WORLD BANK GROUP

No. 27, January 2020

The Fight against Corruption: Taming Tigers and Swatting Flies

Lay Lian Chuah, Norman V. Loayza, and Bernard Myers

Corruption robs the public of precious resources, distorts the incentives to engage in productive activities, destroys confidence in public institutions, and spurs political instability. It disproportionately harms the poor and vulnerable. In turn, corruption is the result of perverse incentives, concentration of power, and lack of accountability. Countries are not condemned to suffer from corruption. They can break the vicious cycle with a comprehensive approach that tackles country-specific governance gaps. This approach should include streamlining rules and regulations; building a meritocratic and well-paid civil service; promoting transparency in public employment, procurement, and services; enabling citizen voice and government accountability; and enforcing anti-corruption laws and penalties.

Introduction

Transparency International defines corruption as "the abuse of entrusted power for private gain." When 25 years ago former World Bank President James Wolfensohn decried the "cancer of corruption" that pervaded many countries, his denunciation drew worldwide attention for its candor. Now, a consensus exists that corruption undermines development and progress (Olken and Pande 2012; World Bank 2017). Corruption diverts precious resources away from the provision of public goods and services, distorts the incentives for people and firms to engage in productive activities, destroys confidence in government and public institutions, and engenders political instability and civil strife. Corruption, however, is not the ultimate cause of all social and economic ills. It is the cause and the result of heavy regulations, poor governance, and weak institutions, coalescing into one of the worst vicious cycles confronting developing countries.

Corruption is pervasive around the world but is particularly prevalent in poorer countries and less developed regions (figure 1) (Kaufmann, Kraay, and Mastruzzi 2011; Kraay and Murrell 2016). There is, however, considerable dispersion across countries with similar levels of economic development (measured by GDP per capita) and within the same geographic region. This dispersion gives a hint of hope, suggesting that countries are not condemned to being corrupt by the sheer fact that they are poor. Reforms to combat corruption can be effective, even in less developed countries.

In 2013, Chinese Premier Xi Jinping called for tackling corruption at all levels, "fighting…tigers and flies at the same time." There are, indeed, different

forms of corruption, each with potentially different causes and consequences. For analytical purposes, corruption can be categorized as grand and petty corruption. According to Transparency International, grand corruption is defined as "acts committed at a high level of government that distort policies or the central functioning of the state." Grand corruption occurs, for example, when politicians grant a concession for public works to a corporation in return for funding their political campaign. "State capture" is an extreme form of grand corruption, where the whole state apparatus is manipulated, often by its leaders, to extract public resources for private gain. "Petty corruption" is defined as "everyday abuse of entrusted power by low- and mid-level public officials in their interactions with ordinary citizens" (Transparency International 2009). Petty corruption occurs, for example, when public officials demand and obtain bribes from people looking for public services in education, health, police protection, and justice.

Understanding what motivates corruption, how it pervades public institutions, and what its consequences are for development can guide policies to fight corruption. That is the aim of this Research & Policy Brief.

The consequences of corruption: Why should we be concerned about the "grabbing hand"?

Corruption has a negative impact on economic and social development. It decreases economic growth, engenders inequality and poverty, and impairs the provision of public goods and services. The notion that corruption "greases the wheels" of the economy is misguided: although corruption may enable a

