Introduction

Corruption—the abuse of public office for private gain—distorts the activities of the state and ultimately takes a toll on economic growth and the quality of people's lives. It weakens key functions of the public sector, including the ability to collect taxes or to make expenditure choices in a fair and efficient way. If, in exchange for bribes, civil servants facilitate tax evasion or corrupt politicians provide ad hoc tax breaks for some people or firms, others will end up facing higher tax rates, and the government may be unable to generate enough revenue to pay for productive spending. Likewise, the quality of public services and infrastructure suffers when project selection reflects opportunities for kickbacks or nepotism. Bribery of foreign officials by multinationals and the use of opaque financial centers, or secrecy jurisdictions, to hide corrupt gains or to evade taxes add a global dimension to the challenge. 1 Against this backdrop, and by contributing to growing inequality, corruption undermines trust in government and can lead to social and political instability.

The widespread acknowledgment that tackling corruption is critical for macroeconomic performance and economic development has led to its inclusion in the United Nations Sustainable Development Goals; it has also prompted several initiatives, including the Framework for Enhanced IMF Engagement in Governance (IMF 2018).² This chapter assesses the fiscal costs of corruption and explores the practices and institutions in the fiscal area that can help curb opportunities and incentives for corruption.

¹Such jurisdictions have features that facilitate the ability to hide assets abroad, allowing corrupt officials to hide illicit gains or multinational firms and wealthy individuals to escape paying their fair share of taxes (Damgaard, Elkjaer, and Johannesen 2018). Tax evasion may occur without corruption, but it is more likely if corrupt officials facilitate it in exchange for bribes (Alm, Martinez-Vazquez, and McClellan 2016).

²The IMF has long been engaged in efforts to help its member countries address governance and corruption issues, guided by its 1997 Governance Policy (IMF 1997). The 2018 framework is designed to promote more systematic, candid, and evenhanded engagement (IMF 2018).

Corruption's hidden nature and diverse manifestations make it hard to measure, posing challenges to systematic analysis. To gauge the prevalence of corruption across countries and over time, most assessments rely on indirect measures based on perceptions by political experts or those conducting business in the country, or surveys of the experiences of corporate employees or ordinary people.³ Although these measures are imperfect and need to be interpreted with caution, they reveal two important patterns in the data.⁴ First, corruption is persistent: over the past two decades, large improvements have been rare and have built on opportunities created by major political changes. In more stable political environments, progress has been gradual, highlighting the need for perseverance over many years or even decades. Second, perceptions of control of corruption are positively correlated with GDP per capita (Figure 2.1). This raises the question of whether reduced corruption is a cause or a symptom of economic development, or whether both reflect stronger institutions or other factors. Fully disentangling the links between corruption, institutions, and fiscal outcomes may not be feasible. Even so, the country experiences presented in this chapter, complemented with cross-country analysis, provide suggestive evidence on the ways in which policymakers can reduce vulnerabilities to corruption.

³All such measures present advantages and disadvantages. The estimates presented in this chapter use the Control of Corruption Index from the Worldwide Governance Indicators, available since 1996, because it aggregates information from more than 30 different sources. Caution is needed in interpreting scores for any individual country given measurement error because the quality of underlying data can vary across countries and data sources. The estimation uses a version of the Control of Corruption Index that strips out its subcomponents explicitly related to actual or perceived features of fiscal institutions. The results are similar using alternative measures, such as those assembled by Transparency International.

⁴Beyond potential concerns regarding the subjective nature of many such measures of corruption, a further limitation is that, while highlighting the perception of a general problem, the measures usually do not provide operational guidance on how to address it. This chapter shifts the attention to fiscal institutions and practices that are under the control of policymakers.

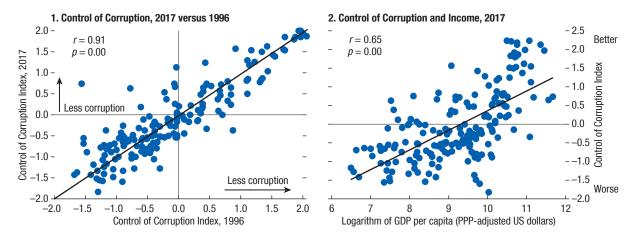


Figure 2.1. Perceptions of Corruption over Time and at Different Income Levels

Sources: IMF, World Economic Outlook database; and Worldwide Governance Indicators. Note: The Control of Corruption Index provides a relative measure of perceived corruption that ranges from -2.5 (high corruption) to 2.5 (low corruption). Panel 2 shows the logarithm of GDP per capita in PPP-adjusted US dollars. p = p value; PPP = purchasing power parity; r = 0.5 coefficient of correlation.

More specifically, this chapter has three main goals:

- Raise the veil on how corrupt activities affect government decisions and operations: Corruption can pervert the drafting of laws and the core operations of the state, such as collecting taxes, building roads, or managing public schools or hospitals.
- Assess the fiscal costs of corruption: Corrupt activities can lead to leakages of public money. Governments will collect less tax revenues and pay too much for goods and services or for investment projects. But the cost of corruption is larger than the sum of the lost money: distortions in spending priorities undermine the ability of the state to promote sustainable and inclusive growth.
- Highlight the core elements of an effective fiscal governance framework: The chapter discusses how fiscal institutions can strengthen integrity and accountability in the public sector. It provides evidence based on the analysis of new data on a large set of fiscal institutions and individual country experiences.⁵

In view of corruption's persistence, curbing corruption is a challenging endeavor requiring persevering with efforts on many fronts. As documented in the chapter, with opportunities for funds to leak at

⁵By providing evidence on the fiscal institutions and practices that reduce vulnerabilities to corruption, this chapter further informs the IMF's enhanced engagement on fiscal governance in its surveillance, program, and capacity-building work.

myriad points as they flow through the public sector, plugging a few holes would simply lead wrongdoers to exploit other vulnerabilities. Indeed, the chapter's findings highlight the importance of a comprehensive approach and the need for several institutions to complement one another. The following lessons are also identified:

- Politicians need to take a stand to fight corruption.
 It is vital for heads of agencies, ministries, and public enterprises to promote ethical behavior by setting a clear tone at the top.
- Countries need to invest in a high degree of transparency and independent external scrutiny. This will allow audit agencies and the public at large to provide effective oversight and promote accountability.
- To reduce opportunities for corruption, institutions need to be upgraded continuously, to keep pace with new challenges as technologies and opportunities for wrongdoing evolve. It is necessary to ensure integrity of processes, especially in higher-risk areas (for example, procurement, tax administration, public enterprises), and to promote effective internal controls. The chances of success are higher when countries improve several, mutually supporting institutions. For example, reforms to tax administration will have greater payoff if tax laws are simplified and the scope for discretion by tax officials is reduced.
- Finally, corruption is also a global problem demanding greater international cooperation to

tackle it. For example, countries should be more proactive in combating bribery by national companies that bribe officials in foreign countries, aggressively pursuing anti–money laundering activities, and reducing opportunities to hide corruption proceeds in opaque destinations. There is also room to improve international exchange of information to fight tax evasion, as well as investigate and prosecute corrupt acts.

Corruption and Government: Channels and Fiscal Costs

What Is Corruption?

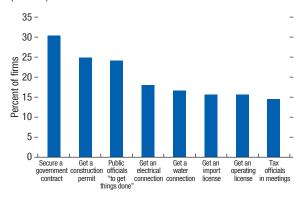
In this chapter, corruption is defined as the abuse of public office for private gain. This implies a focus on corrupt practices involving civil servants or elected officials that are detrimental to the public interest. The private sector is involved in corrupt acts either by being a counterpart—for example, when it obtains a public contract by paying a bribe—or by facilitating the corrupt act (for example, by helping to hide corrupt proceeds).

Fighting corruption requires an understanding of the multifaceted forms through which it operates, including administrative corruption, in which corrupt acts take existing laws and regulations as given; and state capture, whereby politicians or officials accept bribes in exchange for altering legislation or regulation to favor private firms or individuals (Hellman, Jones, and Kaufmann 2000). Depending on the scale of the amounts involved, one can also distinguish between grand corruption (as in the allocation of large investment projects) and petty corruption (for example, bribes to avoid a traffic violation). Drawing on Rose-Ackerman and Palifka (2016), corrupt acts include the following (among others):

- *Payment of bribes* (whether offered or extorted) to get public services or to evade taxes (Figure 2.2).
- Embezzlement and public service fraud, even if not involving bribes. For example, officials may steal money from investment funds, or civil servants may pilfer supplies or neglect their jobs for private sector work.

⁶This is the usual definition of corruption used by the IMF and the World Bank (IMF 1997, 2018). Fisman and Golden (2017) discuss alternative definitions and provide an excellent overview of previous work on this topic.

Figure 2.2. Share of Firms Expected to Pay Bribes to . . . (Percent)



Source: World Bank, Enterprise Surveys.

- *Nepotism or cronyism* to benefit family or a particular group.
- Influence peddling and conflicts of interest, when individuals take advantage of their position in government to extract favors or personal benefits from a government decision. Kleptocracy is the most extreme form of state capture, in which the state is managed to maximize the personal wealth of its leaders.

Corrupt activities can be pervasive, and deeply concealed, throughout the public sector. While corruption can have significant negative impacts in other areas, including regulatory and judicial state functions (IMF 2016), this chapter will focus on the fiscal costs. Figure 2.3 illustrates the way corruption causes leakages as funds flow into, through, and out of the public sector. The remainder of this section describes the "hotspots" for corruption and provides evidence regarding its fiscal costs. Beyond the leakage of funds, these effects include the negative impact on the quality of public policies, wasted talent and effort in the private sector as individuals and firms engage in unproductive activities to capture economic rents,⁷ as well as the loss of revenues that stems from corruption's harmful effects on economic growth.

