The Macro-Fiscal Benefits of Eliminating Corruption in Government

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ABSTRACT

Corruption remains one of the main obstacles to sustainable and inclusive economic development. Its consequences for the functioning of the economy and people’s lives can be large. When prevalent, corruption undermines the core activities of the state through several channels. It distorts fiscal policy and operations, including the collection of taxes and how those taxes are used; hampers central bank operations and financial supervision; weakens the quality of market regulations; and undermines the rule of law. Corruption is particularly harmful for fiscal policy as it undermines the ability of governments to deliver effective policies and services that promote equitable and long-term economic growth. Governments need to invest in comprehensive and persistent efforts to strengthen institutions and adopt aggressive anticorruption strategies.

INTRODUCTION

Corruption is defined as the abuse of public office for private gain (IMF 1997; 2018). Such corrupt practices change government choices to the detriment of the public interest. They can involve administrative corruption (to circumvent existing laws) but also cases in which elected officials or civil servants accept bribes in exchange for altering legislation or regulation to favor private interests—known as state capture (Hellman, Jones, and Kaufmann 2000). The payment of bribes to get government contracts or avoid paying taxes is a common example among a large share of firms worldwide, including in sub-Saharan Africa (Figure 1.1). Other forms of corruption include embezzlement and public service fraud, nepotism or cronyism to benefit family or a particular group, or influence-peddling and conflicts of interest. In an extreme case, within a kleptocracy, the state is managed to maximize the personal wealth of its leaders.¹

¹ See Rose-Ackerman and Palifka (2016) for a discussion of the different forms of corruption.
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There is wide recognition that containing corruption is critical for economic development. This is why tackling corruption is among the United Nations’ Sustainable Development Goals. Corruption distorts the activities of the state and ultimately undermines economic growth and people’s lives. It weakens key functions of the public sector, including the collection of taxes and allocation of resources based on a country’s priorities. For example, government subsidies may be stolen through fraud, and public infrastructure may be more expensive or of poorer quality due to bribes or cronyism. In addition, firms may engage in unproductive activities to capture economic rents (for example, by paying bribes to get favorable regulatory treatment). These include government subsidies being stolen through fraud, and public infrastructure may be more expensive or of poorer quality due to bribes or cronyism. In addition, firms may engage in unproductive activities to capture economic rents (for example, by paying bribes to get favorable regulatory treatment).

Measuring the impact of corruption on economic growth is difficult due to the hidden nature of corruption, but there have been increasing efforts to shed light on the prevalence of corrupt activities and their pernicious impact. These include

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2 For example, excessive government restrictions (such as price controls) can create economic rents. People or firms may then engage in corrupt acts to capture such rents (Krueger 1974).

3 Corruption is facilitated by the ability to hide illicit gains in opaque offshore financial centers. These are estimated to hold about $7 trillion in hidden wealth deposited by individuals (Damgaard, Elkjaer, and Johannesen 2018), although not all of these assets are linked to corrupt activities.

4 See, for example, Fisman and Golden (2017) and IMF (2019).
cross-country indices on the perceptions of corruption, such as the Control of Corruption Index (Kaufmann, Kraay, and Mastruzzi 2007) and Transparency International’s Corruption Perceptions Index (CPI) among others. These measures reveal that perceptions of the control of corruption correlate positively with GDP per capita (Figure 1.2). This correlation between economic development and corruption 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. This question has been a topic of significant debate especially after the publication of the seminal work by Mauro (1995), documenting the significant impact that corruption has on economic growth. A recent review of the literature (IMF 2018) includes evidence that improvements in controlling corruption typically correlate with higher growth. An improvement in the corruption indicator from the 25th percentile to the 50th percentile of the distribution is associated with an increase in GDP per capita growth between

Figure 1.2. Perceptions of Corruption at Different Income Levels (2019; GDP per capita expressed in US dollars)

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

Note: The Control of Corruption Index provides a relative measure of perceived corruption and ranges from −2.5 (high corruption) to 2.5 (low corruption). For logarithm of GDP per capita in purchasing power parity US dollars, r = coefficient of correlation.