Figure 1. While corruption is pervasive around the world, it is particularly prevalent in poorer countries and less developed regions
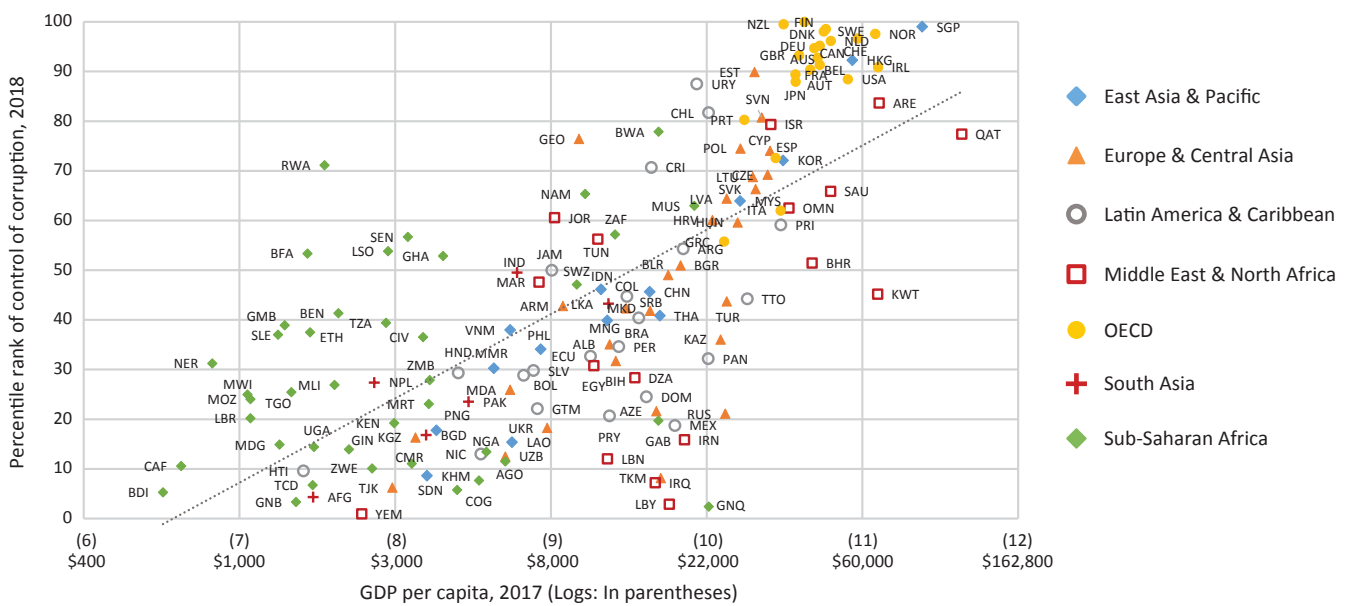
Source: World Bank (2019a) World Development Indicators and World Bank (2019b) Worldwide Governance Indicators.
Note: Control of corruption reflects perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests. The estimates are in percentile rank terms. GDP is converted to constant 2011 international dollars using purchasing power parity rates. Data labels use the International Organization for Standardization (ISO) country codes. OECD includes countries that have been high-income members of the Organisation for Economic Co-operation and Development (OECD) for more than 40 years. Developing countries are grouped in geographic region as presented in the legend.

particular public service or bureaucratic requirement, it distorts the economy as a whole, creates a burden on firms that are asked to pay bribes, and may be the reason behind deficient services and red tape in the first place (Djankov et al. 2002; Freund, Hallward-Driemeier, and Rijkers 2016).

Corruption has a negative and sizable impact on economic growth (Andvig and Attila 2009; Haque and Kneller 2008; Keefer and Knack 1997; Kaufmann and Kraay 2002; Mauro 1995). First, corruption creates an environment for firms and entrepreneurs that distorts the incentives for competition, innovation, and allocation of resources: profits are made by evading taxes and tariffs, obtaining preferential access to finance, restricting access to trading licenses, and blocking competition in procurement (Ades and Di Tella 1999; Faccio 2006; Rijkers, Arouri, and Baghdadi 2017). In an environment where the most corrupt firms win contracts and conquer markets, firms' incentives are not to offer a better product at a lower price but to engage in bribery and collusion, allocating for this purpose otherwise valuable human and financial resources. Moreover, entrepreneurs with low moral scruples and powerful connections tend to participate and thrive where corruption is the norm, while other potentially capable people and firms tend to abstain from participating, remain uncompetitive and small, or are forced to exit the market. Second, corruption creates an environment that inhibits efficient public investment. Public investment decisions are then driven by opportunistic, rent-seeking motives, rather than the intrinsic value that public projects bring to the economy and society. For example, decisions to invest in mega infrastructure projects, which have greater opportunities for kickbacks, may crowd out investments in basic health and education that may have greater welfare benefits (Tanzi and Davoodi 2002).