⁷For example, excessive government restrictions (for example, price controls or licensing mechanisms) create economic rents (that is, proceeds well beyond what would be required to engage in a given activity). People or firms may then pay bribes or engage in other forms of corruption to capture such rents (Krueger 1974).

Corruption causes leakages at multiple points as funds flow into, through, and out of the public sector. Natural Resource **Production Sharing Agreements** Tax **Production** State-Owned Companies Legislation Corrupt legislators give away tax exemptions and investment Corrupt bureaucrats negotiate poor contracts Taxes incentives in exchange for bribes Due **Revenue Administration Tax Collection Procurement** Corrupt tax administrators collude with taxpayers Overpricing to let them evade taxes low-quality products and services **Execution** of the Budget Total Collected **Borrowing and Grants** Resources Funds diverted by corrupt Wages and bureaucrats Pensions Decisions on investment **Budget** projects and subsidies **Choices on** are based on bribes "Ghost" workers and patronage Theft from and pensioners unmonitored Treasury: accounts Financial Embezzlement Management enabled by weak financial controls RESOURCES **AVAILABLE** FOR SPENDING Extrabudgetary Funds and Public Enterprises Lack of controls Misappropriation of budget and own funds Conflicts of interest

Figure 2.3. Corruption Leakages in the Public Sector

Source: IMF staff.

How Corruption Undermines the Funding of the Government

Corruption can harm revenue collection at both the legislative and collection stages.⁸ For example, the introduction of tax exemptions or other tax loopholes in exchange for bribes reduces revenue potential. Furthermore, a complex and opaque tax system enables corruption by requiring more discretion in its administration (Asher 2001) and by facilitating hidden corrupt dealings. Customs administration is also vulnerable to corruption. In many countries, customs officials enjoy discretionary powers (including the power to delay the clearance of goods) with limited supervision.⁹ The distortion of tax laws and the corruption of tax officials,¹⁰ by reducing trust in the state, weaken the culture of tax compliance.¹¹

A cross-country comparison confirms that government revenues are significantly lower in countries perceived to be more corrupt.

- The pattern holds among the different country groups (Figure 2.4). For example, among advanced economies, a country in the top 25 percent in terms of control of corruption collects 4½ percent of GDP more in revenues, on average, than a country in the lowest 25 percent. The gap in revenue collection is 2¾ percent of GDP among emerging market economies and 4 percent of GDP among low-income countries.
- The empirical association between corruption and revenues is confirmed by cross-country econometric analysis, controlling for the level of economic development (Figure 2.5) and other factors. An improvement in the Control of Corruption Index by one-third of a standard deviation (equivalent to the average improvement for those countries that

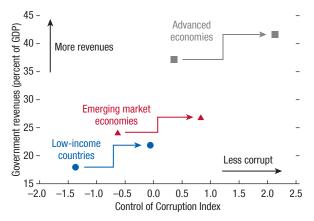
⁸For example, in a case that was described as the largest tax fraud in the history of New York City government, city officials made it appear as if the unpaid taxes had been paid in exchange for bribes from property owners. See https://www.nytimes.com/1996/11/22/nyregion/29-arrested-in-tax-fraud-scheme-described-as-new-york-s-largest.html.

⁹Fisman and Wei (2004), by comparing reported exports from Hong Kong SAR to China and the corresponding reported imports, estimate a tax evasion rate of 40 percent for highly taxed products.

¹⁰Examples include bribery to reduce taxation, undervaluation or underdeclaration of goods at customs, and extortion by tax or customs officials who threaten to use their powers to administer ambiguous tax laws against taxpayers (Martini 2014).

¹¹Alm, Martinez-Vasquez, and McClellan (2016) find that the presence of tax inspectors who request bribes results in a reduction of sales reported for taxes by 4–10 percentage points. Also, larger bribes result in higher levels of evasion.

Figure 2.4. Government Revenues and Corruption



Sources: IMF, World Economic Outlook database; and Worldwide Governance Indicators.

Note: The figure shows the average government revenues as a share of GDP (excluding grants) for countries with the lowest levels of corruption (top 25 percent of control of corruption) and highest levels of corruption (bottom 25 percent) for each of these groups: low-income countries, emerging market economies, and advanced economies. It excludes oil exporters, for which oil revenues are a key driver of total revenues. The Control of Corruption Index provides a relative measure of perceived corruption that ranges from -2.5 (high corruption) to 2.5 (low corruption).

reduced corruption between 1996 and 2017) is associated with an increase of 1.2 percentage points in government revenues as a share of GDP. If that improvement is applied to all countries, the implied increase in total tax revenues could be \$1 trillion, or 11/4 percent of global GDP; the gains would be greater considering that lower corruption would raise economic growth, further boosting revenues. It is also important to note that although the dominant effect is likely to be corruption affecting fiscal outcomes, it is also possible that fiscal outcomes have an impact on the indicators of corruption. It is also not possible to fully disentangle the effect of corruption from the quality of institutions. As such, the results could be interpreted as the benefits of improved governance more generally.¹²

Extractive industries stand out as a hotspot of potential corruption. This reflects the large profits associated with oil and mining exploration. Moreover, because these government revenues come from export receipts and multinationals and do not involve taxing citizens, there is a tendency for less scrutiny and

¹²See the online-only Annex 2.1 for a discussion of the empirical challenges.

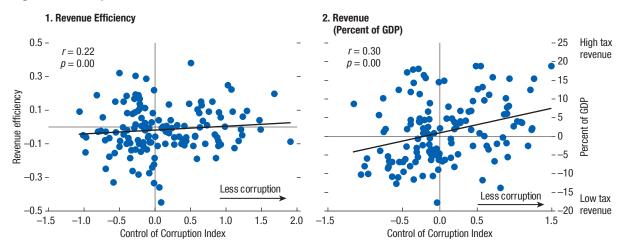


Figure 2.5. Corruption and Revenue Collection

Sources: IMF, World Economic Outlook database; and Worldwide Governance Indicators.

Note: Revenue efficiency is calculated based on personal income tax efficiency and value-added tax c-efficiency. It compares what countries collect relative to what they should collect, based on average statutory tax rates. See the online-only Annex 2.1. Both the revenue variables and the Control of Corruption Index are adjusted for GDP per capita. Revenue data is the average of 2015–17 (excludes oil exporters), and revenue efficiency is an average of 2013–16. Control of corruption shows 2017 data. r = coefficient of correlation.

accountability. 13 Areas particularly prone to corruption include the following:

- Allocation of exploration rights, especially if government officials can exercise discretion without proper vetting, and if secrecy around the terms of the contract prevents governments and companies from being held accountable.
- Revenue collection, if companies and tax officials have opportunities to negotiate tax payments in exchange for bribes.
- State-owned enterprises (SOEs) in the natural resources sector, which present specific concerns because they manage a large share of a country's natural resources. Some may directly negotiate the terms of exploration with foreign corporations (for example, in the case of subcontractor services) with limited oversight. This is one of the most common areas of international corruption. Noncommercial activities of SOEs can also be an area of revenue leakage in the absence of proper vetting. 14

¹⁴In some countries, mining and oil companies pay for activities that are normally conducted by central or subnational governments. This can include funding social and infrastructure projects, usually with limited scrutiny.

How Corruption Distorts the Use of Public Resources

Corruption affects spending choices and their efficiency at various points in the budget formulation and implementation process. At the budget formulation stage, spending choices can be diverted to projects or activities that offer greater opportunities for kickbacks or spending that is exempt from some controls. Examples include spending on large investment projects or complex defense equipment for which there are limited price comparators. By comparison, in the areas of education and healthcare, it is relatively more difficult for policymakers to levy bribes (Mauro 1998). Indeed, corruption is associated with fewer resources allocated to education or health spending, especially for low-income and emerging market economies (Figure 2.6).

The budget execution stage is more likely to involve civil servants exploiting weaknesses in the control environment in the purchase of goods and services or the wage and pension bills (for example, "ghost" workers). It could also involve extortion of bribes in providing public services or subsidies. For example, according to one study, subsidies for research and innovation became more effective after an anticorruption campaign in China (Fang and others 2018). Greater opportunities for corruption exist in off-budget spending (usually encompassing extrabudgetary funds—for example, road or oil funds—

¹³A study by Andersen and others (2017) finds that petroleum windfalls translate into significant increases in wealth hidden abroad by residents of some oil-rich countries.

and SOEs), where controls and external scrutiny are often more lax.¹⁵

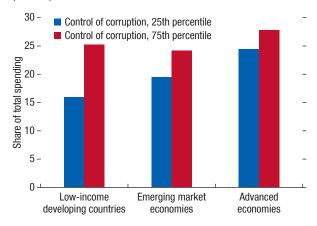
Purchase of goods and services by the government as part of its current and capital spending is another hotspot for corruption because of its size (13 percent of GDP among Organisation for Economic Co-operation and Development [OECD] countries). It is not surprising that procurement is the government activity with the highest perception of bribery risk (OECD 2013; World Bank 2012b). An analysis based on five sectors in eight EU countries finds that the direct public loss from corruption varied between 7 and 43 percent of the value of individual procurement contracts that were suspected of being corrupt (PwC 2013). These amounts reflect cost overruns, implementation delays, and loss of effectiveness (for example, poor quality). Corrupt activities involved bid rigging, kickbacks, and conflicts of interest.

In procurement, public investment is particularly vulnerable to corruption. Investment projects often have unique features, rendering cost comparisons difficult and thus making it easier to conceal bribes and inflate costs. In addition, projects often require numerous licenses and permits, each one providing an opportunity for bribery. Moreover, projects can be designed in a complex way to prevent competition and facilitate corruption. Some estimates suggest that losses from corruption range between 10 and 30 percent of construction value (Matthews 2016). An investigation in the Canadian province of Quebec also found a widespread bribe-for-contracts scandal in the construction industry involving local politicians, contractors, and organized crime groups. 16 Public-private partnerships also present specific challenges because of (1) their complexity; (2) confidentiality clauses in contracts; and (3) frequent renegotiation of contract terms, which opens the door to changes with limited transparency and significant discretion.