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5 These surveys rely on perceptions by experts or surveys of the experiences of firms or people. In this chapter, the indicator used is the Control of Corruption Index from the Worldwide Governance Indicators (WGI), which tracks data from 1996 to the present and aggregates information from a variety of sources (Kaufmann, Kraay, and Mastruzzi 2007, 2010). Caution is needed in interpreting scores for any individual country, as the quality of underlying data can vary across countries and data sources.
In addition, higher corruption also tends to be associated with lower investment (including foreign direct investment) and more inequality. A growing number of microlevel studies add to the evidence on the relationship between corruption and the macroeconomy, including on the channels of transmission (IMF 2019).

Measuring the impact of corruption on economic growth is not only difficult but also likely to provide limited lessons on how to fight corruption. A more promising and practical exercise is identifying how government policies are affected by corruption. The remainder of this chapter focuses on this issue, starting with a discussion of how corruption can undermine inclusive growth and then providing evidence on the impact of corruption on government actions and policies, with an emphasis on the fiscal costs.

**CORRUPTION CHANNELS**

Corruption can affect inclusive growth through different channels. Depending on how pervasive it is, it can impact the normal functioning of the economy by underminding macro-financial stability, public and private investment, human capital accumulation, and total factor productivity. How corruption affects the state functions and through which channels depends to a large degree on the quality of institutions. An emblematic example is the degree of transparency in government actions. Lack of transparency reduces scrutiny of and accountability within government activities and state functions, creating greater opportunities for corruption to prosper (Figure 1.3). However, transparency is not enough. Countries need to cultivate robust governance frameworks to reduce corruption vulnerabilities. Otherwise, corrupt firms and individuals will exploit the channels with weaker governance.

The key channels can be broadly grouped as follows (see also IMF 2016; 2018):

**Fiscal**: Weaknesses in fiscal governance provide a conducive environment for corruption, which could increase tax evasion, distort budgetary choices in detriment of social and economic priorities, result in public spending waste; and translate into loss-making and inefficient state-owned enterprises and public banks. Ultimately, corruption can result in larger deficits and increase the likelihood of debt defaults (Fournier and Bétin 2018; IMF and World Bank 2012; Kraay and Nehru 2006). Key areas of mutually reinforcing good fiscal governance include (1) sound legal frameworks (for example, budget and tax laws), including a professional and merit-based civil service and use of digitalization to support integrity and transparency; (2) sound institutions and processes for revenue

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6 This is based on a meta-analysis of 149 estimates of the relation between growth and corruption that suggests that improvements in corruption are typically correlated with higher growth.

7 Tax evasion is more likely if corrupt officials facilitate it (Alm, Martinez-Vazquez, and McClellan 2016).
collection and procurement; (3) effective internal and external controls (including audits); (4) fiscal transparency; and (5) a robust enforcement system enabling effective detection and sanctioning of acts of corruption.

Central bank governance and operations: Weaknesses in central bank governance (for example, in terms of the accountability and transparency framework or the internal control environment) can impair the bank's ability to manage its operations, including monetary policy.\(^8\) In addition, corruption in the fiscal area may lead to central bank financing and seigniorage to offset revenue lost to corruption (Blackburn and others 2008). Such financing may eventually undermine the independence and credibility of the central bank and lead to higher inflation.

Financial sector oversight: Weaknesses in the quality of the financial sector regulation and supervision framework may facilitate high-level bribery and influence-peddling, hinder financial development, and lead to financial instability (Kane and Rice 2000).\(^9\) Such weaknesses can increase nonperforming assets in the portfolio of the banking sector and diminish banks' willingness to provide credit.

\(^8\) For example, Liberia’s central bank is undergoing a process to strengthen transparency and accountability following scandals regarding an alleged disappearance of funds and cases of unauthorized printing of new banknotes. See Liberia elicits help of USAID to restore integrity of Central Bank, RFI, 07/02/2020; https://www.rfi.fr/en/international/20200205-liberia-elicits-help-usaid -hiring-auditing-firm-restore-integrity-central-ban.