Corruption disproportionately harms the poor and vulnerable, thereby exacerbating poverty and inequality (Ferraz, Finan, and Moreira 2012; Gupta, Davoodi, and Alonso-Terme 2002; Li, Xu, and Zou 2000). People and enterprises with enough economic means can pay, however reluctantly, the bribes demanded by public officials to facilitate bureaucratic procedures and to access public services. The poor cannot. The poor and vulnerable are therefore restricted from accessing health, educational, and justice services that in theory are open and free (Hyll-Larsen 2013; Chow and Nga 2013; Corruption Watch 2013). Likewise, micro and small entrepreneurs resort to informality because the costs of formalization include onerous procedures or hefty bribes. Furthermore, certain economically powerful and politically well-connected elites can induce and benefit from grand corruption. Consider, for instance, the undue influence of the Gupta family on the Zuma administration in South Africa (Aljazeera 2019); the crony capitalism that benefitted firms politically connected to the Ben Ali family in Tunisia (Rijkers, Freund, and Nucifora 2017); and the bribing of the highest spheres of power in Brazil and Peru by the Odebrecht construction company in the infamous *Lava Jato* scandal (The Economist 2019; The Guardian 2017). The poor, the vulnerable, and the middle class, frustrated and often powerless in the face of grand corruption, suffer the consequences.

The estimates of the effect of corruption on economic growth and inequality reported in the research literature vary but can be summarized as follows: a worsening of measured corruption by one standard deviation in a worldwide sample of countries can decrease GDP per capita growth by about 1 percentage point and increase the Gini coefficient of inequality by 11 percentage points. The effect appears to be worse when other areas of governance are weak, when the political regime is dictatorial rather than democratic, when corruption is entrenched and widespread, and when corruption is chaotic and uncertain (Shleifer and Vishny 1993).

As noted, one of the most important mechanisms by which corruption hinders growth and engenders inequality is by decreasing the quality and quantity of public goods and services in areas as important as infrastructure, health, education, police, and justice. First, a significant share of public resources is directly appropriated by government officials who abuse their power over procurement, distribution, and provision. Second, the public goods and services that are provided under these circumstances are not only insufficient but often lacking in quality: roads that fracture at the first storm and bridges that collapse under normal use (for example, in Kolkata, India, and Genoa, Italy, as reported in The Wire 2018 and The Financial Times 2018); medical services and medications that hurt rather than cure (for example in China, as described in The Economist 2014), and courts that take years to resolve a simple dispute (all over the developing world).

It can be argued that corruption can make the difference for a country between being potentially prosperous but actually problem-ridden, like Venezuela and Zimbabwe, and a country that is realizing its potential in terms of growth, stability, and equality, like Estonia and Singapore.

The causes of corruption: What makes a hand, a "grabbing hand"?

A brief analytical framework may help shed light on the causes of corruption. In economics and political science, the classic approach to corruption is the "principal-agent" model (Rose-Ackerman 1978; Klitgaard 1991). In a democratic society, people are the "principal," and the government is their "agent." The agent is supposed to serve the people and work toward achieving their objectives. In reality, however, the agent has its own goals and controls information regarding public processes and resources. This informational asymmetry allows the government to act in its self-interest, possibly to the detriment of people's welfare.

A different model emphasizes power rather than informational asymmetries. According to the "power capture" model, a group of people with particular skills, characteristics, or resources takes over power in a society and exploits it to gain and maintain position and wealth. This asymmetrical power distribution leads to negotiations and interactions whereby the high-power group dominates the exchange and imposes its own terms, changing the law or going beyond it (Cook and Emerson 1978; Dwyer and Walker 1981; World Bank 2017). A "principal-agent" model may be a better explanation for corruption in democratic societies, whereas the "power capture" model may apply more closely to dictatorial and repressive regimes. Even in democratic societies, however, "power capture" can take subtler forms, resulting in elites controlling large portions of economic wealth, opportunities, and decisions.

Two additional models can contribute to understanding corruption. One is the benign "efficiency wage hypothesis," according to which workers who are well remunerated are more likely to exert a stronger effort and comply by the rules (Shapiro and Stigliz 1984). It may follow, therefore, that when remuneration for public officials is too low, they may be more prone to corruption. Another is the "corruption as crime" model, according to which corruption is driven by similar incentives as other crimes, increasing with the size of the loot and decreasing with the probability of detection and the severity of punishment (Becker 1968).

Considering these analytical contributions, it can be argued that corruption is the result of perverse incentives, concentration of power, and lack of accountability: corruption happens when some members of government have the incentives and the opportunity to extract rents from their position and can do so because they control information and power (political, judicial, military, economic), while public institutions and the people at large have little or no recourse to make them accountable.

While the underlying causes of petty and grand corruption are similar, their specific drivers can be different. Petty corruption tends to be prevalent when the public bureaucracy suffers from low salaries and lack of meritocracy but can take advantage of onerous regulations and weak enforcement to extract rents. Thus, for instance, city officials can obtain bribes from businesses to expedite licensing procedures that would otherwise be complicated and lengthy.

