Corruption is a moral category that signifies putrefaction and rot. Commentators use the term to describe aspects of modern life that they find repugnant. They condemn violent video games that corrupt the morals of the young and bemoan the corruption of politics by pointing to the decline in civic virtue and public spiritedness. Under this broad interpretation, corruption does not necessarily involve a monetary quid pro quo. Rather, a vulnerable group – like children – or a respected institution – like the United States Senate – is at risk of falling from grace because of exposure to some feature of the environment, be it video games, television shows, sexually alluring human beings, or a society’s general lack of grace and deference.

Economists are often uncomfortable making such moral judgments. The tools of the trade do not permit the analyst to distinguish between ‘bad’ and ‘good’ tastes, and the field has little to say about how tastes evolve over time. There is thus a basic tension between corruption as a field of study and economic analysis. Writing on corruption often stakes out a moral high ground, but economists are reluctant to sermonize about right and wrong. Yet in recent decades the economics of corruption has generated a wide range of productive research, both theoretical and empirical. This has happened largely by carving off the piece of the broader concept most susceptible to economic analysis – monetary payments to agents (both public and private) to induce them to ignore the interests of their principals and to favor the private interests of the bribers instead. The focus is not on tempting vulnerable populations. Nor is it on the moral vision of a nation’s leaders. Instead, research concentrates on quid pro quo deals where ordinary people, business firms and public officials may behave corruptly if the economic rewards are high enough.

Some of the first studies were contrarian. Economists saw bribes changing hands, and their first instinct was to applaud rather than condemn. This reflects a typical economists’ commitment – one might almost say a moral commitment – to using the price system if at all possible. In a well-functioning corrupt system government services go to the high bidders who value them most. Bribers pay officials for exemptions from costly rules that hamper the development of the private market. Although other scholars quickly showed that this perspective was radically oversimplified, the essential focus on bribes as prices and on the impact of corruption on
resource allocation remains central to economic studies of corruption. However, contemporary research demonstrates that corrupt payments do not usually further efficiency, at least if one takes a systemic view under which corrupt officials may redesign public systems to encourage bribery. Research also shows how illegal systems of bribe-prices undermine other public goals.

Corruption is also a legal category. All states have laws against bribery and fraud in the public sector and most regulate campaign contributions, campaign spending and conflicts of interest. Many states penalize commercial bribery and other types of corporate malfeasance. International and regional treaties seek to control cross-border bribery and facilitate law enforcement. The legal categories are much narrower than the broad use of the term ‘corruption’ in everyday speech, and, further, the law does not map perfectly onto the class of payoffs and quid pro quos that economists find harmful. From a policy point of view, the goals of economic research on corruption are both to isolate the economic effects of quid pro quo deals between agents and third parties and to suggest how legal and institutional reforms might curb the harms and improve the efficiency and fairness of government.

Contemporary research began with theoretical work that built on industrial organization, public finance and price theory to isolate the incentives for paying and receiving bribes and to recommend policy responses based on that theory. My 1978 book, Corruption: A Study in Political Economy, is an early example with its relatively straightforward application of economic concepts to the study of corruption. My raw material was case studies and newspaper reports of corrupt incidents. My own interest had been provoked by teaching courses in urban economics at a time when a series of scandals in US federal housing programs were undermining support for these policies. My insight was to notice that the programs had been unconsciously designed with incentives for corruption built in. Perhaps, I thought, the tools of economics could be used both to understand what programs were especially susceptible to corruption and to recommend ways to reduce these incentives.

My 1978 book was an attempt to achieve this goal, and its durability suggests that others found it useful. However, it largely relied on journalism to supply the facts because there were no statistical efforts to measure the harm caused by corruption. The closest were papers by Anne Krueger (1974) and Jagdish Bhagwati (1974) that sought to measure the volume of rent seeking and illegal transactions in international trade by making use of the two sets of books available internationally – in exporting and in importing countries. Fortunately, in recent years it has become possible to move beyond journalism. Although empirical work on a topic that involves
illegal activity remains difficult, a range of clever devices has been developed to generate quantitative estimates.

The main theoretical and empirical debates concern the relative importance of corruption in explaining low rates of growth in those poor countries that have been unable to escape from poverty traps. High perceived corruption and low growth rates are associated, but the causation can run from corruption to low growth or from low growth to corruption or, more likely, the causal arrow runs both ways, creating vicious or virtuous spirals. To complicate matters further, there are some cases of very corrupt countries that, nevertheless, have strong growth experiences.

It is a mistake, then, to assert that the main cure for corruption is economic growth. That claim reflects an overly simple view of the roots both of economic growth and of corruption. Corruption is not a uniform, standalone problem. Rather, it is a symptom that state/society relations operate in ways that undermine the fairness and legitimacy of the state and that lead to waste and the poor targeting of public spending. In highly corrupt countries even nominally pro-growth policies are likely to be sabotaged by the self-seeking behavior of government officials and of private individuals and businesses – both domestic and foreign. Even when growth does occur, insiders use their status to obtain disproportionate gains. It is wishful thinking to advise poor countries to grow as a cure for corruption. For most of them, that is simply not an option.

In countries that are less corrupt overall, economic growth can coexist with high levels of corruption in particular sectors, such as customs collection or the police. In those cases, some observers claim that corruption is simply irrelevant or may even facilitate growth. But growth is not the only social goal, and even when corruption seems consistent with growth, one can always locate policy alternatives that are superior to the corrupt status quo. I came to the field of economic development from a background in US domestic public policy, and it seems odd to me to hear that corruption should be ignored because the country in which it takes place has a high growth rate. In the United States, police corruption and government procurement fraud are not dismissed because the US economy is growing at a good rate. That kind of response is simply a category mistake: overall economic growth is not the only thing that matters.

Leaders in middle-income countries where corruption pervades some sectors should have the same attitude. Measures of economic growth are an insufficient measure of the quality of state/society relations and of the effectiveness of the public sector. These countries may have reasonably well-functioning governments and vibrant private sectors, but they still need to confront dysfunctional sectors where corruption undermines state legitimacy, harms private business and victimizes citizens.
This introduction first summarizes the economic framework that I continue to believe yields important insights into the causes and consequences of corruption (Rose-Ackerman 1999, 2004). This framework provides a background to most of the chapters in this volume, which simply take it for granted. Then I discuss the diverse approaches to empirical research represented on these pages and conclude with some thoughts on fruitful directions for future research.