\(^9\) Countries with higher levels of corruption tend to have lower bank deposits from the public and to offer less credit to the private sector, undermining financial sector development and inclusion (Detragiache, Gupta, and Tressel 2005).
Capture, by corrupt agents, of regulatory agencies can undermine the ability to identify and manage risk. Mismanagement, lending to related entities, and corruption of prudential authorities can also lead to large fiscal costs associated with subsidizing or bailing out of banks.

**Market regulation:** The strength of a country’s regulatory and administrative frameworks is crucial to achieving a balance between encouraging private sector development and promoting the public good. However, complex, inaccessible, or opaque regulatory frameworks can create opportunities for public officials to exploit discretionary authority in return for bribes or other forms of corruption, resulting in uncertainty and discriminatory treatment. Examples include granting licenses and business permits (for example, licences for oil and mining exploration) and authorizing exemptions from existing regulations.

**Rule of law:** The rule of law enables the protection of property and contractual rights, which are important for well-functioning economies. One of the most important determinants of the enforcement of economic rights is the quality of the judiciary, including its independence from private influence and public interference. Weaknesses in this area can undermine the availability of credit and investment more generally (for example, if property rights cannot be enforced, banks will be less willing to lend). The quality of the anti-money-laundering framework is also relevant in this context. First, money laundering and related crimes can undermine the stability of a country’s financial system or its broader economy. Second, these crimes can facilitate corruption by allowing perpetrators to conceal the proceeds of corrupt acts.

**FISCAL COSTS OF CORRUPTION**

This section presents evidence on the impact of corruption on government actions, focusing on the hotspots of corruption, defined as the fiscal areas in which corrupt activities are especially prevalent and damaging. The costs include large leakages, as revenue is lost and resources are misused or stolen, but also poorer quality of policies and efficiency of public services. Corruption also distorts the actions of the private sector and can lead to inefficiencies, and lower productivity and growth, which ultimately reduces tax revenues and increases public spending pressures. This occurs because firms direct resources to rent-seeking activities instead of productive ones (Krueger 1974) or because corruption imposes a cost on firms. For instance, Sequeira and Djankov (2010) estimate costs incurred by firms due to corruption by comparing two ports (Mozambique and South Africa) that have similar operating costs but different levels of perceived corruption. They find that companies prefer to double their transportation costs to avoid the port where a public bureaucrat coerces a private agent into paying an additional fee, above and beyond the official price, just to gain access to the public service or good. The cost for a firm to reroute is eight times higher than the cost of the actual bribe requested, suggesting an extreme aversion to the uncertainty and ambiguity of bribe payments.
Corruption Leads to Lower Revenue Collection . . .

Cross-country evidence confirms that government revenues are significantly lower in countries perceived to be more corrupt. The pattern holds among the different-income country groups (Figure 1.4). Among low-income countries (excluding oil exporters), a country in the top 25 percent in terms of control of corruption collects 4 percent of GDP more in revenues, on average, than a country in the lowest 25 percent. The gap is 2¾ percent of GDP among emerging market economies. This relationship between corruption perception and revenue collection is confirmed by other studies that also control for the level of economic development and other factors. For example, IMF (2019) finds that an improvement in the Control of Corruption Index by one-third of a standard deviation (equivalent to the average improvement for those countries that

Figure 1.4. Government Revenues and Corruption

Sources: IMF, World Economic Outlook database; and Worldwide Governance Indicators.
Note: The figure shows the five-year average government revenues as a share of GDP (excluding grants).

10 When including oil exporters, the gap is even higher, around 7 percent of GDP, likely reflecting that the oil sector is especially vulnerable to corruption given the high profits.
reduced corruption between 1996 and now) is associated with an increase of 1.2 percentage points in government revenues as a share of GDP.