Table 1. The elements of good (or bad) governance are closely connected: Pairwise correlations between governance indicators, 1996-2017

	Control of Corruption	Regulatory Quality	Government Effectiveness	Voice and Accountability	Rule of Law
Control of Corruption	1				
Regulatory Quality	0.8910	1			
Government Effectiveness	0.9436	0.9544	1		
Voice and Accountability	0.7933	0.7988	0.7790	1	
Rule of Law	0.9567	0.9129	0.9438	0.8489	1

Source: World Bank (2019b) Worldwide Governance Indicators.

Likewise, court officials can extract bribes from people and businesses when the judicial system is clogged because of incompetence and inefficiency. Moreover, public bureaucrats are more likely to engage in corrupt acts when their salaries are too low, the prospects of promotion for honest and dedicated work are minimal, and the probability and severity of punishment are small (Gaspar, Mauro, and Medas 2019; Gong and Wu 2011).

Grand corruption, on the other hand, is not driven by low salaries or lack of meritocracy. The potential rents to be extracted as bribes are so large that no reasonable public salary could match it, and these bribes can tempt even the most skillful and competent public officials. The drivers of grand corruption can be found in the lack of transparency and accountability over the control of public resources (such as taxes, natural resource rents, state-owned firms, regulations, and public contracts) and in an environment of concentration of power and inoperative checks and balances, resulting in the worst cases in state capture. Thus, for instance, a minister of finance or even a head of government can favor a firm in a bid for a large public infrastructure project in exchange for a sizeable sum, directly deposited in an encrypted personal bank account or masked as a campaign donation. This conduct can become prevalent when transactions are secretive and not open to scrutiny; when other instances of government such as the legislature and the courts are in collusion or dominated by the executive; and when other powerful members of society such as the military and the press are bribed or threatened into complicity. This may be more apt to happen in regimes such as dictatorships, oligarchies, and plutocracies that facilitate the control and abuse of power that promotes corruption— but it may also occur where democratic governments lack checks and balances and are captured by corrupt elites.

The control of corruption is rightly seen as an element of good governance (World Bank 2017). The Worldwide Governance Indicators, for instance, include control of corruption along with voice and accountability, government effectiveness, regulatory quality, rule of law, and political stability to build an overall measure of governance (Kaufmann, Kraay, and Mastruzzi 2011). Each of these aspects of institutional development is closely connected to the rest (see table 1 for a quantitative illustration). Corruption, in particular, weakens governance and, in turn, is worsened by bad governance, in a vicious cycle of regrettable consequences.

The reforms to fight corruption: Taming tigers and swatting flies

Countries are not condemned to suffer from corruption. They can break the vicious cycle with a combination of reforms that include from modest policy interventions to large institutional changes. Measures to fight corruption must address the underlying incentives for corruption and the conditions that enable corruption to thrive (World Bank 2017; Gaspar, Mauro, and Medas 2019). Consider the following anti-corruption reforms:

- *Streamline rules and regulations.* Bureaucracy and layers of red tape not only frustrate citizens hoping to receive government services but also create rent-seeking opportunities by those who function as gatekeepers (World Bank 2018). A straightforward and predictable regulatory and legal environment can not only promote efficiency and productivity but can also reduce the room for discretionary and arbitrary decision-making and exercise of power. Before the 2003 Rose Revolution, Georgia was perceived to be one of the most corrupt countries in Eastern Europe. The new government made it a priority to eradicate corruption, and Georgia is now seen as a case of successful reform (see figure 2). It conducted a series of economic liberalization policies to cut red tape and eliminate the opportunities and incentives for bribery. For example, the government cut the number of taxes from 21 to 6 and the number of required business permits from 600 to 50. The liberalization reforms were comprehensive, as property registration, trade regimes, customs procedures, tax systems, and business requirements were simplified and rationalized.