Some contributions are theoretical; some, empirical; and some combine both aspects. Some seek simply to understand an aspect of the phenomenon; others go on to develop policy proposals. Part I includes two chapters by leading exponents of cross-country research on corruption and economic performance and a third that discusses the measurement issues raised by these studies. Part II concentrates on the relationship between particular institutional structures and corruption: the bargaining framework between firms and officials, the constitutional structure of democracies, decentralized government and bureaucratic hierarchies. It concludes with a critique of the conventional economic approach to corruption especially as applied to poor countries. Part III contains two chapters that, from quite different points of view, ask whether there is anything special about the countries in Europe and Asia that are making a transition from communism. Part IV reports the results of survey work and experiments that aim for insight into individual attitudes and behavior. Part V concludes the Handbook with chapters on individual sectors: government service delivery, taxation, public works, customs and healthcare.

1. Conceptual underpinnings

Corruption occurs where private wealth and public power overlap. It represents the illicit use of willingness to pay as a decision making criterion. In the most common transaction a private individual or firm makes a payment to a public official in return for a benefit. Bribes increase the private wealth of officials and may induce them to take actions that are against the interest of their principals, who may be bureaucratic superiors, politically appointed ministers, or multiple principals such as the general public. But illicit payments may sometimes flow in the reverse direction: those holding or competing for public office make cash payments to private individuals, firms or other officials to get benefits for themselves or their political parties. In both cases pathologies in the agency/principal relation are at the heart of the corrupt transaction.

I begin by differentiating between low-level opportunistic payoffs, on the one hand, and systemic corruption, on the other, that implicates an entire bureaucratic hierarchy, electoral system or overall governmental structure from top to bottom. I discuss each in turn.
Low-level corruption occurs within a framework where basic laws and regulations are in place, and implementing officials seize upon opportunities to benefit personally. There are several generic situations.

First, a public benefit may be scarce, and officials may have discretion to assign it to applicants. Suppose that superiors cannot observe payoffs but can easily check if any unqualified applicants receive the benefit. Then the qualified applicants with the highest willingness to pay and the fewest scruples will get the benefit in a corrupt system. This would seem the least problematic case from a welfare economics perspective. The payoff is a transfer, and the benefit goes to those who value it the most in dollar terms. The main problems are the transaction costs of corrupt deals and the elimination of qualified beneficiaries with high scruples. The obvious policy response is to sell the benefit legally. It is a good test of this strategy to ask whether any significant public policy goal would be violated by charging fees as a rationing device. For example, if a country has a limited supply of import licenses to allocate, selling them to the high bidder will usually be the efficient strategy. Related cases are transparent auctions for privatized firms and broadcast licenses or competitive bidding for contracts.

Second, consider the ways in which the first example is idealized. In particular, suppose that low-level officials are required to select only qualified applicants and that their exercise of discretion cannot be perfectly monitored. The overall supply may be scarce, as in the above example (for example, university places or government-subsidized apartments), or open-ended (for example, drivers’ licenses, business firm registration, certificates of occupancy for new construction). In either case, the officials’ discretion permits them to collect bribes from both the qualified and the unqualified. The level of corruption will depend upon the options for the qualified. For example, can they approach another, potentially honest, official? Incentives for payoffs will also depend upon the ability of superiors to monitor allocations. For example, a firm that builds a shoddy building may be able to hide the flaws, at least until it is tested in a fire or an earthquake. Government contracting and the sale of state assets also often fit this case. Superiors cannot perfectly monitor official behavior, so lower-level bureaucrats can collect bribes that permit contracts to be given to poorly qualified firms and that allow asset sales to bidders who do not provide the state with the highest return.

Third, the bureaucratic process itself may be a source of delay and other costs. In that case, incentives for corruption arise as applicants try to get to the head of the queue or otherwise get better service. To further exploit their corrupt opportunities, officials may create or threaten to create red tape as a means of extracting bribes. This strategy is plausible in many real-world applications because even honest officials need to take some time and trouble to process applications.
Turn next to cases in which officials can impose costs rather than benefits – for example, they seek to collect taxes or threaten citizens with arrest. They can then extract payoffs in return for overlooking the illegal underpayment of taxes or for tolerating illegal gambling and drug operations. More pathologically, they can demand payoffs in exchange for refraining from arresting them on trumped-up charges.

In general, low-level corruption can lead to the inefficient and unfair distribution of scarce benefits, undermine the purposes of public programs, encourage officials to create red tape, increase the cost of doing business and limit entry, and lower state legitimacy. (See Rose-Ackerman 1999: 7–88 for a more detailed treatment.) Note, however, that such corruption may have political benefits for incumbents. The bribes may be paid at the lowest level in the hierarchy, but they may be part of an organized system that is used to favor political allies and to build campaign war chests, and not only to obtain individual cash benefits. At that point, low-level corruption merges with high-level corruption.

‘Grand’ corruption shares some features with low-level payoffs, but it can be more deeply destructive of state functioning – bringing the state to the edge of outright failure and undermining the economy. I distinguish three varieties.

First, a branch of the public sector may be organized as a rent-extraction machine. For example, top police officials may organize large-scale corrupt systems in collaboration with organized crime groups, who are given a de facto monopoly on illicit activities. In practice, it may be difficult to know whether the police or the criminals have the upper hand. In the extreme, police may even arrest competing groups so as to maintain the dominant group’s monopoly. Policing is probably the most dramatic example here, but tax collection agencies and regulatory inspectorates, to name just two, can also degenerate into corrupt systems where high-level officials manage and share in the gains of their inferiors.

Second, a nominal democracy may have a corrupt electoral system, with money determining the outcome. Here there are many slippery slopes and difficult lines to draw. Political campaigns require funds from either public or private sources. Voters need to be persuaded to support particular candidates in one way or another, and corruption can enter in three ways. It can undermine limits on spending, get around limits on the types of spending permitted (that is, no direct quid pro quos), and subvert controls on the sources of funds. There is no agreement about what should count as ‘corrupt’ in this context. The extremes are clear, but the more subtle distinctions are hotly contested.