Corruption can harm revenue collection through both tax legislation and administration. The introduction of tax exemptions or tax loopholes, which can be exchanged for bribes, reduces revenue potential. Furthermore, a complex and opaque tax system allows more discretion in its administration (Asher 2001) and facilitates hidden corrupt dealings. Customs administration is particularly vulnerable to corruption because customs officials often enjoy discretionary powers with limited supervision. The distortion of tax laws and the corruption of tax officials reduce trust in the state and weaken tax compliance. For example, recent data from 36 African countries suggest that if people believe the government is corrupt, they are more likely to disagree that governments have the right to make people pay taxes, undermining a culture of voluntary compliance (Boly, Konte, and Shimeles 2020).

Rwanda stands out as a country that significantly reduced corruption and subsequently enjoyed a surge in tax revenues. Over the past two decades, its government enacted several legal and institutional reforms to fight corruption. Strengthening fiscal institutions has been an integral part of these reforms, which included major civil service modernization through the establishment of a competitive and merit-based recruitment system. Rwanda also undertook tax administration reforms, with significant improvements in collection efforts, auditing procedures, and scrutiny of large taxpayers. As corruption declined, tax revenues rose from around 9–10 percent of GDP in 1996–2000 to 15–16 percent of GDP in 2016–18. Another example is Georgia, considered in the 1990s as one of the countries with the largest corruption challenges worldwide. In particular, corruption in tax administration decimated revenue collection. In 2003 a new government launched an anticorruption campaign, strengthened fiscal institutions, and made significant improvements on governance. As a result, compliance was fostered by renewed trust in government as public services improved, and tax revenues more than doubled to 25 percent of GDP in 2008.

Extractive industries stand out as a hot spot of corruption, reflecting 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 accountability. For example, Andersen and others (2017) find that petroleum windfalls translate into significant increases in wealth hidden abroad by residents of some oil-rich countries. The risks of corruption are also particularly high around the design and award of exploration rights contracts. Indeed, the terms of these contracts are

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11 Examples 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).

12 Alm, 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. Additionally, larger bribes result in higher levels of evasion.
often secret, preventing external scrutiny of the actions of public officials and firms (including state-owned oil companies). The industry also faces heightened risks in revenue collection, partially due to the complexity in assessing and monitoring taxes due, which facilitates the negotiation of lower tax payments in exchange for bribes.

**... And Distorts Spending Choices and Reduces Effectiveness of Policies**

Corruption can affect spending choices in the government budget, with implications for the economy and the quality of services to the population. One pernicious example is that corruption is associated with fewer resources allocated to education or health, especially among low-income countries (Figure 1.5). The countries where corruption is least prevalent tend to spend almost 10 percentage points more on education and health than those with the highest levels of corruption. One reason for this relationship may be that these are areas where it is more difficult for policymakers to extract large bribes (Mauro 1998)—these areas may have more petty corruption at the implementation stage (for example, teachers not showing up to work or charging bribes for grades). Instead, resources may be diverted to projects that offer opportunities for larger kickbacks or where there is

**Figure 1.5. Control of Corruption and Public Spending on Education and Health (Percent)**

![Graph showing the relationship between control of corruption and public spending on education and health.](image)

Sources: IMF, Government Finance Statistics database; and Worldwide Governance Indicators.

Note: Graph based on 2016 data on share of spending on health and education 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 country group.
less scrutiny, such as large investment projects or defense-related equipment purchases.

Procurement of goods and services is an area where corruption risks are exceptionally high. This is not surprising as procurement accounts for a large share of government budgets in most countries, with some estimating it at 10–15 percent of GDP among sub-Saharan African countries (UN 2017; World Bank’s global public procurement database). Lack of transparency and competitiveness (for example, having only one bidder) make countries especially vulnerable to corruption. More generally, corruption risks in procurement are usually associated with contracts with large tenders, a lack of transparency and collusion among bidders, complaints from nonwinning bidders, shortened bidding times, multiple contracts below procurement thresholds, unusual bid patterns, inflated agent fees, suspicious bidders, failure to select the lowest bidder, repeat awards being given to the same contractor, changes in contract terms and value, and poor quality of works and services (see Ferwerda, Deleanu, and Unger 2017 and World Bank’s common red flags). The direct losses due to corruption are reflected in cost overruns, implementation delays, and poor quality. For example, a study of Hungary’s procurement process (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 eight cents, and results in a drop in the productivity of selected contractors.