- *Build a meritocratic and well-paid civil service.* Making the compensation of public officials competitive and promoting meritocracy in the ranks of the public administration can increase the incentives for honest and dedicated work. In Georgia, along with the measures mentioned, the anti-corruption reforms included a 50 percent reduction in the number of public sector employees and a 15-fold increase in the salaries of the remaining civil servants (Kupatadze 2011). In 1998, Rwanda conducted major civil service reforms, including reductions in public employment (such as eliminating ghost workers), increases in wages, and mandatory declarations of assets, with remarkable results (IMF 2019). Throughout their development history, Hong Kong and Singapore have been among the most notable cases of how meritocracy underpins the efforts to build a professional civil service technically competent, open to constant improvement, and resistant to corruption (Oehlers 2005).
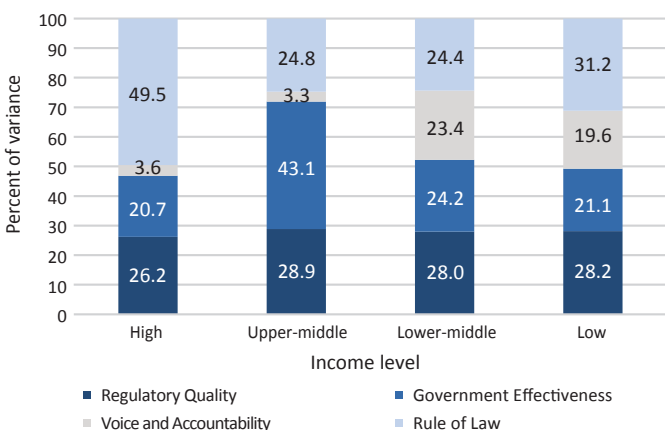

Figure 2. Uneven progress in the fight against corruption in the last two decades
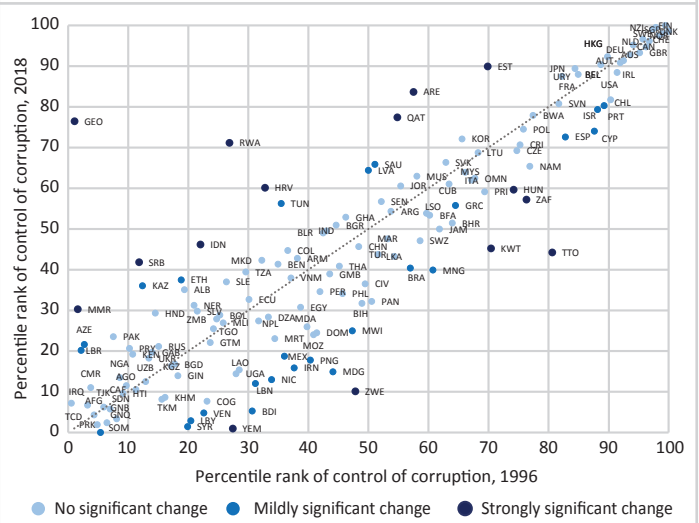
Source: World Bank (2019b) Worldwide Governance Indicators.
Note: The 45-degree line indicates no changes in control of corruption between 1996 and 2018. Being above (below) the 45-degree line indicates improvement (worsening) in control of corruption from 1996 to 2018. Statistically, the change is strongly significant when the margins of error of the point estimates for 1996 and 2018 do not overlap, mildly significant when neither point estimates are included in each other's margin of error, and not significant otherwise. Data labels use the International Organization for Standardization (ISO) country codes.

- *Promote transparency in public employment, procurement, and services.* As US Supreme Court Justice Louis Brandeis said, "sunlight is the best disinfectant." Transparency in government transactions—including employment, procurement, public works, and services—remains one of the most powerful drivers of good governance and an important deterrent to corruption (World Bank 2018). To the extent that information and communication technologies (ICTs) are not subject to manipulation, they can become useful and cost-effective tools to promote transparency. In Indonesia, for example, civil service employment was often tainted by cronyism and nepotism. However, that changed substantially when the civil service agency implemented a computer-assisted testing system in 2013, with real-time reporting on civil service exam results outside the testing centers and monitoring by the public. E-procurement systems have also become a vital tool to creating greater transparency and more competition in the contentious area of government contracting. The Ukraine launched its e-procurement system, ProZorro, in 2015; by 2017 it was handling US$14.4 billion in contracts, with an estimated savings to the state of US$1.5 billion, or 1.4 percent of GDP (Manthorpe 2018). Furthermore, trust in the system had increased from 41 percent to 71 percent.