The public sector's activities extend beyond the budget through the operations of SOEs. These companies

Figure 2.6. Control of Corruption and Public Spending on Education and Health

(Percent)



Sources: IMF, Governance Finance Statistics; and IMF staff estimates. Note: Percentiles are computed for each country group. See the online-only Annex 2.1.

range from small enterprises owned by local governments providing core public services, to some of the largest companies in the world. The risks of corruption tend to be higher either because these enterprises operate in corruption-prone sectors, including energy, utilities, and transportation, or, more generally, because of weaker controls and conflicts of interest. SOEs may be unduly influenced by civil servants or elected officials over the company's management for personal benefit. Mismanagement, lending to related entities, and corruption of prudential authorities can also lead to large fiscal costs associated with subsidizing or bailing out public banks—or even private banks (Laeven and Valencia 2012).

The evidence confirms that corruption is one of the main challenges faced by SOEs, including bribes by foreigners:

- In an OECD survey, 42 percent of SOE respondents reported that corrupt acts or other irregular practices occurred in their company during the past three years (OECD 2018a). Several high-profile corruption probes involving SOEs underscore the risk of abuse of public resources, including Petrobras in Brazil, Elf in France, and Eskom and Transnet in South Africa. Corruption has also been highlighted as a key obstacle to reform of SOEs in Ukraine (OECD 2018c).
- In addition, the evidence suggests that 80 percent of foreign bribes go to SOE officials (OECD 2014).
- Cross-country evidence, based on a large SOE data set covering 38 countries, suggests that

¹⁵One example is Malaysia's development fund (1Malaysia Development Berhad), which is being investigated for corruption reportedly involving an embezzlement of public funds of at least US\$4.5 billion. See "Malaysia's former prime minister faces trial in the 1MDB scandal," *The Economist*, February 9, 2019, https://www.economist.com/finance-and-economics/2019/02/09/malaysias -former-prime-minister-faces-trial-in-the-1mdb-scandal).

¹⁶The investigation was conducted by the Commission of Inquiry on the Awarding and Management of Public Contracts in the Construction Industry (commonly referred to as the Charbonneau Commission).

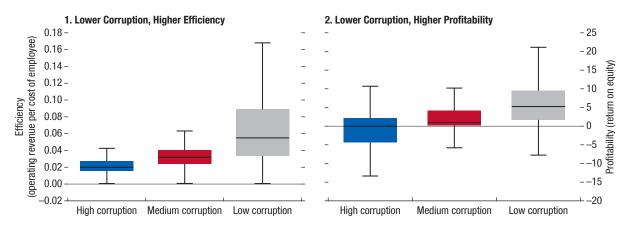


Figure 2.7. Corruption and Performance of State-Owned Enterprises

Sources: Orbis; Worldwide Governance Indicators; and IMF staff estimates.

Note: The figure shows performance indicators for state-owned enterprises in the electricity, mining, transport, and water sectors. The database comprises 1,446 firms in 38 countries. The boxes show the median and the 25th and 75th percentiles, while the whiskers show the maximum and minimum values. Countries are divided into high, medium, and low corruption, based on the Control of Corruption Index. Data are from 2000–17.

SOEs' performance (profitability and efficiency) is weaker in countries with high levels of corruption (Figure 2.7).

How Corruption Impairs the Effectiveness of Government Policies

By distorting the incentives of policymakers and civil servants, corruption undermines the quality and effectiveness of government policies. Core public services, such as the provision of quality public infrastructure and education, can be severely hampered (Gupta and others 2000). This, in turn, has a negative effect on governments' ability to promote economic growth and reduce poverty.

Countries with lower levels of perceived corruption have significantly less waste in public investment projects. To assess waste, this analysis uses a measure of public investment efficiency—that is, the degree to which countries turn public investment spending into physical capital.¹⁷ If two countries spend different amounts for a similar output (for example, a mile of two-lane paved road), the country that spends less is more efficient. The difference between a given country and the most efficient one—the efficiency

¹⁷The efficiency measure considers the level of GDP per capita because countries at different levels of development have different technologies with which to invest and varying initial capital stocks. A country's level of efficiency is relative to the most efficient country with a similar level of income (IMF 2015).

gap—provides a measure of waste, which reflects corruption (for example, cost overruns, bid rigging) and other factors such as weak project design or poor investment allocation. Panel 1 of Figure 2.8 shows that public investment efficiency is positively associated with control of corruption. ¹⁸ The estimates suggest, for instance, that an emerging market economy in the top 25 percent of the control of corruption scale wastes half as much as one in the bottom 25 percent. ¹⁹

The quality of education, measured by test scores, is also positively associated with control of corruption (Figure 2.8, panel 2). This effect can be explained by several factors. In some countries, access to teaching positions in public schools is influenced by bribes or connections rather than merit. In addition, teacher absenteeism is a widespread form of petty corruption in several developing economies (Chaudhury and others 2006). Ferraz, Finan, and Moreira (2012) also find evidence that corruption leakages in education grants have a negative impact on test scores and are associated with higher dropout rates.

¹⁸While the cross-country evidence seems to confirm the micro studies and country examples that corruption contributes to lower public investment (and higher waste), it is not possible to rule out a reverse causality effect. While corruption undermines investment efficiency, it is also possible that high inefficiencies could lead to a deterioration in the perceptions of corruption.

¹⁹This result is based on regression analysis reported in the online-only Annex 2.1. Improving the control of corruption by one standard deviation is associated with a fall in the average efficiency gap from 34 to 20 percentage points.

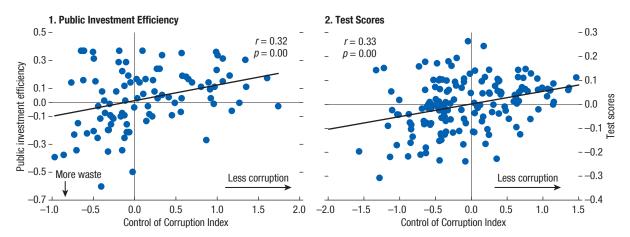


Figure 2.8. Countries with Less Corruption Have Higher Test Scores and Less Waste in Public Investment

Sources: Patrinos and Angrist 2018; Worldwide Governance Indicators; and IMF staff estimates.

Note: Public investment efficiency is estimated using efficiency frontier analysis and measures inefficiency as the distance to the frontier—that is, the maximum level of output for given levels of inputs. Output is measured by a physical indicator of the volume of economic infrastructure and social infrastructure. Inputs include capital stock and income. Test scores for school-age students are harmonized across sources (and adjusted for GDP per capita). See the online-only Annex 2.1. The Control of Corruption Index provides a relative measure of perceived corruption that ranges from –2.5 (high corruption) to 2.5 (low corruption). r = coefficient of correlation.

Governments' ability to borrow as well as to manage risks may also be undermined by corruption, together with other institutional weaknesses. By harming revenue mobilization or through outright theft of public assets, corruption makes it more difficult for governments to service their debt obligations. Some studies find that countries with weaker institutions and weaker policies default more often (Fournier and Bétin 2018; Kraay and Nehru 2006; IMF and World Bank 2012).

The Role of Fiscal Institutions: Country Experiences and Lessons

Can fiscal institutions curb corruption? Is it possible to identify specific budget or tax administration procedures that are more effective in this regard? This section—while acknowledging the role of other institutions, including an effective judicial system—explores the potential role of fiscal institutions in reducing vulnerability to corruption. The discussion highlights the main lessons from selected country experiences and cross-country evidence.

Country Cases: Reducing and Containing Corruption

Corruption tends to be persistent. Government agencies, cities, and even countries can get trapped in an environment of pervasive corruption. A public

official will be more tempted to accept a bribe when "everyone" takes bribes.²⁰ (The opposite is also true: if corruption is rare, individuals will be less tempted to accept bribes because they face a greater chance of being caught.) Thus, escaping the trap of high corruption is difficult. A few countries—such as Estonia, Georgia, Liberia, and Rwanda—have made significant progress over a relatively short period. In these cases, the authorities seized the opportunity of a major political change. These countries reached a "tipping point," often as a result of a broad-based domestic consensus or an external push to aggressively fight corruption. Some countries also have been able to sustain levels of corruption lower than their regional or income peers (for example, Chile). These country experiences can provide lessons on how to reduce corruption and improve fiscal and economic outcomes.

Georgia and Rwanda have shown the largest improvements on the Control of Corruption Index since 1996. Both countries have made wide-ranging efforts to overcome a pervasive culture of corruption

²⁰The persistence of (or lack of) corruption can be seen as a social equilibrium. Fisman and Golden (2017) characterize it based on a contingent behavior: we make decisions after having considered what we expect others to do. Similarly, Mauro (2004) explores the possible different equilibria in the presence of strategic complementarities. The decision on whether to pay a bribe or denounce it hinges on how many other participate in the bribe or speak out.

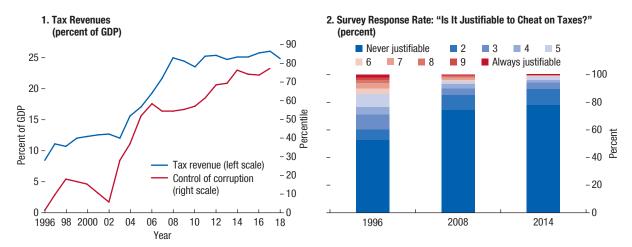


Figure 2.9. Georgia: Tax Compliance Surged with Anti-Corruption Reforms

Sources: Country authorities; IMF, World Economic Outlook database; Worldwide Governance Indicators; World Values Survey; and IMF staff estimates.

within a relatively short period. While challenges remain, both countries have achieved remarkable improvements relative to pre-reform periods.