Among types of procurement, public investment is particularly vulnerable to corruption. Investment projects often have unique characteristics, and they tend to be complex, reducing competition and making it easier to conceal corruption (for example, it may be difficult to compare costs to help identify bribes). In addition, projects may require numerous licenses and permits, providing an opportunity for bribery. Some estimates suggest that for construction projects, the losses due to corruption range between 10 and 30 percent of the overall value (Matthews 2016).

Other areas of corruption at the budget execution stage could involve wage and pension bills (for example, for so-called ghost workers) or extortion of bribes in providing public services or subsidies. Lack of effective controls can also lead to fraud and embezzlement. For example, the “cashgate scandal” in Malawi involved the misuse of funds totaling 1.3 percent of GDP in 2013. In contrast, in India, the adoption of an electronic platform for managing a social assistance program reduced opportunities for discretion and fraud and resulted in a 17 percent decline in spending with no corresponding decline in benefits (Banerjee and others 2016). Greater opportunities for corruption exist in off-budget spending where transparency, controls, and external scrutiny are often laxer (see Chapter 12).

Another harmful consequence of corruption is the poorer quality and effectiveness of government policies. In particular, core public services, such as the provision of good-quality public infrastructure and education, can be severely hampered (Gupta, Davoodi, and Tiongson 2000). There have been many cases of infrastructure projects plagued by corruption allegations in Africa (UN 2017).
Examples include the construction of dams in Kenya (1986) and Uganda (2010), and the Lesotho Highlands Water Project (1980s). Ultimately, this can lead to lower economic growth and higher poverty and inequality.

Cross-country comparisons suggest that countries with higher levels of perceived corruption are significantly less efficient, or have higher waste, in undertaking public investment in infrastructure (Figure 1.6.1). The difference between a given country and the most efficient one within the same income-level group—the efficiency gap—provides a measure of waste, which reflects corruption and other factors. For instance, the data indicate 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 (IMF 2019).

Corruption is also associated with lower human capital. Countries in which corruption is higher, tend to have a lower quality of education, measured by test scores (Figure 1.6.2). This can reflect several factors. In some countries, bribes or connections, rather than merit, influence access to teaching positions in public schools. In addition, teacher (and health worker) absenteeism is a widespread form of petty corruption in several developing economies (Chaudhury and others 2006). There is also evidence that corruption leakages in education grants have a negative impact on test scores and are associated with higher dropout rates (Ferraz, Finan, and Moreira 2012). Uganda provides an example of the benefits of instituting reforms in this area. In the late 1990s the Ugandan government

13 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. The 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).
initiated a newspaper campaign to boost the ability of schools and parents to monitor local officials’ handling of a large school-grant program. As a result, the diversion of funds decreased from 80 percent in 1995 to less than 20 percent in 2001 (Reinikka and Svensson 2005).

**Weak Governance Severely Undermines State-Owned Enterprises’ Performance**

Public sector activities extend beyond the central budget via the operations of state-owned enterprises (SOEs). In many countries, SOEs play a role in building infrastructure and providing public goods and services. For example, they account for about one-third of infrastructure investment in Sub-Saharan Africa (World Bank 2017). Many SOEs are also involved in the provision of core services, such as water and electricity, and are key players in extractive industries (oil and mining). As such, how well these firms operate can have significant budgetary and economic consequences.