- *Enable citizen voice and government accountability.* Democratic mechanisms, checks and balances between government powers, and a free press are critical elements to deter, detect, and penalize corruption. While the election process itself may generate corruption (such as vote-buying and patronage), having fair and competitive elections is one way for citizens to impose accountability on politicians and public officials. The recent experience in Malaysia is an example of how democratic forces can be used against corruption. In 2018, against all odds, Malaysians voted in a new administration whose main mandate was to dismantle and penalize the corruption that had overtaken the 1MDB national development fund at the highest spheres of government. Democracy can serve as a deterrent and a solution but is not a panacea for corruption. It must be complemented by checks and balances between the executive, legislative, and judicial branches of government, as well as continuous electoral competition from outsiders. For its part, freedom of the press can complement, and sometimes substitute for, democracy. There is evidence that countries with more press freedom experience less corruption (Brunetti and Weder 2003). Although not immune to capture, a free press can be an effective channel in raising awareness, spurring debates, and exerting pressure on officials to conform to the rule of law.

- *Enforce anti-corruption laws and penalties.* An independent, agile, and unbiased judicial system is necessary to prevent corruption and stop it as soon as it emerges. When corruption is rampant, specialized institutional anti-corruption agencies within the judicial system may be needed. The Independent Commission Against Corruption (ICAC), established in 1974 in

Figure 3. The correlates of corruption vary by country and income level: Variance decomposition of control of corruption into other governance indicators by income level, 1996-2017

Source: World Bank (2019b) Worldwide Governance Indicators.
Note: Variance decomposition was conducted using dominance analysis (Grömping 2007).

2010 Kenya initiated reforms to strengthen oversight, capacity, and accountability of the judicial system by strengthening the role of the Judicial Service Commission. The Commission is the body in charge of appointing and removing judicial officers and magistrates, as well receiving and investigating cases against them (Ndungu 2012). Given its achievements, Kenyans now have greater confidence in their judicial system to fight corruption than they had before 2010.

Conclusion

Curbing corruption is not only necessary but also possible. In the last two decades, corruption has fallen in some countries around the world thanks to a concerted and explicit effort to prevent it and fight it (see figure 2). The progress made in Georgia, Indonesia, and Rwanda are worth highlighting. Unfortunately, worsening corruption is also possible, as evidenced by South Africa, Yemen, and Zimbabwe. Moreover, even in countries where progress has occurred, there are constant threats of falling back, as certain power elites and unscrupulous bureaucrats try to identify and exploit new vulnerabilities.

A comprehensive approach that considers country-specific governance gaps is needed to eradicate corruption (Mauro 2002; Kaufmann and Kraay 2002; Lederman, Loayza, and Soares 2005; Djankov et al. 2010; World Bank 2017). This approach should include improvements in regulatory quality, effectiveness of the public administration, voice and accountability, and enforcement of the law. The challenges in improving these areas of governance may differ for countries at different levels of development (see figure 3). Preliminary analysis indicates that in low and lower-middle income countries, a balanced approach that seeks to improve all areas may be necessary. In upper-middle income countries, many of which have attained a large degree of voice and accountability, the greatest challenge is improving government effectiveness, followed by regulatory quality. In high-income countries, the emphasis seems to fall heavily on strengthening law enforcement.

It is clear that "silver bullets" to fight corruption do not exist and isolated policy reforms are bound to fail. The entire political, institutional, and administrative ecosystem must be conducive to "tame the tigers and swat the flies" of corruption. It is a battle worth fighting, and one on which the prosperity of nations depends.

Hong Kong, has been successful because its institutional independence gives it a unique and clear mandate, as well as the resources to achieve it (Manion 2004). In Indonesia, the Corruption Eradication Commission (KPK) has succeeded in convicting previously untouchable high-profile perpetrators, recovering stolen assets, and enjoying a high degree of public trust and support since its formation in 2002 (Bolongoita 2010; Schütte 2012). The reasons for the success of the KPK up until now has been attributed to its jurisdiction, autonomy, and powers, which include investigative and prosecutorial authority. KPK's institutional arrangements allow the agency to hire and pay its own staff according to merit and to promote internal transparency and accountability in operations (Bolongoita 2010). Finally, in

References

Ades, A., and R. Di Tella. 1999. "Rents, Competition, and Corruption." *American Economic Review* 89 (4): 982–93.

Aljazeera. 2019. "Will Zuma Testimony Help South Africa's Fight Against Corruption?" July 17. https://www.aljazeera.com/news/2019/07/zuma-testimony-south-africa-fight-corruption-190717080746974.html.

Andvig, J. C., and G. Attila. 2009. "Crime, Police Corruption and Development: Evidence from Victimization Data." NUPI Working Paper 772, Norwegian Institute of International Affairs (NUPI), Norway.