- Until 2003, Georgia was considered one of the most corrupt countries in the world. Many interactions with the state required bribes, and corruption in tax administration decimated revenue collection. In late 2003, a new government launched an all-out anticorruption campaign. It focused on eliminating corruption in the civil service, reducing the number of regulations, and improving the business environment. To show that they were committed to change, the authorities dismissed the entire traffic police force and arrested high-level officials suspected of corruption.
- Over the past two decades, Rwanda has enacted several legal and institutional reforms to fight corruption. The anticorruption legal framework includes legislation criminalizing different types of corruption and money laundering. The government also adopted a code of conduct and rules of disclosure for public officials. Several high-ranking officials were dismissed or prosecuted.

Strengthening fiscal institutions has been an integral part of anticorruption reforms.

 Georgia and Rwanda both undertook major civil service reforms, including reductions in public employment (such as eliminating ghost workers) and increases in wages. The focus has been on establishing competitive, merit-based recruitment. Mandatory asset declarations were introduced in

- both countries. Public financial management and transparency were enhanced.
- In Georgia, the tax code was simplified, including elimination of many tax loopholes and a reduction in the number of taxes and import tariffs. One-stop windows were introduced for procedures such as registering businesses and clearing customs. Rwanda undertook tax administration reforms, with significant improvements in collection efforts, auditing procedures, and scrutiny of large taxpayers.

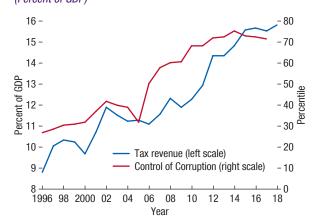
The fight against corruption contributed to improvements in fiscal outcomes. Tax revenues in Georgia increased from 12 percent of GDP in 2003 to 25 percent of GDP in 2008—one of the largest increases recorded for any country, partly due to a new culture of taxpayer compliance (Figure 2.9). Compliance was fostered by renewed trust in government as public services improved, with lower crime rates and fewer power outages. Higher revenues made it possible to clear all wage and pension arrears. In Rwanda, the revenue-to-GDP ratio rose by 6 percentage points (Figure 2.10).

Sustaining the gains requires constant strengthening and modernizing of institutions.

 Georgia and Rwanda have continued to take steps to strengthen institutions over the years after the first wave of reforms. For example, Georgia introduced an e-procurement system in 2011, which has made the system more transparent. Rwanda started implementing one in 2016.

- The need to continue to strengthen institutions over time is also illustrated by other countries that have been able to sustain levels of corruption lower than their peers. One such case is Chile, which has had lower levels of corruption than comparators for decades. Part of the reason is the country's willingness to respond aggressively to corruption cases by addressing institutional weaknesses. The Auditor General has been one of the institutional pillars in Chile since 1925. Legal reforms in the 1960s aimed to reduce the use of slush funds or pork-barrel spending. Economic reforms in the 1970s and 1980s simplified procedures and reduced the scope for excessive public discretion. In 2003, Chile launched ChileCompra (an electronic procurement system, e-procurement), increasing transparency and accountability. The oversight of public money was further strengthened with the 2009 Transparency Law. More recent advances include a 2016 law on public probity to prevent conflicts of interest in the public sector.
- Estonia's strategy of broader and reinforcing reforms over the past two decades also helped reduce corruption. After independence, Estonia undertook an ambitious program of reforms to make the economy more open and business-friendly and to reduce corruption. The judiciary and public administration underwent major transformations and SOEs were privatized. Estonia also embraced digitalization, and 99 percent of state services are now provided online (see the April 2018 Fiscal Monitor). Such reforms, together with the adoption of the Public Information Act in 2000 (Terracol 2015), had a large and positive impact, including on tax administration and promotion of transparency.
- Liberia's experience, especially since 2006, demonstrates the possibility of large governance improvements, and fiscal gains, for an aid-dependent country. In the aftermath of the civil war, a donor-supported anticorruption program involving significant reforms of fiscal institutions helped lead to an improvement in corruption perceptions.²¹
 The reforms included promoting the independence of the General Auditing Commission, launching transparent budget processes, establishing the Liberia

Figure 2.10. Rwanda: Tax Revenues Surged with Anti-Corruption Reforms, 1996–2018 (Percent of GDP)



Sources: IMF, World Economic Outlook database; Worldwide Governance Indicators; and IMF staff estimates.

Note: For the years in which Control of Corruption data are not available, an estimate was created from the average of the previous year and the subsequent year.

Anti-Corruption Commission, and ensuring compliance with the Extractive Industries Transparency Initiative (EITI).

Lessons from Policy Experiments: The Right Incentives and Effective Monitoring

Experiences with specific institutional reforms and the growing literature on policy experiments help shed light on how institutional design can affect incentives and monitoring and lead to better policy outcomes. This section highlights some lessons based on the existing literature (see the online-only Annex 2.2).

Institutional design, supported by technology, can create the right incentives to promote greater integrity in government activities.

• Studies on public procurement show that the design of procedures can have a significant impact on the prices and quality of products. A study for Hungary (Szucs 2017) finds that abandoning an open auction for a negotiation procedure increases corrupt rents, raises the price of every dollar of public spending by 8 cents, and results in a drop in the productivity of selected contractors. In Italy, the introduction of a central procurement agency led to a reduction in waste, measured by the price gap in relation to prices paid by individual public entities. Bandiera, Prat, and Valletti (2009) estimate that corruption

²¹The Governance and Economic Management Assistance Program, 2006–10, establishes a framework for donors to participate in oversight and institutional capacity building. See Chene (2011) for details on Georgia, Liberia, and Rwanda.

accounted for 20 percent of the waste, with the remainder of the gap attributed to inefficiency.²² The introduction of e-procurement in India and Indonesia also increased competition and led to better quality of construction (Lewis-Faupel and others 2016).

• Some reforms in India show the benefits of digitalization and reducing opportunities for discretion and fraud. For example, the adoption of an electronic platform for managing a social assistance program in India resulted in a 17 percent decline in spending with no corresponding decline in benefits. Similarly, in the state of Andhra Pradesh, the use of smart ID cards that are used to identify beneficiaries of specific programs and improve beneficiaries' access to information helped reduce leakage by 41 percent relative to the control group.²³

A common element of many anticorruption reforms is increasing civil servants' wages. In theory, this helps by (1) reducing the need for civil servants to request bribes to complement very low wages and (2) deterring corrupt activities by raising the cost of being caught. However, there is insufficient evidence that raising wages by itself can play a prominent role in fighting corruption.

- Cross-country data provide tentative support that
 higher wages may help reduce corruption. For a sample of 90 countries, this chapter finds some evidence
 of a positive association between higher wages and
 lower corruption (see the online-only Annex 2.1).
 As noted by An and Kweon (2017), however, solely
 relying on higher wages to curtail corruption would
 likely be too costly and insufficient.
- Country experiences show mixed results, depending on the overall environment and incentives. Studies on absenteeism of teachers and nurses in several developing countries find that the level of wages did not have an impact.²⁴ On performance-related incentives, an experiment in Pakistan also shows

²²Public bodies could choose between buying the goods directly or through the central agency, which allowed for identifying the two types of waste.

²³For details, see the online-only Annex 2.2; Banerjee and others (2015, 2016); and Muralidharan, Niehaus, and Sukhtankar (2016).

²⁴See Chaudhury and others (2006) and Banerjee, Duflo, and Glennerster (2008). On the other hand, there is evidence that pay-for-performance policies can promote greater effort and that higher salaries can improve the likelihood of hiring individuals who are more inclined to public service and less prone to corruption. Dal Bó, Finan, and Rossi (2013) illustrate the effect for Mexico.

the potential for undesirable consequences: while performance-based salaries of tax officials led to a significant increase in tax collection (by as much as 50 percent), bribe requests increased by 30 percent (Khan, Khwaja, and Olken 2015). Some studies suggest that higher wages can be effective if complemented with other institutional features, such as monitoring and sanctions.²⁵

Tax evasion can be fought with the right incentives and by reducing opportunities for corruption. The evidence from policy experiments shows that deterrence approaches improve tax compliance (Hallsworth 2014). For example, a study of taxpayers in Denmark finds that prior audits and threat-of-audit letters have significant effects on self-reported income (Kleven and others 2011). Yang (2008) shows that preshipment inspections of containers increase import duty collection by 15–30 percentage points. ²⁶ In Tajikistan, introducing e-filing led to lower compliance costs, and tax payments doubled among firms previously more likely to evade, probably by disrupting collusion with officials (Okunogbe and Pouliquen 2018).

Monitoring and credible sanctions are another element on the anticorruption agenda. For example, audits can decrease costs of public purchases (Di Tella and Schargrodsky 2003), and performance monitoring helps improve the performance of public sector workers (Banerjee and others 2012). Several studies in Brazil show that increased audit risk or having been audited in the past tends to deter future corruption in subnational governments (Ferraz and Finan 2008; Zamboni and Litschig 2018). Muralidharan and others (2017) also find that increased frequency of inspections can help reduce teacher absenteeism. However, to be effective, audits may need to be supported by sanctions or other forms of penalties (Olken 2007).

Providing more information on public programs can help promote greater accountability. More transparency appears to be particularly effective when supported by

²⁵In a study of hospitals in Buenos Aires in 1996–97, Di Tella and Schargrodsky (2003) find evidence of a significant negative effect of public managers' wages on the prices paid by hospitals for supplies when there was also a risk of being audited. Chen and Liu (2018) find that in China, while corruption is reduced by increasing lower-scale wages, the relationship is inverted for higher-scale wages, suggesting that, for the latter, sanctions may be more effective.

²⁶Yang (2008) also finds that developing economies that have hired private firms to conduct preshipment inspections of imports subsequently experience large increases in import duty collections.