Third, governments engage in large projects and transfer assets in ways that have a significant effect on the wealth of domestic and foreign business
organizations. For example, they regularly contract for major construction projects such as highways and port improvements, allocate natural resource concessions, and privatize state-owned firms. High-level politicians can use their influence to collect kickbacks from private firms in all of these areas. The relative power of government officials and private interests may, in practice, be difficult to sort out. The extremes are kleptocracy, on the one hand, and state capture by powerful private interests, on the other. In some cases, concentrated power exists on both sides, and we have a bargaining situation similar to a bilateral monopoly in the private market (Rose-Ackerman 1999: 115).

These types of grand corruption can undermine state legitimacy and economic functioning. Most problematic is the case of bilateral monopoly, where a narrow set of powerful public and private figures controls the state. Some scholars dispute this claim. Using a market analogy, they observe that a monopolist seeks productive efficiency, and, in the presence of external effects and free riding, it is better to centralize power over resources. In Mancur Olson’s term (1993), a ‘stationary bandit’ is better than a large number of ‘roving bandits’. The evidence suggests, however, that most kleptocrats do not act like efficient monopolists. They are not that powerful. Far from choosing efficient projects that maximize monopoly profits, they need to buy off supporters. Given the risk of losing power, they often transfer their profits outside the country for safekeeping. The analogy to a private monopolist misses these aspects of kleptocratic government (Rose-Ackerman 1999: 114–24; 2003).

Some claim that deep cultural, historical and social factors are the fundamental determinants of corruption and also can explain the impact of corruption on economic growth and other variables. Several chapters in this Handbook point in that direction, and empirical evidence provides support for some, but not all, of these claims. Taking these results literally is a counsel of despair suggesting that countries cannot escape their history. If a country’s ‘culture’ inexorably generates corruption, policy makers might as well give up on the reform project.

This seems overly dire. Of course, present-day realities, including existing institutions, are influenced by history and culture. Statistical work may find that settler mortality, colonial heritage, religion or distance from the equator is a good proxy for today’s institutional structures. But this does not imply that a country with background conditions associated with corruption and low growth cannot change, although it does suggest that change may need to be more radical and far reaching than in other countries. The massive transformations that have occurred in Central Europe, the former Soviet Union, China and Vietnam demonstrate that change is possible and can occur quite rapidly. The transitions to democracy in Latin
America and Asia, however unfinished and rough-edged, demonstrate the same point. Furthermore, in countries where widespread corruption has gone along with a strong growth performance, one can seek to understand both why corruption did not hold back growth and whether corruption had a disparate impact on particular sectors and social groups who bear the brunt of the corrupt gains earned by others. Such research could provide a more nuanced approach to policy-oriented studies that aim to understand how government and private sector institutions affect economic outcomes and the legitimacy of the state.

2. Alternative approaches to understanding corruption

With this framework in mind, I summarize the contributions to this Handbook. Most of the chapters are by economists, but one thread that unites many of them is the importance of politics in understanding both the roots of corruption and the success or failure of alternative policy interventions. Reforms do not occur in a vacuum but are deeply affected by the political context in which they are implemented.

Corruption and poor governance around the world

Because of its prominence in the recent literature, I begin with two chapters by leading practitioners of cross-country research. The authors are Johann Graf Lambsdorff, the originator of the Transparency International (TI) Corruption Perceptions Index, and Daniel Kaufmann, Aart Kraay and Massimo Mastruzzi of the World Bank Institute, which has developed several governance indicators, including an index of control of corruption. Both datasets are tied to perceptions of corruption as reported mostly by the international business community and by experts in particular countries and regions. Thus the indices do not represent hard measures of corruption. It is, however, difficult to imagine how anyone could collect hard data that would be comparable across a wide range of countries. Although the two indices aggregate and report the data in rather different ways, the end results are similar. They are highly correlated; hence, from the point of view of statistical analysis, there is little difference between them. Both appear to capture, in a general way, the level of corruption as perceived by knowledgeable observers.

The TI and the World Bank indices have spawned a large number of studies. The data are obviously not a random and independent draw from the universe of all possible countries. Furthermore, conditions in one country may be affected by conditions in other countries, especially close neighbors, trading partners and former colonial powers. Even given these caveats, however, the broad empirical regularities are so striking that it is hard to dismiss them on technical grounds. Both Lambsdorff and
Kaufmann, Kraay and Mastruzzi make a persuasive case for the value of such work. The indices and the studies they have made possible have helped make corruption control part of the global debate on governance and growth. The results demonstrate that corruption is associated with harmful outcomes and support the claim that institutions matter for growth.

Lambsdorff’s chapter reviews a broad selection of cross-country research on the causes and consequences of corruption. He reports on research that links costly regulation to corruption, but he points out that this finding provides only a partial explanation for cross-country differences. After all, some of the most honest countries in northern Europe also have very active regulatory states. The role of decentralization is ambiguous on both theoretical and empirical grounds (see also Bardhan and Mookherjee, this volume). Competitive pressures reduce corruption, but payoffs can also be used to buy relief from market pressures through laws that restrict entry and trade. The structure of government does seem to affect the integrity of government, but the connections are complex and the results sometimes contradictory (see also Kunicová, this volume). Cultural and social factors are related to a country’s level of corruption; in particular, when family ties are very important, reported corruption is high. Geography also matters – a supply of valuable natural resources establishes the preconditions for corruption.

As Lambsdorff’s survey shows, the consequences of corruption are difficult to distinguish from the causes because the causal arrow frequently appears to go both ways. Thus inequality is associated with high levels of corruption, but the econometric evidence on causation is mixed. Similar ambiguities arise in sorting out the link between poverty and corruption. Other consequences of corruption are a larger shadow economy, a smaller and less productive capital stock, and distorted allocations of public and private resources. Increases in the level of corruption are associated with falls in the rate of growth. Most of these results, however, could be flipped so that they are causes, not consequences. For example, an iterative process may operate where corruption limits growth and low growth encourages corruption.

As for policy, cross-country research cannot provide detailed anti-corruption programs, but Lambsdorff argues that the evidence suggests the value of reforms that streamline and simplify regulations and that encourage competition. Democracy appears to limit corruption but only if it produces vigorous competition for office and only in the long term. Other studies summarized by Lambsdorff find that increases in civil service salaries are not a sufficient policy response. A free press and an independent judiciary act as checks. According to Lambsdorff’s own research, improvements in civil liberties and the rule of law improve productivity and
encourage capital inflows. His results suggest that country strategies should differ depending upon whether the state is most interested in productivity improvement or in attracting foreign capital. Bureaucratic and regulatory reforms are most important for raising productivity; the rule of law is central to efforts to attract foreign capital.