Becker, G. 1968. "Crime and Punishment: An Economic Approach." *Journal of Political Economy* 76 (2): 169–217.

Bolongoita, E. 2010. "An Exception to the Rule? Why Indonesia's Anti-Corruption Commission Succeeds Where Others Don't—A Comparison with the Philippines' Ombudsman." Transparency International.

Brunetti, A., and B. Weder. 2003. "A Free Press Is Bad News for Corruption." *Journal of Public Economics* 87 (7): 1801–24.

Chow, S., and D. T. Nga. 2013. "Bribes for Enrollment in Desired Schools in Vietnam." In *Global Corruption Report 2013: Education*, by Transparency International, 60–67. Transparency International.

Cook, K. S., and R. M. Emerson. 1978. "Power, Equity and Commitment in Exchange Networks." *American Sociological Review* 43: 712–39.

Corruption Watch. 2013. "Low-Income Housing: More Transparency Needed." https://www.corruptionwatch.org.za/low-income-housing-more-transparency-needed/.

Djankov, S., R. La Porta, F. Lopez-de-Silanes, and A. Shleifer. 2002. "The Regulation of Entry." *Quarterly Journal of Economics* 117 (1): 1–37.

Djankov, S., R. La Porta, F. Lopez-de-Silanes, and A. Shleifer. 2010. "Disclosure by Politicians." *American Economic Journal: Applied Economics* 2 (2): 179–209.

Dwyer, F. R., and J. R. Walker. 1981. "Bargaining in an Asymmetrical Power Structure." *Journal of Marketing* 45 (1): 104–16.

Economist, The. 2014. "A Bitter Pill for GlaxoSmithKline." July 4. https://www.economist.com/analects/2014/07/04/a-bitter-pill-for-glaxosmithkline.

———. 2019. "Brazil's Biggest Anti-Corruption Investigation is a Turning Point." April 11. https://www.economist.com/the-americas/2019/04/11/brazils-biggest-anti-corruption-investigation-is-at-a-turning-point.

Faccio, M. 2006. "Politically Connected Firms." *American Economic Review* 96 (1): 369–86.

Ferraz, C., F. Finan, and D.B. Moreira. 2012. "Corruption Learning Evidence from Missing Federal Education Funds in Brazil." *Journal of Public Economics* 96 (9-10): 712-726.

Financial Times, The. 2018. "Italy's Bridge Disaster: An Inquest into Privatisation." September 8. https://www.ft.com/content/874b7e4c-ac3f-11e8-94bd-cba20d67390c.

Freund, C., M. Hallward-Driemeier, and B. Rijkers. 2016. "Deals and Delays: Firm-Level Evidence on Corruption and Policy Implementation Times." *World Bank Economic Review* 30(2): 354–382.

Gaspar, V., P. Mauro, and P. Medas. 2019. "Tackling Corruption in Government" (April 4 blog). https://blogs.imf.org/2019/04/04/tackling-corruption-in-government/.

Gong, T., and A. M. Wu. 2012. "Does Increased Civil Service Pay Deter Corruption? Evidence from China." *Review of Public Personnel Administration* 32 (2): 192–204.

Grömping, U. 2007. "Estimators of Relative Importance in Linear Regression Based on Variance Decomposition." *The American Statistician* 61 (2): 139–47.

Guardian, The. 2017. "Operation Car Wash: Is this the Biggest Corruption Scandal in History?" June 1. https://www.theguardian.com/news/2017/jun/01/brazil-operation-car-wash-is-this-the-biggest-corruption-scandal-in-history.

Gupta, S., H. Davoodi, and R. Alonso-Terme. 2002. "Does Corruption Affect Income Inequality and Poverty?" *Economic of Governance* 3: 189–209.

Haque, E. M., and R. M. Kneller. 2008. "Public Investment and Growth: The Role of Corruption." Research Discussion Paper 98, Centre for Growth and Business Cycle, Economics, the University of Manchester, United Kingdom.

Hyll-Larsen, P. 2013. "Free or Fee: Corruption in Primary School Admissions." In *Global Corruption Report 2013: Education*, by Transparency International, 52–59. Transparency International.

IMF (International Monetary Fund). 2019. Fiscal Monitor: *Curbing Corruption*, April. Washington, DC: International Monetary Fund.

Kaufmann, D., and A. Kraay. 2002. "Growth without Governance," *Economía* (Journal of the Latin American and Caribbean Economic Association, LACEA) 3 (1): 169–230.