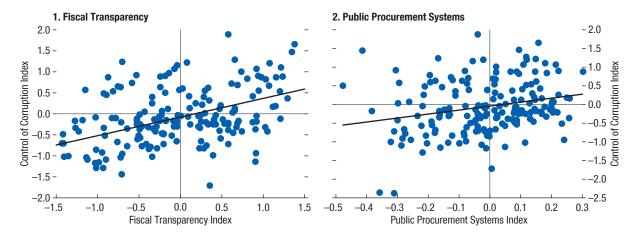


Figure 2.11. Fiscal Transparency, Procurement Systems, and Corruption, 2017

Sources: IMF, World Economic Outlook database; International Budget Partnership, Open Budget Index; Worldwide Governance Indicators; and IMF staff estimates.

Note: The Fiscal Transparency Index was built by IMF staff, and the Public Procurement Systems Index is based on the World Bank's GDP per capita adjusted data. See the online-only Annex 2.1.

the media and fostered by civil society participation. For example, in Brazil, the results of audits of municipalities have a significant impact on the reelection prospects of officials suspected of misuse of public money, but these effects were larger in areas with local radio stations. Similarly, two experiences in Uganda illustrate (1) the positive impact of information on local officials' use of education grants; and (2) how community monitoring, together with the provision of "report cards" on the performance of health facilities, improved health outcomes. The introduction of ID cards for recipients of a social program in Indonesia, which displayed the copay to be paid by beneficiaries, led to a significant reduction in leakages (likely as a result of corruption) and a 26 percent increase in actual received benefits in villages with the new ID cards.²⁷

Cross-Country Evidence

The case studies suggest that fiscal institutions can play a role in preventing and containing corruption. To assess whether these results hold more broadly, the chapter now turns to systematic analysis for a larger sample of countries. Some fiscal institutions—such as the quality of procurement systems or tax institutions—refer to

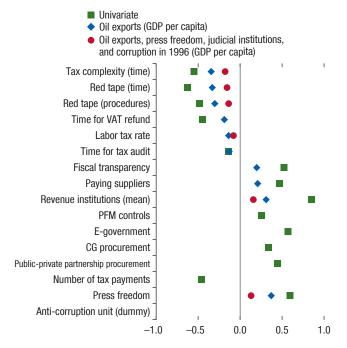
²⁷For details on these cases, see Banerjee and others (2015); Björkman, de Walque, and Svensson (2017); Ferraz and Finan (2008); Ferraz, Finan, and Moreira (2012); and Reinikka and Svensson (2005).

specific areas (see the online-only Annex 2.1 for details). Others have an overarching impact on the public sector, such as the degree of fiscal transparency (Figure 2.11), digitalization (e-government), or the degree of administrative burden (red tape) citizens face when dealing with the state. The analysis explores whether these institutional measures are associated with indicators of perceptions of corruption.

Results from the cross-country analysis support the role of fiscal institutions found in the selected country experiences.

- The analysis of individual institutions one by one shows that they are significantly associated with control of corruption (Figure 2.12). Institutional features for which the relationship holds, controlling for other factors, include tax complexity (time required to pay taxes) as well as other aspects of revenue administration (for example, audits). These results are in line with the view that complex tax laws and weaknesses in tax audits or systems to assess compliance risks lead to higher tax evasion. Fiscal transparency and a lower administrative burden are also correlated with lower corruption.
- When assessing the impact of institutions together (Online Annex 2.1), the analysis suggests that fiscal transparency is particularly effective when there is more press freedom. The degree of digitalization of the government also has a positive relationship (Andersen 2009; Elbahasawy 2014).

Figure 2.12. Fiscal Institutions and Control of Corruption



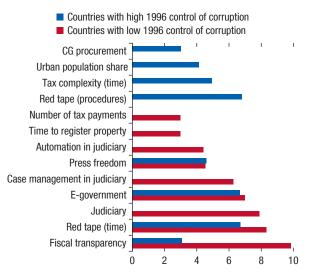
Source: IMF staff estimates.

Note: The figure shows coefficients when regressing the control of corruption on different fiscal institutions. For example, the more complex the laws, the lower the control of corruption. Coefficients are shown if they are significant at the 5 percent level. Series are standardized. See the online-only Annex 2.1. CG = central government; PFM = public financial management; VAT = value-added tax.

The cross-country analysis explores complementarities among institutions. For example, complex tax laws may enhance opportunities for corruption, but the outcome will depend on the quality of the tax administration. Or, the ability of good public financial management or procurement processes to prevent corrupt (illicit) behavior may depend on the timeliness and impartiality of judicial proceedings. The analysis of these interactions provides the following insights:

- Good revenue institutions and lower tax complexity, not surprisingly, reinforce each other; that is, they have a stronger association with lower corruption. Administratively efficient judiciary institutions display complementarities with some fiscal institutions (tax complexity and public financial management).
 Finally, the results further suggest that fiscal transparency is relevant only when there is press freedom.
- Furthermore, the analysis indicates that revenue institutions are particularly important (higher

Figure 2.13. Relative Importance of Fiscal Institutions



Source: IMF staff estimates.

Note: The results show the topmost relevant institutions out of more than 50 variables. See the online-only Annex 2.1. CG = central government.

correlation with control of corruption) when other institutions are weak.²⁸

The importance of specific institutions also appears to vary depending on the history of corruption. Use of a regression tree approach, which allows for interactions between institutions, ²⁹ shows that for countries with a tradition of low corruption, the fiscal institutions that appear more relevant are the degree of digitalization, administrative burden, procurement, and complexity of the tax system (Figure 2.13). For countries that start with a high level of corruption, fiscal transparency and digitalization stand out as key institutional features associated with better control of corruption. Among other institutions, press freedom and the speed of judicial processes are also important.

Promoting Good Governance in the Public Sector

How can countries ensure that fiscal institutions are designed to help fight corruption? The previous

²⁸This finding is based on threshold models analyzing whether some institutions are more relevant depending on the quality of other institutions (Online Annex 2.1).

²⁹Nonlinearities are explored using a regression tree approach (Breiman and others 1984), which has several advantages. Regression trees allow for flexible interactions and for making use of the entire sample of countries, despite missing values for some variables.

sections indicated some of the key elements needed. First, strong political commitment is necessary for comprehensive and profound reforms to broader institutions (encompassing not just fiscal but also effective courts and supervision of the financial sector). Second, countries must ensure integrity of core fiscal operations (tax collection, procurement, management of public enterprises). Third, transparency and external oversight (audit agencies, free press) are needed to promote accountability. Finally, while promoting appropriate incentives, there is also a need to effectively sanction corrupt acts.

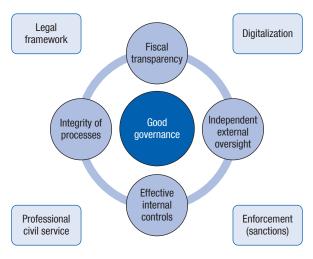
Building on the findings of the previous analysis and the experience of countries across the world, the chapter next discusses a comprehensive approach to strengthening fiscal governance (Figure 2.14). Such an approach will help to not only fight corruption but also more generally contribute to reducing tax evasion and waste in public programs and fostering accountability in decision making. The following are key elements of strong fiscal governance, with an emphasis on reducing vulnerabilities to corruption:

- Overarching, cross-cutting elements that affect all agencies: the legal framework, a professional civil service, and the degree of digitalization (good information technology systems that support management, control, and transparency). An effective system of sanctions is also necessary to ensure good governance
- Design of the organizational structures and integrity of the processes, especially those that are higher risk, to reduce opportunities for corruption.
- An effective control framework, including (1) internal controls and internal audits and (2) an independent external oversight
- Finally, fiscal transparency, a core pillar to ensure accountability and support the other elements of the governance framework.

Fiscal Governance Framework

As illustrated by country experiences and by the many vulnerabilities to leakages, the chances of successfully containing corruption are higher when countries improve several, mutually supporting institutions. When capacity is constrained, governments can prioritize areas of higher risk—for example, procurement or tax administration—but eventually should expand efforts to all the core institutions.

Figure 2.14. Fiscal Governance Framework



Source: IMF staff.

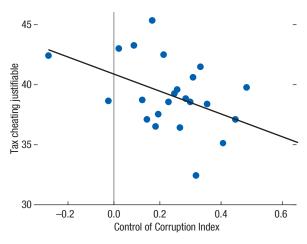
Overarching Legal Framework and Information Systems

County experiences highlight some overarching elements that promote a robust governance framework across the public sector:

- A legal and regulatory framework clearly defining the accountability, transparency, and control environment for the use of public resources. For example, in Australia, the Public Governance, Performance and Accountability Act of 2013 established a system of governance and accountability for the use and management of public resources for all central government agencies and SOEs. Some countries are also moving toward an ex ante review of new laws (known as "corruption proofing") to minimize the risk of future corruption (for example, Albania, Lithuania, South Korea).³⁰
- A professional civil service, based on transparent, merit-based hiring and remuneration procedures.
 Codes of conduct and financial accountability principles, including conflict of interest guidelines, mandatory reporting of gifts, and declaration of assets and interests accessible to the public, should be in place.

³⁰These reviews include identifying factors such as unclear definitions of the rights and duties of public officials, excessive discretionary powers, inadequate sanctions, lack of (or conflicting) regulatory and administrative procedures, and disproportionate burdens on citizens to exercise their rights (Hoppe 2014).

Figure 2.15. Corruption Control and Attitude toward Tax Cheating



Sources: Afrobarometer; Latinobarómetro; Worldwide Governance Indicators; and World Values Survey. Note: The Control of Corruption Index provides a relative measure of

Note: The Control of Corruption Index provides a relative measure of perceived corruption that ranges from –2.5 (high corruption) to 2.5 (low corruption).

