5089/9798400269691.019.
Robinson, Marc, and James Brumby. 2005. "Does Performance Budgeting Work? An Analytical Review of the Empirical Literature." IMF Working Paper 05/210, International Monetary Fund. https://doi.org/10.5089/9781451862294.001.
Rodgers, Robert, and John E. Hunter. 1992. "A Foundation of Good Management Practice in Government: Management by Objectives." *Public Administration Review* 52 (1): 27–39.
Rogger, Daniel Oliver, and Christian Schuster, eds. 2023. *The Government Analytics Handbook: Leveraging Data to Strengthen Public Administration*. World Bank. https://www.worldbank.org/en/publication/government-analytics.
Rogger, Daniel Oliver, and Ravi Somani. 2023. "Hierarchy and Information." *Journal of Public Economics* 219 (March): 104823.
Rose-Ackerman, Susan R. 1975. "The Economics of Corruption." *Journal of Public Economics* 4 (2): 187–203.
Santini, Juan Francisco, Flavia Sacco Capurro, Daniel Oliver Rogger, et al. 2024. *Data for Better Governance: Building Government Analytics Ecosystems in Latin America and the Caribbean.* World Bank.
Schuster, Christian, Kim Sass Mikkelsen, Daniel Oliver Rogger, et al. 2023. "The Global Survey of Public Servants: Evidence from 1,300,000 Public Servants in 1,300 Government Institutions in 23 Countries." *Public Administration Review* 83 (4): 982–93.
Scott, James C. 2020. *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed*. Veritas Paperbacks Series. Yale University Press.
Scur, Daniela, Scott Ohlmacher, John Michael Van Reenen, et al. 2024. "The International Empirics of Management." *Proceedings of the National Academy of Sciences* 121 (45): e2412205121.
Slough, Tara, and Christopher Fariss. 2021. "Misgovernance and Human Rights: The Case of Illegal Detention Without Intent." *American Journal of Political Science* 65 (1): 148–65.
Sousa, Rui, and Christopher A. Voss. 2002. "Quality Management Re-Visited: A Reflective Review and Agenda for Future Research." *Journal of Operations Management* 20 (1): 91–109.
Taylor, Frederick Winslow. 1919. *The Principles of Scientific Management*. Harper & Brothers.
Tenny, Steven, and Matthew A. Varacallo. 2024. "Evidence-Based Medicine." *StatPearls* (blog), September 10. https://www.ncbi.nlm.nih.gov/books/NBK470182/.
Tuan Zainun Tuan Mat, Nur Aainaa Roslan, and Fadzlina Mohd Fahmi. 2023. "Role of Governance in Outcome-Based Budgeting Implementation: Towards Accountability in the Malaysian Public Sector." *IPN Journal of Research and Practice in Public Sector Accounting and Management* 13 (1): 101–28.
UNSD (United Nations Statistics Division). 2025. *System of National Accounts 2025*. UNSD, Department of Economic and Social Affairs, United Nations. https://unstats.un.org/unsd/nationalaccount/snaupdate/2025/2025_SNA_Combined.pdf.
Van Dooren, Wouter, Geert Bouckaert, and John Halligan. 2015. *Performance Management in the Public Sector*, 2nd ed. Routledge Masters in Public Management Series. Routledge. https://www.taylorfrancis.com/books/mono/10.4324/9781315817590/performance-management-public-sector-geert-bouckaert-john-halligan-wouter-van-dooren.
V-Dem Institute. 2024. *V-Dem, Varieties of Democracy: Codebook*. Version 14 (March). V-Dem Institute, Department of Political Science, University of Gothenburg. https://v-dem.net/documents/38/V-Dem_Codebook_v14.pdf.
WAGE (Women and Gender Equality Canada). 2025. "Women and Gender Equality Canada's 2023–24 Departmental Results Report," rev. ed. (April 11), WAGE. https://www.canada.ca/en/women-gender-equality/transparency/departmental-results-reports/2023-2024.html.
Williams, Martin J. 2017. "The Political Economy of Unfinished Development Projects: Corruption, Clientelism, or Collective Choice?" *American Political Science Review* 111 (4): 705–23.
Williams, Martin J. 2021. "Beyond State Capacity: Bureaucratic Performance, Policy Implementation and Reform." *Journal of Institutional Economics* 17 (2): 339–57.
Williams, Martin J., and Liah Yecalo-Tecle. 2020. "Innovation, Voice, and Hierarchy in the Public Sector: Evidence from Ghana's Civil Service." *Governance* 33 (4): 789–807.
Woo-Cumings, Meredith, ed. 1999. *The Developmental State*. Cornell Studies in Political Economy Series. Cornell University Press. https://www.cornellpress.cornell.edu/book/9781501720383/the-developmental-state/#bookTabs=1.
World Bank. 1997. *World Development Report 1997: The State in a Changing World*. World Bank; Oxford University Press.
World Bank. 2005. *Anexos*. Vol. 2 of *Chile: Estudio de Evaluación de Impacto del Programa de Evaluación de Programas*. Report 34589-CL. World Bank. https://documents1.worldbank.org/curated/en/946451468236081503/pdf/345890vol10210paper.pdf.
World Bank. 2010. "Final Report, Program Budgeting in Malaysia: Implementing the Outcomes-Based Approach in Malaysia." March, World Bank. https://openknowledge.worldbank.org/server

/api/core/bitstreams/80804ff8-20e5-545c-b558-f11ff26b3b93/content.
World Bank. 2017. *World Development Report 2017: Governance and the Law*. World Bank.
World Bank. 2021a. *Green Public Procurement: An Overview of Green Reforms in Country Procurement Systems*. Climate Governance Papers Series. World Bank. https://hdl.handle.net/10986/36508.
World Bank. 2021b. *World Development Report 2021: Data for Better Lives*. World Bank.
World Bank. 2022. "Governance of the Service Delivery Chain for Youth Mental Health in Lithuania: Key Findings from a Public Sector Employee Survey." June, World Bank. https://hdl.handle.net/10986/38144.
World Bank. 2024. "2024 Global Report on the Use of Accrual Accounting for Fiscal Management." Prosperity Insight Series, Government Balance Sheet Lab, Institutions Global Department, World Bank. https://documents1.worldbank.org/curated/en/099030125153013298/pdf/P1778111c716ee005189da17349f43b2c8b.pdf.
Wu Chebili, Blandine, Hunt La Cascia, Francois Collineau, Arnaud Salomon, Baptiste Calvet, and Yoann Moreau. 2021. *Electronic Government Procurement Implementation Types: Options for Africa*. E-Procurement Implementation Type Report. World Bank.
Zubairu, Salawu Adeku. 2019. *Treasury Single Account Policy in Nigeria*. Office of the Accountant General of the Federation, National Institute for Policy and Strategic Studies, Nigeria. https://papers.ssrn.com/abstract=3531846.