Kaufmann, D., A. Kraay, and M. Mastruzzi. 2011. "The Worldwide Governance Indicators: Methodology and Analytical Issues." *Hague Journal on the Rule of Law* 3 (2): 220–46.

Keefer, P., and S. Knack. 1997. "Why Don't Poor Countries Catch Up? A Cross-National Test of an Institutional Explanation." *Economic Inquiry* 35 (3): 590–602.

Klitgaard, R. 1991. *Controlling Corruption*. Berkeley, CA: University of California Press.

Kraay, A., and P. Murrell. 2016. "Misunderestimating Corruption." *Review of Economics and Statistics* 98 (3): 455–66.

Kupatadze, A. 2011. "Similar Events, Different Outcomes: Accounting for Diverging Corruption Patterns in Post-Revolution Georgia and Ukraine." http://www.css.ethz.ch/publications/pdfs/CAD-26-2-4.pdf.

Lederman, D., N. V. Loayza, and R. R. Soares. 2005. "Accountability and Corruption: Political Institutions Matter." *Economics and Politics* 17 (1): 1–35.

Li, H., C. L Xu, and H. Zou. 2000. "Corruption, Income Distribution, and Growth." *Economics and Politics* 12 (2): 155–82.

Manthorpe, R. 2018. "From the Fires of Revolution, the Ukraine Is Reinventing Government." Wired UK. https://www.wired.co.uk/article/ukraine-revolution-government-procurement.

Mauro, P. 1995. "Corruption and Growth." *Quarterly Journal of Economics* 110: 681–712.

———. 2002. "The Persistence of Corruption and Slow Economic Growth." IMF Working Paper WP/02/213, International Monetary Fund, Washington, DC.

Manion, M. 2004. "Lessons for Mainland China from Anti-Corruption Reform in Hong Kong." *The China Review* 4(2): 81-97.

Ndungu, I. 2012. "Cautious Optimism over Judicial Reforms in Kenya." http://www.issafrica.org/iss-today/cautious-optimism-overjudicial-reforms-in-kenya.

Oehlers, A. 2005. "Corruption: The Perculiarities of Singapore." In *Corruption and Good Governance in Asia*, Routledge Studies in the Modern History of Asia, edited by Nicholas Tarling, 149–64. New York: Routledge.

Olken, B., and R. Pande. 2012. "Corruption in Developing Countries." *Annual Review of Economics* 4 (1): 479–509.

Rijkers, B., H. Arouri, and L. Baghdadi. 2017. "Are Politically Connected Firms More Likely to Evade Taxes? Evidence from Tunisia." *World Bank Economic Review* 30 (1): S166–S175.

Rijkers, B., C. Freund, and A. Nucifora. 2017. "All in the Family: State Capture in Tunisia." *Journal of Development Economics* 124: 41–59.

Rose-Ackerman, S. 1978. *Corruption: A Study in Political Economy*. New York: Academic Press.

Schütte, S. A. 2012. "Against the Odds: Anti-Corruption Reform in Indonesia." *Public Administration and Development* 32: 38–48.

Shapiro, C., and J. E. Stiglitz. 1984. "Equilibrium Unemployment as a Worker Discipline Device." *American Economic Review* 74 (3): 433–44.

Shleifer, A., and R. W. Vishny. 1993. "Corruption." *The Quarterly Journal of Economics* 108 (3): 599–617.

Tanzi, V., and H. R. Davoodi. 2002. "Corruption, Public Investment and Growth." IMF Working Paper WP/97/139, International Monetary Fund, Washington DC.

Transparency International. 2009. *The Anti-Corruption Plain Language Guide*. Transparency International.

Wire, The. 2018. "Why Our Bridges and Flyovers Collapse." September 5. https://thewire.in/urban/kolkata-majerhat-bridge-collapse-tenders-corruption.

World Bank. 2017. *World Development Report: Governance and the Law*. Washington, DC: World Bank.

———. 2018. *Improving Public Sector Performance through Innovation and Inter-Agency Coordination*. Global Report: Public Sector Performance, Inaugural Issue. Washington, DC: World Bank.

———. 2019a. World Development Indicators (WDI). https://datacatalog.worldbank.org/dataset/world-development-indicators (accessed June 1, 2019).

———. 2019b. Worldwide Governance Indicators (WGI). https://info.worldbank.org/governance/wgi/Home/Reports.