Investment in digitalization to improve the integrity of processes and facilitate transparency. Digitalization affects many areas of the government, including e-procurement, transparency (easier access to data), and controls. A core element is a robust and comprehensive integrated financial management information system to reduce human interaction and keep an audit trail of financial transactions. As part of larger reforms, France implemented a comprehensive system of this type for the central government in the 2010s, integrating all budget and accounting processes and strengthening financial controls.³¹ Governments will also need to invest in technology to fight evolving corrupt practices as new technologies present both a challenge to and an opportunity for the fight against corruption. Governments will need to tackle new threats, including cyberattacks (Kopp, Kaffenberger, and Wilson 2017).

Strong Institutions, Mechanisms, and Processes

A key pillar of governance is ensuring integrity in the normal processes across the public sector. Design-

³¹The adoption of the new overarching public financial management law in 2001 was a key step toward greater fiscal transparency, with modernized budget documentation and reporting as well as increased parliamentary oversight after a review of the accountability framework by all stakeholders in the budget execution process.

ing sound mechanisms and tools that create appropriate incentives, limit discretion by public servants, and include controls can reduce vulnerabilities to corruption. Most exposed to corruption are processes that involve bank transactions; interactions with third parties (revenue collection, public procurement, and management of SOEs); and recurrent, less-scrutinized operations (such as payments for wages or goods and services).

The ability of revenue administrations to fight corruption and tax evasion depends on the institutional framework of the agency and the broader governance context (Figure 2.15). For example, a study based on interviews with Greek experts on tax administration highlighted impunity and political interventions among the most frequently cited challenges (Antonokas, Giokas, and Konstantopoulos 2013). In addition, a tax system that is clear, stable, and not overly complex will be easier to administer and harder to evade. Other features that can promote better governance include (1) processes that reduce compliance costs and are based on a risk-based approach, (2) operational independence and effective internal audit and anticorruption units, (3) revenue administration processes that are digitalized and automated (including automated system of internal controls and risk assessment), and (4) institutional efforts to promote integrity (see the online-only Annex 2.3). For example, Estonia's Tax and Customs Board is using big data analysis to create risk profiles of tax payment transactions and permit close monitoring of high-risk transactions.³²

Tax authorities can also play a critical role in helping fight corruption. Tax crime and corruption are often linked, as criminals do not report income derived from corrupt activities for tax purposes or overreport to launder the proceeds of corruption. As such, tax and law enforcement authorities can benefit from more effective cooperation and sharing of information (OECD and World Bank 2018).

Public procurement and public investment management remain among the most challenging areas. Procurement processes should be competitive and

³²Some custom authorities in Africa (Tanzania, Uganda) are using online platforms to allow the trading community to report problems, including corruption. Real-time information could be displayed at strategic points in the offices or public areas where taxpayers are served. The deterrent potential appears high with this approach to visibility, but there are limitations (Fisman and Golden 2017), and care is needed in the design and safeguards (Ryvkin, Serra, and Tremewan 2017).

transparent and should allow for fair and effective treatment of complaints. Noncompetitive procedures or unsolicited proposals should be limited and tightly regulated.³³ For example, South Africa obtained significant savings on its public-private partnership program by increasing competition.³⁴ Initiatives in the areas of public procurement and public investment management include the following:

- A growing number of countries and institutions use alert systems, or "red flags," to minimize the risk of corruption and fraud in public procurement. The indicators that are more correlated with corruption are large tenders, lack of transparency and collusion among bidders, complaints from nonwinning bids, substantial changes in the project after the award, and a shortened time span for the bidding process (Ferwerda, Deleanu, and Unger 2017). For example, the European Commission assesses performance of procurement across EU countries based on a set of indicators,³⁵ with several countries having unsatisfactory scores in many indicators (Greece, Italy, Portugal, Spain).³⁶
- An increasing number of countries are adopting e-procurement systems because they promote transparency and efficiency, thus reducing corruption opportunities. Korea has one of the most complete e-procurement systems, covering the entire procurement cycle electronically. A corrupt activity analysis system is in place and suspicious cases are investigated.
- Investment projects, especially large ones, also require proper oversight in other stages—project planning, selection, and implementation—to ensure that decisions are consistent with the public interest.
 For example, in Malaysia, the central coordination

³³In Côte d'Ivoire, the degree of openness in procurement procedures (competitive versus restricted or closed tendering process) is reviewed, presented in the Council of Ministers quarterly, and published.

³⁴In 2011, South Africa launched a competitive procurement program for renewable energy, resulting in significant drops in prices of renewable energy, mainly owing to a clear, transparent, and comprehensive public-private partnership and Independent Power Producer procurement framework and a dedicated public-private partnership unit of the Ministry of Finance (Eberhard and others 2016).

³⁵The three most important are (1) the proportion of contracts awarded with a single bidder; (2) the proportion of procurement procedures negotiated with a company without a call for bids; and (3) the value of public procurement advertised to businesses, that is, the access and openness of public procurement.

³⁶Some progress has been made; for example, Spain adopted a new procurement law in 2018.

unit produces weekly monitoring reports, measuring both financial and physical progress of investment projects.

Well-functioning budget and treasury systems are also critical for good management of public money. Budget execution processes should be governed by a strong chain of control throughout the process, with adequate segregation of duties. The budget system should be comprehensive, and borrowing should be centralized and authorized by law. The use of extrabudgetary funds (including donor-financed activities) should be avoided because it tends to involve less-stringent controls and scrutiny, increasing vulnerability to misuse of the funds. Digitalization of wage bill payments, combined with payroll monitoring systems, can help identify irregularities or ghost workers. Treasury systems and bank transactions should be comprehensive and subject to tightly controlled processes. A Treasury single account, consolidating all government receipts and payment transactions, is crucial to monitor and control flows.

Many countries either lack key elements of good corporate governance for SOEs in their laws or do not fully implement such elements in practice. The OECD guidelines on corporate governance for SOEs provide the core international standards.

- One crucial element is the relationship between the state (as owner) and SOE management. The governance responsibilities of the state (at the national or subnational level) include proper exercise of its ownership duties. This implies monitoring performance regularly and avoiding undue political interference (including addressing conflicts of interest). One challenge has been transparently selecting SOE boards that are independent and qualified. For example, a study of local public utilities in Italy finds that when boards were dominated by politically connected directors, SOE employment was higher and firm performance was worse (Menozzi, Urtiaga, and Vannoni 2012).
- Another challenge is to fully integrate good corporate governance practices in day-to-day activities, including effective internal controls and risk management systems. Good corporate governance also means ensuring a high degree of accountability through wide-ranging transparency. Even countries that were perceived to have relatively good monitoring and reporting of SOEs activities previously

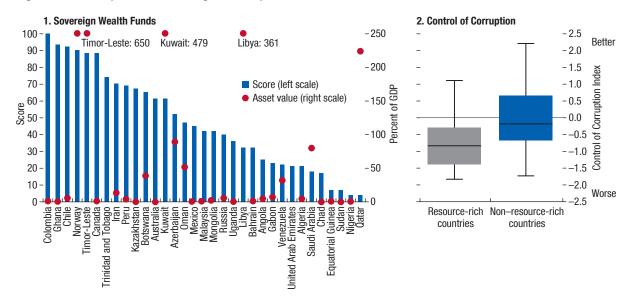


Figure 2.16. Corruption Is a Challenge for Many Resource-Rich Countries

Sources: Natural Resource Governance Institute 2017; and Worldwide Governance Indicators.

Note: Panel 1 shows the corporate governance and transparency scores of the sovereign wealth funds and the size of assets as a percentage of 2016 GDP. Caution is needed in interpreting scores for any individual country as the quality of underlying data can vary across countries and data sources. In panel 2, the boxes show the median as well as the 25th and 75th percentiles, while the whiskers show the bottom and top 5 percent of the data. The definition of resource-rich countries follows the October 2015 *Fiscal Monitor*. The Control of Corruption Index provides a relative measure of perceived corruption that ranges from -2.5 (high corruption) to 2.5 (low corruption).

have been struggling with corruption in some of their largest companies, leading to further reforms to improve corporate governance (Brazil, South Africa). In 2017, Transparency International issued a guide to further strengthening corporate governance by committing to specific procedures to reduce corruption risks.

The governance challenges of commodity-rich countries—that is, the management of public assets—call for ensuring a high degree of transparency and accountability in the exploration of such resources. Countries should develop frameworks that limit discretion, given the high risk of abuse, and allow for heavy scrutiny (Box 2.1). For example, Mexico adopted high transparency standards to recover public trust in the management of the oil sector.³⁷ At the international level, the EITI has promoted new disclosure

³⁷The National Hydrocarbons Commission awards license contracts through open tender processes with clear prequalification and evaluation criteria and independent verification of the final award. All final bids and associated scores are made public, and bid awards are published (Pattanayak and others 2018). (The new government has canceled all auctions temporarily.)

standards—both within countries and for foreign companies operating in the sector in a country—and monitors countries' abidance. Some progress has been made, but only a few countries follow most EITI recommendations.

The sheer size of economic rents associated with natural resources demands especially strong institutional safeguards.³⁸ Such rents create incentives for payment of bribes or even state capture to secure control over the country's natural wealth. It is then critical to develop a strong institutional framework to manage these resources—including good management of the financial assets kept in sovereign wealth funds—and to ensure that proceeds are appropriately spent. This remains a significant challenge in many resource-rich countries that, on average, have weaker institutions and higher corruption (Figure 2.16). The economic costs (sometimes referred to as the "resource curse") can be significant (see the October 2015 Fiscal Monitor).

³⁸Economic rent is the extra amount paid (over what would be paid for the best alternative use) to somebody or for something useful whose supply is limited. Natural resources are a source of rents because their market price far exceeds their cost of exploration.