Kaufmann, Kraay and Mastruzzi take a broader approach and examine the association between indicators of governance and economic outcomes. Drawing information from a wide range of sources, the World Bank Institute has constructed six indices and made them available on its website. In addition to a measure of corruption control, the indices include: voice and accountability, political instability and violence, government effectiveness, regulatory burden and the rule of law. The authors argue that these perceptions-based data on governance do a better job of capturing reality than supposedly objective measures of the rules of the game. The data demonstrate the wide variation in the indices across regions and countries and the relatively modest changes over time.

The authors stress the margins of error associated with their data and urge that policy makers take them into account, especially if the data are used to determine eligibility for aid. Index values should not be used in a mechanical fashion to deny aid to those that fall below an arbitrary cutoff. Average values are not sufficient to make such judgments, and their use gives a false sense of precision to the exercise of selecting aid recipients. However, unless all the sources exhibit the same biases, they argue that one way to increase the precision of the data is to combine several sources into an index instead of relying on a single source. Nevertheless, the remaining margins of error need to be part of the information conveyed to policy makers, and the World Bank Institute is careful to include this information in the data they present.

Kaufmann, Kraay and Mastruzzi examine the issue of causation and recognize, with Lambsdorff, that it is a central concern for cross-country research. They study the issue econometrically and claim that the dominant direction of causation is from weak governance, including high corruption, to low growth. Under this view, which has theoretical as well as empirical support, the prescriptions of economists who urge countries to get their macroeconomic incentives right will not work unless the state has institutions capable of putting such policies into effect. Even if there is also a feedback mechanism from low growth to high corruption and from high growth to low corruption, the growth process cannot begin unless reasonably well-functioning institutions are in place.

The third chapter in this section, by Christopher Woodruff, asks whether the TI and World Bank indices based on perceptions might actually be superior to harder measures of bureaucratic inefficiency and the rule of law.
Woodruff considers the difference between formal, legal institutions such as constitutional provisions, electoral rules and formal judicial independence, on the one hand, and measures of how such institutions work in practice from TI and the World Bank, on the other. He points to the frequent gaps between the law on the books and the law as it functions in real life. In many countries, the relationship between the formal rules and reality may be so tenuous that perceptions may be superior to efforts either to examine the laws on the books or to document the red tape involved in particular transactions. Woodruff’s arguments provide additional support for the use of perception-based indices.

In spite of its value in capturing broad empirical regularities, there are distinct limits to cross-country research. It assumes enough regularity in the phenomenon so that a single statistical model can cover the world. The relation between macro variables and corruption will indeed distinguish between very corrupt and very clean states. In the former, state failure is so pronounced that pro-growth policies cannot be carried out by the government. In the latter, the state is competent, and citizens support high taxes because their funds are used effectively to provide public services. But most countries fall in the middle range, and here the connection is less clear. Countries with similar rankings have very different business climates because corruption is concentrated in different sectors. Indices based on the perceptions of business investors may miss corruption experienced by ordinary people. Thus it is not surprising that in the middle of the distribution there is a wide range of possible links between corruption and growth. This fact counsels an emphasis on research at the sector and country levels.

The key issue is not the size of the payoffs or the amount of funds embezzled. It is, instead, their impact on the efficiency and fairness of state actions. Cross-country statistical work can point to a general set of situations where corrupt incentives are high. However, the diversity of corrupt incentives suggests that cross-country work, however valuable in raising consciousness about the problem, cannot be used to design reasonable responses. For the very worst cases the only hope may be a thorough overhaul of the state apparatus, but for the large number of countries in the middle that is not a viable or desirable option. Research needs to focus more carefully on where corruption is particularly harmful and on the structural relationships between particular institutions and corruption that undermines government functions. The remainder of the Handbook focuses on such research.

*Corruption and institutional structure*

In cross-country research, the actual mechanism that connects institutional measures to economic outcomes is a black box that can be theorized but
not tested. The chapters in Part II take one step inside the black box. They ask whether the specific nature of corrupt deals can help explain their impact and whether the levels and types of corruption can be explained by a country’s institutional structure.

The first issue is discussed by Ray Fisman and Roberta Gatti. They demonstrate that when firms are uncertain about the bribe payment needed to get around a government-imposed cost, corruption is more costly to them than in more stable, predictable environments. This analysis ignores the possible social benefits of the rule that has been violated, but it does demonstrate that if a program is going to be corrupted, then it is better to minimize the transaction costs of the deal. This is, of course, not a defense of corruption, but it does help to explain the cross-country variation.

The remaining chapters consider the relationship between different institutional structures and corruption. The associations are often quite strong, but the causal arrow may go both ways – from institutions to corruption and from corruption to institutional choice.

Jana Kunicová reviews work that links constitutional structures and voting rules to reported perceptions of corruption. With more and more countries becoming democracies, at least in the nominal sense of having elections and alternations in power, Kunicová asks whether variations in the democratic framework matter. She makes an important distinction between corruption that enriches elected officials, on the one hand, and legal public spending programs with regionally concentrated benefits – ‘pork barrel’ politics – on the other. Only the former falls under her definition of corruption. She shows that presidential systems are more corrupt, on balance, than parliamentary democracies and that proportional representation systems are more corrupt than first-past-the-post systems. The worst systems combine strong presidents with proportional representation under which a powerful executive can negotiate with a few powerful party leaders to share the spoils of office.

Pranab Bardhan and Dilip Mookherjee analyze the complex links between decentralized government, corruption and government accountability. One simple view is that decentralization will limit corruption by making it easier for ordinary people to monitor government officials. However, some work, including the research summarized by Kunicová, finds that federal states are more corrupt than unitary ones. Moreover, there are conceptual reasons to doubt a strong connection between decentralized government and integrity. Smaller polities may contain more uniform groups of people, and politics may be less competitive, leading to increased corruption. Local elites may seize control of a town or village government but be unable to achieve the same goal in larger polities because of the greater collective action problems. A local kleptocracy may
be especially difficult to control in rural areas in poor countries where wealthy landlords exercise political power. Bardhan and Mookherjee provide a nuanced discussion of these issues, drawing on the experience of many countries as well as their own past work on India.