Corruption has been one of the main challenges faced by SOEs in many emerging market and low-income economies. The risks of corruption tend to be higher because these firms operate under weaker controls and transparency. Civil servants or elected officials may unduly influence SOEs’ operations for personal benefit. The high degree of corruption may also reflect the sectors where SOEs operate. For example, national oil companies have a particularly high risk of corruption because they can generate large profits, and rents for corruption (see Section 3 of this book). 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.14 Noncommercial activities of SOEs can also be an area of revenue leakage in the absence of proper vetting. Recent corruption examples include Angola’s Sonangol and several of the largest South African SOEs (for example, Eskom and Transnet).15

International experience shows that weak governance is one of the main reasons behind poor SOE performance. SOEs operating in countries with high levels of governance are almost three times more efficient (in terms of higher labor productivity) than SOEs operating in countries with poor governance

14 Available evidence suggests that 80 percent of foreign bribes go to SOE officials, many of whom operate in the oil sector (OECD 2014).

15 For example, in Angola, President Lourenço indicated that at least $24 billion was lost to corruption (see “Angola Sharpens Fight to Recover Stolen Cash as Debt Pressure Mounts,” Financial Times, November 2020; https://www.ft.com/content/5ebceb76-5e3f-4e08-98b8-3345b86a3482). Sonangol has also announced in recent years actions to improve governance (see Ver Angola, November 2020, https://www.verangola.net/va/en/112020/Energy/22809/Sonangol-approves-review-of-anti-corruption-policies-to-protect-and-enhance-the-company). The problems are also common outside Africa and among advanced economies. In an OECD survey, 42 percent of SOE respondents reported that corrupt acts or other irregular practices had occurred in their company during the past three years (OECD 2018).
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Figure 1.7. Corruption and Firm Performance

(Figure 1.7). The difference in terms of profitability (return on equity) between private firms and SOEs is close to 12 percentage points in countries with high corruption. However, in countries with good governance, the performance between private firms and SOEs is comparable, with a very small productivity gap on average.

Lack of transparency regarding SOE operations can significantly impede external scrutiny. For example, financial information on SOEs remains very uneven across countries. This is especially the case for national oil companies in the Middle East, North Africa, and sub-Saharan Africa (Figure 1.8). In sub-Saharan Africa, fewer than one-fourth of the companies provide comprehensive and detailed information on their operations and balance sheets, despite controlling large assets of the country. Publishing regular reports with detailed information and analysis of the performance of the SOE sector at the aggregate and company levels is a needed step toward greater transparency and accountability (see Section 4 of this book). Some sub-Saharan African countries provide information on SOEs (for example, Angola, Ghana, and South Africa), but the information is not always timely or sufficient for a comprehensive analysis. Another challenge has been implementing and enforcing good corporate governance standards even when there is a legal framework for SOEs. Countries also

Sources: IMF (2020); and Worldwide Governance Indicators.
Note: The figure shows the difference between profitability (return on equity) of private firms and SOEs, and productivity gap, measured by the ratio between productivity of private firms relative to SOEs.
often lack the institutional capacity to effectively monitor SOEs, especially the larger ones, which are typically involved in complex activities. Baum and others (2019) show, when comparing different SOE reforms, that improvements in governance can result in some of the largest improvements in the performance of SOEs (for example, by raising productivity and lowering costs).

**CONCLUSION**

Corruption can impose large negative budgetary, economic, and social costs. Importantly, corruption takes advantage of governance vulnerabilities in the different areas where the state operates. For example, weak transparency creates a fertile ground for corruption. Corruption undermines the ability of governments to collect taxes, leads to unnecessary and expensive public projects that often are fueled by bribes, and leads to poorly performing SOEs. When corruption is more pervasive, governments also spend less, in areas like education, health, and spend with worse quality on public infrastructure, areas that are critical to address development needs. While difficult, fighting corruption and strengthening governance and accountability are crucial to achieve sustainable and inclusive development. Despite some progress, governments in sub-Saharan Africa need to invest more in good institutions. This needs to be a comprehensive and continued effort, as corruption will evolve to exploit institutional vulnerabilities.
REFERENCES