Effective Internal Control Environment

Internal controls and audits are essential to help minimize waste, mismanagement, and corruption. Internal controls need to apply to all activities of the government units, and it is important to set a clear "tone at the top" for integrity. The control environment should be (1) based on risk assessments with corresponding mitigating measures, (2) documented and disseminated, and (3) regularly assessed by both internal and external auditors.

Implementation of an effective control system remains one of the major challenges. The public sector is usually characterized by considerable levels of "formal" controls (such as signatures and approvals), but their efficiency has proved uneven. In the private sector, the Sarbanes-Oxley Act of 2002 in the United States spurred a profound overhaul of financial controls, the oversight role of boards of directors, and the independence of the external auditor after major financial scandals in that country associated with weak governance, fraud, and corruption. The principles in this framework are being gradually adopted by public sectors around the world, especially in EU countries. Even so, weak internal controls continue to undermine the ability to ensure that public money is used properly (Peru, United States).³⁹ More generally, countries are still making progress on core elements, including managerial accountability, independent internal audits, and development of capacity to prevent and detect fraud and corruption.

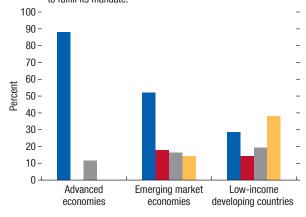
Independent External Oversight

External scrutiny by supreme audit institutions (SAIs), parliaments, and civil society helps safeguard the integrity of public finances and hold civil servants and elected officials accountable. SAIs certify that public resources are raised and spent in accordance with legal requirements; they also ensure that these activities are accurately reported to the public. Focused audits can help fight corruption by identify-

Figure 2.17. Many Audit Agencies Are Constrained by a Lack of Resources

(Percent)

- The SAI determines its own budget, or the budget of the SAI is determined by the legislature or judiciary (or some independent body), and the funding level is broadly consistent with the resources the SAI needs to fulfill its mandate.
- The budget of the SAI is determined by the executive, and the funding level is broadly consistent with the resources the SAI needs to fulfill its mandate.
- The budget of the SAI is determined by the legislature or judiciary (or some independent body), but the funding level is not consistent with the resources the SAI needs to fulfill its mandate.
- The budget of the SAI is determined by the executive, and the funding level is not consistent with the resources the SAI needs to fulfill its mandate.



Source: International Budget Partnership, Open Budget Index 2017. Note: SAI = supreme audit institution.

ing waste and mismanagement. For example, social audits have been in place in India since 2005 to oversee the implementation of a large job guarantee program and to fight corruption in the program. These audits were endorsed and supported by the Indian SAI and relied on the strong and direct participation of citizens. SAIs also help promote integrity by reviewing the reliability of the internal control and audit framework.

SAIs face challenges in fulfilling their role as independent external auditors. According to a 2014 survey of 177 such institutions (IDI 2014), 40 percent indicated that the executive interfered with their budget process, including unapproved cuts by the Ministry of Finance, undermining their effectiveness and independence (Figure 2.17). The survey also indicated that many SAIs in developing countries need further capacity-building and political support to fulfill their mandates of preventing, detecting, and reporting on corruption.

³⁹In Peru, the external auditor is pushing for a reform given that most public institutions have weak internal control systems. In the United States, over the past 20 years, the Government Accountability Office has not been able to express an opinion on the consolidated financial statements of the US government, mostly because of inadequate financial management and internal control weaknesses at the Department of Defense. In response, the Department of Defense has conducted the first audit (2018) of its operations and is planning to address the weaknesses identified.

Transparency Standards

A high degree of transparency allows for more intrusive scrutiny, which is essential to ensure accountability. For example, timely and accurate fiscal reports are critical to monitor budget execution and help detect fraudulent use of public funds. Making fiscal information accessible to the public ensures that the legislature, audit institutions, the media, and civil society groups can effectively perform their oversight roles. In that context, the IMF's Fiscal Transparency Code sets standards for international good practices in fiscal transparency.⁴⁰

Transparency practices vary significantly (as shown earlier), with many countries still providing limited or incomplete reporting on their activities. A growing number of countries, recognizing the crucial role of transparency, have established legislation that sets out requirements for public disclosure of information. For example, after misreporting on the state of public finances in New Zealand and Australia in the early 1990s, both countries moved to strengthen fiscal transparency requirements through the Fiscal Responsibility Act and the Charter of Budget Honesty Act 1998, respectively, which mandate standards for disclosure of fiscal information. Some countries are taking advantage of new technologies to increase the availability and timeliness of information. For example, Colombia, Costa Rica, and Paraguay, with the support of the Inter-American Development Bank, use an online platform that allows citizens to monitor the physical and financial progress of investment projects, leading to increases in completion rates and more reporting of irregularities (Kahn, Baron, and Vieyra 2018).

Enforcement

The elements of the governance framework discussed above need to be supported by an effective system to detect and punish corrupt acts. The deployment of tip-off boxes, confidential public hotlines, and feedback mechanisms can encourage reporting of corrupt acts. Whistleblower protections are crucial for those who report misconduct (OECD 2016). Moreover, financial institutions should be

⁴⁰The Fiscal Transparency Code is complemented by several other guidelines and accountability tools. Some of the key principles regarding fiscal reports are that they should be timely and comprehensive, covering all transactions of public sector institutions including fiscal flows, assets and liabilities, and contingent commitments; classify information in ways that make clear the use of public resources; and be in line with international standards.

obligated to report to their national financial intelligence units when they suspect that a client is involved in corruption or related money laundering. Different institutions and instruments can uncover corrupt transactions. Some SAIs can enforce sanctions, including requiring monies to be refunded and imposing fines, and some have a judicial role (France). Ministries of finance can also enforce a variety of sanctions (for example, administrative, disciplinary). But the main route is criminal enforcement by law enforcement agencies. These often are specialist units (and sometimes agencies) tasked to investigate, prosecute, and adjudicate corruption (Box 2.2).

An effective system of sanctions is critically important in creating effective disincentives to corruption, but the system also needs to allow for flexibility to minimize damage to the economy and policy objectives. This has been a challenge, particularly when corruption is detected in large public investments (including public-private partnerships and SOEs). For example, in some Latin American countries, discovery of a corrupt act can lead to suspension of projects in line with a zero-tolerance policy (Michele, Prats, and Revol 2018). One possible approach is to continue a project if it is in the public interest, while adopting additional safeguards and still prosecuting and imposing sanctions on corrupt actors (Canada, European Union).

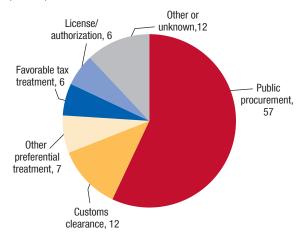
International Cooperation

Corruption is a global challenge with important transnational dimensions: multinational companies offer bribes to facilitate their business abroad; likewise, bribe recipients take advantage of opacity in secrecy jurisdictions, including international financial centers, to hide corruption proceeds. The involvement of multinationals in corrupt acts, in turn, is related to institutional weaknesses in recipient countries and usually involves bribes to obtain contracts or concessions (Figure 2.18). 42 Conversely, corruption at home is

⁴¹Corruption scandals in some Latin American countries (for example, Brazil, Peru) affected large infrastructure investments with a macroeconomic impact. In some cases, projects were stopped after already-large initial investments.

⁴²Recent examples involving multinationals paying bribes to officials in several countries include Siemens (Germany), which, according to the US Securities and Exchange Commission, paid more than \$1.4 billion in bribes to government officials across Asia, Africa, Europe, the Middle East, and the Americas; and Odebrecht (Brazil), which paid bribes in at least 12 countries (10 in Latin America and two in Africa), according to Transparency International.

Figure 2.18. Purpose of Foreign Bribes (*Percent*)



Source: OECD 2014.

facilitated by the ability to hide illicit gains abroad—in opaque offshore financial centers. These are estimated to hold about \$7 trillion in hidden wealth deposited by individuals—equivalent to 10 percent of world GDP (Damgaard, Elkjaer, and Johannesen 2018). Although not all of these assets are related to corrupt activities, these flows greatly facilitate corruption.

International cooperation is an increasingly important element in anticorruption efforts and in building stronger institutions. More countries, especially OECD member countries, have been following the example of the US Foreign Corrupt Practices Act, which makes it an offense for US firms to pay bribes to get business abroad. These efforts include coordinated action through international initiatives, such as the OECD Anti-Bribery Convention. However, enforcement by individual countries has been uneven, and the flow of information between countries is slow and unreliable, making it harder to investigate and prosecute corrupt acts (OECD 2018b). ⁴³ Improving the sharing of information on international trade could also help fight corruption in customs.

International institutions and aid donors can also play a role. Donors can promote aid that supports good governance. They can also lead by example by improv-

⁴³The United Nations also adopted a convention against corruption (United Nations Convention against Corruption) in 2003. The work of the United Nations has mainly been to encourage countries to share information. See Rose-Ackerman and Palifka (2016) for a history of international efforts.

ing transparency in how their aid is used—at present, practices vary greatly across donors. ⁴⁴ International institutions, including the IMF (Box 2.3), have promoted international standards and disseminated country experiences in areas such as transparency and good governance. The Group of 20 and the OECD have developed a new global standard on the automatic exchange of information to fight tax evasion. ⁴⁵ This includes stricter requirements to disclose beneficial owners.

Conclusion

Curbing corruption is a challenging endeavor, but one that can bring substantial benefits. On the fiscal front, less corruption means lower revenue leakage and less waste in expenditures, and higher quality of public education and infrastructure. It also increases the chances of success in meeting the Sustainable Development Goals and restoring trust in government. Whereas major political changes occasionally present opportunities for ambitious reforms and rapid improvements, in most circumstances, progress in fighting corruption is likely to be gradual and requires political will, perseverance, and a commitment to continuously upgrade institutions over many years.