Ajit Mishra examines how incentive systems and monitoring procedures can limit or encourage corruption. He is particularly interested in alternative ways of organizing bureaucratic hierarchies to achieve effective deterrence. Governments provide services or impose costs on citizens and use lower-level officials to implement these programs. These officials generally have some discretion and have better information about the clients’ characteristics than their superiors. In such cases, corrupt payments by clients to low-level bureaucrats can undermine the purposes of public programs. Payoffs can permit the payer to violate the law. Alternatively, the bureaucrat can extort money from a law-abiding person in return for not claiming that a violation has occurred. Monitoring of agents combined with rewards and punishments can limit payoffs, but corruption can seldom be completely eliminated. There are many ways to organize control processes, and Mishra evaluates some of the options.

If the probability of detection is a choice variable for officials, he shows that having a separate monitoring track is generally superior to a single hierarchy. Of course, if the whole hierarchy is corrupt, an internal promotion system, ostensibly designed to reward effective agents, can become a source of payoffs itself. Then even public officials who would be honest under most circumstances may either turn to corruption to maintain their position in the bureaucracy or become passive observers of the dysfunctional system. Mishra shows when and how incentive schemes and organizational structure can be combined to fight corruption, but he is sensitive to the real-world difficulties. Sometimes corruption can only be fought by changing the types of services delivered or by limiting discretion and reducing information requirements.

Finally Mushtaq Khan critiques the conventional economic analysis of corruption as applied to poor countries. The standard analysis assumes that corruption interferes with the enforcement of clear legal rules. But state interventions often have no legal basis in very poor and highly corrupt countries. Corruption is not designed to get around the rules; rather it determines the behavior of officials and political leaders in their absence. Khan argues that policy prescriptions taken from the experience of countries with strong laws and institutions are inappropriate for highly corrupt poor countries.

Corruption in weak states with low levels of per capita income is the result of two basic problems facing politicians. First, it is difficult or impossible to collect sufficient taxes to cover the demands on the state. Not only
is national income small, but also a smaller share of income can be taxed than in richer countries. At the same time, internal political conflict is often very high. Second, the productive capitalist sector is relatively small, and most people do not believe that their own well-being is tied to its success. Thus the redistributive demands expressed through populist politics and clientelism are likely to be more open-ended and unchecked than in countries with larger capitalist market sectors. Khan claims that, given these realities, political leaders try to achieve stability by transferring resources to the most powerful or dangerous factions through patron–client networks. This leads to widespread political corruption. These targeted transfers can sometimes produce political stability and hence further economic growth, but this does not happen in most cases. Reforms that promote greater transparency and fiscal accountability will have no impact. Economic growth that provides a larger tax base is necessary for success, but such growth may be held back by the corrupt status quo, and growth is only necessary, not sufficient. Popular pressure for reform is also required.

Khan’s chapter thus ends Part II with an admonition to understand the underlying political and economic forces that produce corruption in different societies. Sometimes economic theory can explain the incidence and impact of corruption, and in such cases incentive-based measures derived from economic analysis can alleviate the problem. Other times, corruption arises from the underlying locus of political power and its interaction with the economic system. In such cases, institutional and incentive-based reforms must be part of a broader reform agenda. The case studies in Part V help clarify the contexts in which economic reform strategies are likely to succeed and those in which a more holistic approach is required.

Corruption in the transition from socialism

Corruption is a pervasive feature of the wide-ranging changes occurring in Central Europe, the former Soviet Union, China and Vietnam. Under socialism, corruption helped overcome some of the rigidities of a planned economy. During the transition, corruption played a different role: it was a response to the uncertainty and institutional weakness of the transitional states, and in China and Vietnam it continues to accompany efforts to liberalize the economy while maintaining Communist Party control. As the transition proceeds, countries have been more or less successful in limiting corruption and in creating well-functioning states and markets. Two chapters explore the link between corruption and regime change.

The first, by Alan Rousso and Franklin Steves, examines corruption trends in Central Europe and the former Soviet Union and links them to anti-corruption policies. They distinguish three policies: integrated anti-corruption programs, efforts to strengthen institutions of governance and
accountability, and the adoption of international anti-corruption conventions. Thus their focus is on explicit policies to limit corruption and increase accountability, not on the structural reform of programs to limit underlying corrupt incentives. They find that corruption levels have fallen in most countries in the region, but that explicit anti-corruption policies had little effect. These results, although preliminary and based on a small sample, present a challenge to the claim that corruption needs to be fought through explicit policies over and above efforts to promote economic growth. The challenge, however, may be less severe than a superficial examination of the results might suggest.

Under pressure from the European Union (EU), countries with prospects for EU membership were most likely to adopt anti-corruption policies. In general, these countries were the ones with the least serious corruption problems in the region. Those where corruption is deeply entrenched did little, probably because those with political power had little interest in reform. But perhaps the laggards did not suffer much from their passivity – even when they are adopted, these policies do not seem to explain why corruption declined. In interpreting Rousso and Steves’s result, it is important to remember that those in the first round for EU accession did much more than adopt pro-growth policies. They also created relatively well-functioning democracies and adopted the EU’s acquis communautaire, a body of law that sets the legal framework for the member states. Thus, the fall in corruption cannot simply be attributed to the countries’ improved economic positions. Rather, these findings suggest that efforts to reform both the democratic character of the state and the way in which it delivers services are likely to be better approaches to corruption control than ones that concentrate on signing anti-corruption conventions and designing anti-corruption strategies that may only express lofty goals. However, the continuing extensive corruption and self-dealing in much of the Former Soviet Union suggest that the problems there cannot be solved either by stand-alone anti-corruption policies or by structural changes emphasizing economic incentives. The implications for policy-oriented research are twofold. In the countries of Central Europe that have joined or will soon join the EU, research can seek to discover how and why corruption declined in particular sectors and to understand the reasons why it remains prevalent in others. Reforms can then be targeted where they will do the most good. In Central Asia and Russia the role of patronage politics and cronyism needs to be better understood and connected to the weakness of democratic institutions. Policies that might, for example, limit corruption in healthcare or the police in Hungary would likely be entirely ineffective in Kazakhstan.

Jens Andvig’s chapter focuses on the two most important countries in the post-socialist region – Russia and China. Andvig is critical of cross-country
work that includes China and Russia as two data points on a par with a multitude of smaller states. He emphasizes the need to understand each country at a deeper level that takes account of history – in particular, the role of Marxism and Maoism – in shaping present-day attitudes.