Improving fiscal institutions and practices is essential to enhancing integrity and accountability throughout the public sector. The chances of success are greater when countries improve several mutually supporting institutions to tackle corruption. A fiscal governance framework requires a professional and ethical civil service as a key pillar. It demands assiduously upgrading fiscal processes, such as procurement and revenue administration, as well as internal controls. It also requires embracing high levels of transparency and independent external scrutiny, including by civil society and the media.

The benefits of better fiscal institutions will be enhanced if accompanied by other institutions, such as appropriate legal frameworks, as well as timely and

⁴⁴Publish What You Fund publishes the Aid Transparency Index showing how donors perform relative to the International Aid Transparency Initiative standards. The 2018 index shows large differences in the degree of transparency across donors.

⁴⁵Participating jurisdictions that implement this standard send and receive previously agreed-upon information each year. This initiative runs in parallel with another initiative to address Base Erosion and Profit Shifting, whereby companies use tax planning strategies that exploit gaps and mismatches in tax rules to artificially shift profits to low- or no-tax locations.

evenhanded enforcement by the courts. Likewise, transparency has a more beneficial impact in the presence of press freedom and an active civil society. Moreover, adopting new technologies, such as digitalization, is key to fighting constantly evolving corruption challenges. For example, e-procurement can be an effective tool to promote greater transparency, increase competition, and reduce the scope for discretionary decisions.

Finally, to fight corruption effectively in a global economy, international cooperation is necessary in

several areas, including the design and enforcement of legislation against bribery of foreign officials, transparency in international transactions in the natural resource sector, anti-money-laundering activities and greater international information sharing among the relevant authorities, and a reduction in the opacity of ultimate (or beneficial) ownership of assets abroad. Finally, international institutions can help by promoting dissemination of good practices and peer learning.

Box 2.1. Governance in the Extractive Industries

The IMF Fiscal Transparency Code sets out principles and practices for resource-rich countries at each stage of natural resource management. Areas to reduce opportunities for corruption include:

Allocation and Disclosure of Rights

- Open and clear procedures for allocating resource rights are fundamental for the extractive industries to develop in an efficient and transparent manner. Procedures should be based on clear objectives, such as finding the most suitable investor to develop the resource (Mexico's recent licensing rounds).
- Disclosure of resource rights in a license or contract registry is internationally recognized as best practice (for example, Colombia, Liberia, United Kingdom). The availability of this information makes the government and company accountable to parliament and the public at large. Reducing opportunities for corruption also requires defining fiscal regimes in model contracts and legislation, establishing the variable parameters along with clear qualification and bid evaluation criteria ahead of time, and limiting officials' discretion in negotiating new contracts, changes to existing contracts, or licensing procedures—for example, by using competitive and open allocation processes.
- Reporting on beneficial owners of resource rights is emerging as an international norm, with all 51-member countries of the Extractive Industries Transparency Initiative (EITI) having established plans for such disclosure by 2020. As a next step, publication of the associated corporate structure (that is, the chain of intermediaries connecting the beneficial owner and license holder) would ensure complete transparency regarding the ultimate owner of a resource right.

Resource Revenue Administration and Collection

 Clear resource revenue collection, audit, and compliance procedures are needed to ensure that the correct amounts of revenue are collected. Revenues should be reported at the project level. Several EITI

- members (Indonesia, Kazakhstan) have made progress in project-level reporting.
- Governments can enhance transparency by requiring that companies report on all payments to government. The disclosure requirement should extend to any corporate entity engaging in natural resource exploration, extraction, or commodity trading.

National Oil and Mining Companies

- Awareness of the need to strengthen transparency and governance among state-owned enterprises (SOEs), especially in the extractive sector, is growing. The 2016 EITI Standard outlines the requirements and recommendations applicable to SOEs from participating countries, including disclosure requirements on beneficial ownership, commodity sales, revenue transfers, and quasi-fiscal expenditures.
- SOEs are increasingly defining clear governance guidelines and codes and publishing information on governance policies and practices (Chile's Codelco and Brazil's Petrobras provide such information on their websites). Transparency can be further strengthened with detailed disclosure of quasi-fiscal spending and procurement contract awards, both high-risk areas of mismanagement.

Sovereign Wealth Funds

- Another challenge is to ensure that the large financial assets included in oil or other sovereign wealth funds are well managed in a transparent way to reduce the potential for misuse. While some sovereign wealth funds are highly transparent in governance and operations (Norway), others—including several major oil exporters in the Gulf—provide little information.
- Sovereign wealth funds should abide by clearly established rules and governance arrangements, and report regularly on operations and investment performance, with externally audited annual financial statements. The Santiago Principles present a sound basis for the transparency practices of sovereign wealth funds (IWG 2008). Preferably they should not be allowed to undertake extrabudgetary spending.

Box 2.2. Supportive Legal Systems

Robust legal systems for detecting, investigating, and prosecuting acts of corruption are critical to the effectiveness of fiscal governance frameworks. They motivate compliance and discourage criminal behavior, such as violation of the relevant laws, rules, and regulations.

Anticorruption

An effective anticorruption regime includes a sound statutory framework implemented by effective institutions, focusing on detection and investigation, prosecution, and adjudication.

- These functions often are carried out by the regular law enforcement agencies, sometimes with officers or sections specializing in corruption.
- Some countries have anticorruption agencies. Most
 of these agencies are either preventive, repressive,
 or a hybrid pursuing both objectives (Hong Kong
 Special Administrative Region, Latvia). Preventive agencies typically provide policy advice and
 public information. Repressive covers investigation,
 prosecution, or both. Some have only investigative
 powers, while others also have prosecution powers.
- Corruption cases are most often filed before the regular courts, sometimes staffed by specialized judges. However, when faced with judicial corruption, countries may opt for distinct courts (or court units) with distinct procedures, staffing, and other facilities, as well as special safeguards, to process corruption and financial crimes cases impartially and with efficiency.

Anti-Money-Laundering Regimes

The proceeds of corruption must almost always be laundered, that is, made to appear legitimate in order to be spent, transferred, or invested. As such, antimoney-laundering (AML) tools strengthen the deterrent value and effectiveness of "traditional" repressive frameworks by:

 Helping to detect corrupt practices via the laundering of the related proceeds: The Financial Action Task

- Force, the global AML standards setter, requires countries to mandate and ensure that financial institutions monitor their customers' transactions, with special attention to those conducted by "Politically Exposed Persons," and report those that are suspicious.
- Supporting the investigation of corrupt practices and related money laundering: Countries should conduct financial investigations ("follow the money") in the case of proceeds-generating crimes and should ensure the transparency of beneficial ownership, typically by requiring that legal entities (for example, opaque investment vehicles) and arrangements (for example, trusts) disclose the names of the natural persons who ultimately own or control them—whether to official registries or to the financial institutions holding their accounts. This can help in the investigation of cases in which public officials steer government contracts to companies that they or their associates own.²
- Establishing adequate sanctions for convicted officials and their accomplices: First, officials convicted of both corruption and money laundering face more severe penalties. Second, because money laundering is a stand-alone offense, the accomplices of corrupt officials may be convicted of money laundering even if they were not involved in the act of corruption. And third, the sanctions prescribed for money laundering should be "dissuasive," such that corrupt officials face serious consequences for laundering the proceeds of their crimes.

¹Such as senior politicians, senior government, judicial, or military officials, and executives of state-owned enterprises.

²Nigeria illustrates the importance of transparency with respect to beneficial ownership. In 1998, a former oil minister granted himself the rights to exploit a large oil field by signing them over, right before leaving office, to an ostensibly independent firm that he secretly controlled.

Box 2.3. IMF Work on Fiscal Governance

Over the years, the International Monetary Fund has built up comprehensive diagnostics on the quality of fiscal institutions, supplying a wealth of information on many aspects of fiscal governance, including public financial management and revenue administration. These tools have been part of the IMF's capacity-building work across its membership. They help strengthen core institutional processes, promote integrity in public administration, and promote fiscal transparency. This work has been undertaken in cooperation with other international institutions (for example, the World Bank) and donors.

Public Investment Management Assessments (PIMAs) help countries evaluate the strength of their public investment management practices. They evaluate 15 institutions that shape public investment decision making at three key investment stages: planning, allocation, and implementation. As of February 2019, 51 countries had completed a PIMA, providing a basis to set up a reform plan tailored to each country's needs.

Fiscal Transparency Evaluations (FTEs) assess fiscal transparency practices against the principles outlined in the Fiscal Transparency Code with a focus on four pillars: (1) fiscal reporting; (2) fiscal forecasting and budgeting; (3) fiscal risk analysis and management; and (4) resource revenue management for specific needs of resource-rich countries. As of February 2019, 25 FTEs were publicly available.²

¹https://www.imf.org/external/np/fad/publicinvestment/#3. ²https://www.imf.org/external/np/fad/trans/index.htm. Other tools in public financial management include the long-established *Public Expenditure* and Financial Accountability assessment, which has covered many low-income countries, and the *Public-Private Partnership Fiscal Risk Assessment Model*, which gauges potential fiscal costs and risks arising from public-private partnerships. Another diagnostic tool related to resource revenue management is the *Fiscal Analysis of Resource Industries* framework, which assists countries in designing fiscal regimes for natural resources.

A similar suite of tools is available to assess the performance of tax and customs administrations. The Tax Administration Diagnostic Tool (TADAT) is designed to provide an objective assessment of the health of key components of a country's system of tax administration.3 TADAT assessments identify relative strengths and weaknesses, which helps in setting and prioritizing reform agendas and facilitating external support for reforms. Other IMF diagnostic tools for revenue administration include the Revenue Administration Fiscal Information Tool, which compiles a set of performance indicators, and the Revenue Administration-Gap Analysis Program, which helps countries estimate the size of tax gaps for major taxes; it provides a better understanding of factors affecting the size of, and changes in, those gaps—in particular, those stemming from taxpayer noncompliance.

³http://www.tadat.org/.

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