During the era of central planning, generations were taught to view a broad range of market transactions as ‘corrupt’. Yet suddenly, these transactions have been given the regime’s seal of approval. Andvig suggests that this has resulted in widespread moral confusion, particularly for the older generation. Some go too far and see all quid pro quo deals as legitimate. Others resist the new world of markets and disappearing safety nets and see the widespread growth of the price system as corrupt. Cross-sectional surveys that compare responses from transition countries fail to grapple with the impact of history on present-day attitudes.

Andvig’s focus on China and Russia generates another important question: why is widespread corruption consistent with high growth in China but seems to have retarded growth in Russia? To explain the difference between China and Russia, Andvig stresses the different roles of the Communist Party during the transition. In Russia it surrendered power and became an unimportant opposition party. In China, the Party is still in control and is trying to manage an economic transformation. The rapid collapse of central control in Russia led to widespread corruption and self-dealing as former officials and new capitalists struggled to gain advantage. In China the center has so far maintained control so that corruption, although widespread, is not associated with a breakdown of authority. It remains to be seen how these cases will work themselves out over time, but each provides a rich case for studies of the impact of the past on the present and of the consequences of rapid change on relationships between private and public power.

Surveys and experiments

Part IV asks how businesspeople and ordinary citizens experience and evaluate corruption. Three chapters are based on survey evidence, and one reviews experimental studies. Surveys help to capture the way corruption affects different parts of society and highlight the connections between corruption and government legitimacy. Experiments permit a more controlled assessment of human behavior, but they miss the nuance of real-world situations where subtle interpersonal cues may operate to encourage or discourage payoffs.

Jennifer Hunt concentrates on households’ actual experience with corruption. She tries to solve a pervasive problem with surveys. If people are asked to estimate the levels of corruption in public agencies, their answers are affected by their own experience. A public service may be reported to be
highly corrupt simply because people have more contact with that agency than with an even more corrupt agency that they seldom encounter. Detailed data from Peru permit Hunt to correct for this bias. She calculates the ratio of total bribes paid to usage rates and finds that the judiciary is the most corrupt institution, followed by the police. Forty-two percent of reported bribe revenues were paid to the judiciary, even though it represented only 2 percent of citizen interactions. The source of the problem appears to be the extensive delays in the court system due, in part, to the poor training of judges. Given the importance of the judiciary both in constraining the state and in enforcing private contracts, corruption in that institution may be especially damaging.

Corruption in the police is also troubling. Although the individual payoffs are not large, 37 percent of those who had an interaction ended up paying a bribe, compared with 17 percent for the judiciary and under 5 percent for most other agencies. Of course, the police can impose costs and coerce payoffs more effectively than can other agencies, so it is not surprising that payoffs are more frequent than in other public agencies.

Overall the proportion of interactions that involve bribery is partly a function of client characteristics and partly a reaction to the slow pace of honest service. Both bribe levels and bribery rates are higher when clients are frustrated by slow service. Hunt’s study provides a solid foundation for setting reform priorities if the goal is to limit the impact of corruption on people’s daily lives. If Hunt’s research in Peru is confirmed in other countries, it argues in favor of policy initiatives that target judicial and police corruption and that concentrate on streamlining service provision to limit delays.

Rafael Di Tella and Robert MacCulloch focus on citizens’ perceptions of high-level corruption or state capture rather than on citizens’ day-to-day experience. They argue that those who perceive widespread corruption in a capitalist society are likely to find socialism relatively attractive. Citizens do not view corruption in the way suggested by some economists. They do not think of it as a way for business to get around illegitimate and inefficient state rules and regulations. Instead they view it as a way for business to avoid legitimate laws and to benefit at the expense of ordinary people. The authors show that corruption lowers public perceptions of the productivity of business, and as a result, those who believe that corruption is endemic tend to endorse left-wing solutions.

Di Tella and MacCulloch present a theoretical model of this phenomenon and then use survey data from Latin America to test its implications. They find that those who perceive that corruption is high tend to be on the left of the political spectrum; these people think that the distribution of income is unfair and that privatization has brought few benefits. Citizens do not view
regulations as devices created by officials to collect rents. The policy implication is clear: governments with a free-market agenda must make strenuous efforts to control corruption in business/government relations, and they need to communicate their actions effectively to the electorate.

In contrast with the household surveys discussed in preceding chapters, Tina Søreide reports on the attitudes and practices of firms engaged in international trade and investment. She surveyed businesspeople and embassy representatives from Norway – a country that consistently ranks among the cleanest in cross-country rankings. This permits her to test a commonplace complaint of developing countries; they blame multinational firms for pushing corrupt inducements on reluctant local politicians. Because payoffs require both a payer and a payee, each side must bear some of the blame, but it is useful to see how multinationals and Norwegian embassy staff view the situation. Søreide found that most embassy representatives and firms view corruption as a problem in many low- and middle-income countries. Two-thirds of the firms thought they had lost a contract because of corruption, and one-third had withdrawn from a particular country because of high levels of corruption. In general, they did not believe that tender procedures were adequate to deter corruption; in part, this was because many believed that firms could influence the outcome. As for engaging in corruption themselves, 17 percent admitted to making facilitation payments, and 15 percent thought that payments to agents had probably or likely been used for payoffs. Firms in the telecom/IT, energy and construction industries are most likely to report that corruption is part of the business environment.

Firms were asked how they would respond to corrupt demands. Although most disapproved of corruption, very few would complain about its impact. Many agreed with the statement that ‘corruption is part of the game’, and their silence in the face of corruption was frequently linked to a desire to maintain future business prospects. Politics and the profit motive interact to make corruption an entrenched problem in international business. If, as Di Tella and MacCulloch suggest, such corruption undermines support for capitalism among the general public, the patterns of behavior uncovered by Søreide can have serious consequences over time for the development of well-functioning market economies.

Finally, Klaus Abbink reviews experimental studies. These studies attempt to get around an obvious difficulty of other types of research – actual payoffs are seldom observed outside of explicit sting operations carried out by law enforcement. The experiments summarized in Abbink’s chapter provide an interesting twist on the large body of research on trust games. Under a common lab scenario, payoffs are highest if players completely trust each other, but strict rationality predicts that players will prove
untrustworthy to maximize short-term gains. Experimental results are usually somewhere in the middle. The twist is that in conventional games trust is a desirable trait to be applauded, but in corrupt situations trust permits illegal corrupt deals that are harmful for society. In the experiments the players (mostly university students) exhibit some trust, meaning that they are willing to make payoffs that are destructive of other goals. Players do not take into account the social losses of their actions but are strongly deterred by the possibility of punishment.

One issue of experimental design is whether the payoffs are described as ‘bribes’ or whether the language is kept neutral. In most experiments, there is no explicit mention of bribery. The players are only told about the costs of their actions for others, but their own payments were described in neutral terms. In one experiment, in contrast, subjects were told that the payments constituted bribes. Such framing had little effect on subjects’ behavior. Another experiment suggests the importance of honest high-level officials who create loyalty in their subordinates. Experiments abstract away from the real world in order to get clear-cut results. Policies, however, must be implemented in a messy reality. This suggests carrying out experiments not with students but with people facing corrupt incentives in their daily life. A pilot study that uses nursing students in Ethiopia as subjects suggests the potential of this approach. So far, the experimental results are fragmentary. More work is needed to refine experimental designs, explore framing effects, and connect this work to other types of research based on surveys, cross-country work and detailed sectoral analyzes.

**Sectoral anti-corruption policies**

How then should anti-corruption policies be designed? Recall that the goal is not to minimize bribes but to limit the overall social costs of corruption, taking into account the costs of anti-corruption programs themselves. The cross-country results using perception indices can raise consciousness, but they do not suggest concrete responses. Instead, one needs to examine the benefits and costs of particular policies directed toward the solution of particular problems in particular countries.

Several of the chapters summarized above have policy implications. For example, Hunt’s results imply that Peru should emphasize programs to improve the integrity of the judiciary and the police and to speed up the delivery of public services. Her methods could be applied elsewhere to set priorities. Di Tella and MacCulloch, and Søreide point to the need to target corruption in multinational business deals. Roussou and Steves conclude that anti-corruption programs that are directed at too high a level of generality will not have much impact. A number of chapters highlight the role of institutional structure in setting conditions under which corruption can flourish.
The final part takes a more microscopic view and collects studies that analyze particular sectors. They discuss government service delivery, tax collection, public works, customs and prescription drugs. Speaking broadly, these chapters suggest the importance of melding technocratic reform based on economic reasoning with a sophisticated understanding of the politics of systems that permit corruption to persist over time.

Ritva Reinikka and Jakob Svensson deal with the connection between accountability and corruption in the delivery of public services. They argue that inexpensive programs to deliver information to program beneficiaries can help undermine corrupt systems. They illustrate this point with a study of primary school financing in Uganda. In earlier work, they documented the severe leakage of central government funds as it was passed down to the grassroots – one dollar of central government funds only produced $0.13 in budget for local schools. This finding galvanized public opinion, and central government officials took action. They introduced a simple, information-based strategy combined with better monitoring from the center. After the reform’s introduction, one dollar expended by the center produced $0.80 of local school funds, and school enrollment rose. Nearly 75 percent of the improvement can be explained by a newspaper campaign that allowed parents to know how much money their children’s schools were supposed to obtain.

An information strategy cannot be effective on its own. In Uganda, parent-teacher groups at the village level used the information to monitor school spending. In other countries, more costly and complex interventions might be necessary. Even in Uganda, education may be a special case because it is a service used by school-age children on a daily basis, unlike, say, healthcare, where demand is more episodic, and sick and injured users are vulnerable to exploitation. Different villages also varied in their ability to obtain funds for their schools. Schools in better-off communities experienced less diversion of funds than poorer areas, presumably because parents were better organized and more assertive in the wealthier areas.

Where did the money go? Reinikka and Svensson suggest that the funds were diverted into patronage politics. Consistent with Khan’s more general argument, the money was used to maintain the power of the local and regional leaders of the National Resistance Movement. After the reform, these politicians needed alternative sources of funds. Research should seek to discover what those were. Are other programmatic funds now being diverted to patronage?

Ugandan schools provide a ‘best’-case scenario. Conditions were very bad ex ante, and once research revealed the shortfall, a centralized information provision policy, combined with better enforcement, made a big difference. This reform does not answer the question of how much
a country ought to spend on education, but it suggests that, with the reform, education spending will be more productive. It also illustrates how surveys that track public expenditures at two points (in the center and at the local level) can be used to uncover missing funds, raise public awareness, and spur reform even in a situation where the diversion of funds is due to political pressures to provide patronage. What began as a pure data-gathering enterprise developed into an effective reform tool in an otherwise inhospitable political environment.

Miriam Golden and Lucio Picci study public works in Italy and develop a method by which central governments can measure the extent of corruption and waste in different regions. They combine measures of the physical public capital stock in the Italian regions with measures of historical costs to produce estimates of the relative efficiency of public spending throughout Italy. Building on research that finds that corruption and waste go together, they assume that corrupt officials encourage wasteful projects as a way of generating rents. The physical data cover a range of government capital investments in 1997, including roads, railroads, hospital beds and number of school classrooms, combined into an index that is expressed as a ratio to the national average. Overall, the physical index favors the northern part of the country, and the financial index favors the south. The ratio of the two provides a rough measure of the relative levels of corruption and inefficiency.

Golden and Picci then tally the proportion of deputies charged with malfeasance in each region under the nationwide corruption investigations in Italy. The two measures are correlated. Regions with unproductive public spending tend to have more than their share of deputies accused of corruption. They conclude that political corruption is associated with waste and kickbacks in public contracts. In some regions politicians are much more likely to earn kickbacks and bribes than in others, and some of those gains are likely to be hidden inside the budgets for public works. If the political forces supporting corruption are strong, reform has to go beyond moves to introduce more competitive bidding and more central government oversight. As also suggested in Kunicová’s chapter, reform may require changes in fundamental political structures and in the incentives facing elected officials.

The next two chapters examine reform efforts that target tax collection and the customs service. Odd-Helge Fjeldstad analyzes an effort to reform tax collection in Uganda through the creation of the Ugandan Revenue Authority (URA). His report complements studies of similar efforts in Latin America and Africa. The reform created a semi-autonomous agency with leaders of known integrity. The aim was to limit political interference and to get away from the constraints of the civil service system. In most cases
reforms initially produced gains in revenue collection and falls in corruption. But as with many initiatives, the gains could not be sustained over time.

The URA conforms to this pattern. After marked success in the first years after its creation in 1991, revenue is now falling as a share of GDP, and corruption is believed to be pervasive. Operating in a politically charged atmosphere, reformers struggled to create and sustain an independent agency outside of politics. One way to maintain independence is to use the influence of organizations or individuals outside of the country such as the World Bank, and this was an important aspect at the founding of the URA. Uganda also employed expatriate staff to maintain professionalism and integrity and to keep the URA separate from tribal and party politics. However, conflicts arose between the URA and the Ministry of Finance (MoF), leading to 1998 legislation that increased the influence of the MoF. This change increased the possibility of political influence even though the MoF claimed that it was only seeking to improve the expertise of the board.

Fjeldstad argues that the relatively high pay and generous bonuses paid to the staff were ineffective in deterring corruption. Apparently, employment in the relatively well-paying URA escalated workers' obligations to provide financial support for their extended families. Merely to stand still, they had to take bribes to fulfill their family responsibilities. Political interference and patronage also undermined reform goals. The tax law was complex and unclear and left room for widespread discretion. This encouraged people to use connections to get special treatment. A general belief that the system was corrupt and politicized reinforced cynical attitudes toward the payment of taxes, creating a vicious cycle. The deeply intertwined nature of tax collection and politics suggests that reform cannot succeed without strong leadership inside the country. Outsiders can help support insiders but cannot substitute for them. Reformers need to understand the underlying political dynamics that can sabotage proposals that otherwise seem consistent with principles of good public administration.

To avoid these political dynamics, it is sometimes possible to turn over an aspect of government operation to an organization located entirely outside the country. Dean Yang’s chapter examines the most prominent real-world example – private pre-shipment inspection (PSI). PSI firms value imported goods before they leave their port of origin and then earn a fraction of the value of the imports. In general, the PSI firm receives about 1–2 percent of the value of imports inspected plus a minimum charge per shipment. The actual duties are collected by customs officials in the importing country on the basis of the information supplied by the PSI service. More than 50 developing countries have hired PSIs over the last two decades. At the aggregate level, these programs appear successful and cost effective. Countries implementing PSI programs experience large increases
in the growth rate of import duties. On average, import duties increase by 15–30 percentage points. Additional evidence suggests that reductions in corruption are the cause of these increases. PSI programs are accompanied by declines in underinvoicing and in misreporting of goods classifications in customs. PSI appears to be cost effective. Improvements in import duties in the first five years after program implementation were 2–3 times larger than program costs.

But success is not guaranteed, and the failures shed light on the conditions under which such programs are likely to succeed. Yang focuses on two countries: the Philippines and Colombia. He finds that when the increase in enforcement is only partial – in that PSI only addresses a subset of potential methods of avoiding import duties – then there can be substantial displacement to alternative methods.

Yang’s findings suggest broader lessons for anti-corruption efforts. In PSI programs, foreign inspectors provide additional information to higher levels of government while duty collection and enforcement remains in the hands of lower-level bureaucrats. As Mishra stresses, information is a key constraint on anti-corruption enforcers, and policies that find innovative ways to alleviate information constraints can have large returns in terms of reducing corruption. Private firms can generate information for anti-corruption efforts, but to be successful, anti-corruption reforms should be ‘broad’ in the sense of encompassing a wide range of possible loci of illegal activity. Otherwise, displacement to alternative methods can negate the original goals of the reform. Of course, it is also important that the PSI firms and their employees not be corruptible themselves. Some have alleged that PSI firms have paid bribes to obtain contracts over their competitors, and this behavior might raise the costs imposed on contracting countries even if the service itself is provided honestly.

The final chapter by Patrick Meagher studies the incentives for corruption in the selection and procurement of prescription drugs in Bulgaria. Basic structural features of the Bulgarian system virtually ensure widespread corruption. The vulnerabilities reflect problems likely to arise anywhere where political and market pressures bump up against technical rules meant to guide choices. His study highlights the importance of clear procedures and effective oversight in the design of public programs with large financial stakes. He demonstrates the difficulties facing emerging economies with untested democratic structures, limited resources and embedded conflicts of interest. The fundamental problems are not technical, but political.

Clearly, the financial stakes were high when pharmaceutical companies sought inclusion on the list of approved drugs and sought to exclude competitors. As in many emerging economies, conflicts of interest were prevalent.
Politicians had family interests in drug companies, and the institution approving drugs was not independent of these politicians. Of course, these conflicts of interest are not exogenous – the fact that the process is politicized gives drug companies an incentive to form alliances with those in political power. No outright bribes may be paid when the list is set. Rather, decisions are made out of the public eye that benefit both favored firms and their political allies. In addition to the passage of conflict-of-interest laws, Meagher recommends two solutions. First, the drug control agency should be genuinely independent of politics and should introduce more transparency and public justification into its procedures. Second, international standards, such as the World Health Organization’s Essential Drugs List, should be used as a key reference point. Any proposal to deviate from that list should require the drug company to bear the burden of proof through an open process of justification before the agency.

3. Conclusion
This Handbook displays the richness and complexity of ongoing research on corruption, and demonstrates the value of disaggregating the problem to further understanding and to promote effective policy responses. Common patterns recur throughout the world and across sectors, so that lessons learned in one area have relevance elsewhere. But it is also essential to examine the structure of particular systems or sectors. The underlying economic incentives for corruption in such areas as public works, the police, the judiciary, tax and customs collection, and procurement are common throughout the world. Yet the incidence and severity of the problem vary widely. Effective policy cannot just concentrate on catching and punishing ‘rotten apples’. Much has been made of the importance of moral leadership from the top, but this is not sufficient. Too much moralizing risks degenerating into empty rhetoric – or worse, witch hunts. Policy must address the underlying conditions that create corrupt incentives, or it will have no long-lasting effects. The sorts of structural and incentive-based policy responses that are outlined here – both the successes and the failures – can guide governments that are genuinely committed to reform.

Yet, the case studies suggest a word of caution. Clever technical solutions, based on economic incentives, may not be enough. If corruption is one of the pillars supporting a political system, it cannot be substantially reduced unless an alternative source of revenue replaces it. Powerful groups that lose one source of patronage will search for another vulnerable sector. Strong moral leadership is necessary but not sufficient. Tough political and policy choices need to be faced squarely. It is little wonder that effective and long-lasting corruption control is a rare and precious achievement. But it is not beyond the power of determined and intelligent political reformers.
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