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# Anticorruption in Transition 2

Corruption in  
Enterprise-State Interactions  
in Europe and Central Asia 1999–2002





# **Anticorruption in Transition 2**

## **Corruption in Enterprise-State Interactions in Europe and Central Asia 1999–2002**

**Cheryl Gray  
Joel Hellman  
Randi Ryterman**



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1818 H Street, NW  
Washington, DC 20433  
Telephone 202-473-1000  
Internet [www.worldbank.org](http://www.worldbank.org)  
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The report is based largely on an analysis of the EBRD-World Bank Business Environment and Enterprise Performance Survey (BEEPS), a long-term collaborative project between the EBRD and the World Bank to monitor the investment climate, governance and firm performance across all the transition countries. The BEEPS project has been directed jointly by Steven Fries (EBRD) and Joel Hellman (ECSPE). We are grateful to the Office of the Chief Economist of the EBRD for their continued partnership, as well as to the Office of the Chief Economist, ECA, and the Government of Japan for financial support of the BEEPS

project. Initial analysis of portions of the BEEPS data was published in Chapter 2 of the *EBRD Transition Report 2002*.

Portions of this report and associated research were presented at the ECA Chief Economist's Seminar Series, the ECA-PREM annual retreat, the 13<sup>th</sup> Annual International Anticorruption Conference (Seoul, South Korea), the Institute of Economics (Budapest, Hungary), and the Project on Honesty and Trust at the Collegium Budapest (Hungary). The team is grateful for the useful comments and suggestions provided by the participants at these presentations.

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Finally, we would like to express our gratitude to the 10,000 or so enterprise managers in 27 transition countries who have generously given their time to participate in the two rounds of the BEEPS in 1999 and 2002.



## **Acronyms and Abbreviations**

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ACT	Anticorruption in Transition: A Contribution to the Policy Debate
ACT2	Anticorruption in Transition 2: Corruption in Enterprise-State Interactions in Europe and Central Asia 1999–2002
BEEPS	Business Environment and Enterprise Performance Survey
BiH	Bosnia and Herzegovina
CEE	Central and Eastern Europe
CIS	Commonwealth of Independent States
CPIA	Country Policy and Institutional Assessment
EBRD	European Bank for Reconstruction and Development
ECA	Europe and Central Asia
EU	European Union
FYROM	former Yugoslav Republic of Macedonia
GDP	Gross Domestic Product
NGOs	Non-governmental Organizations
SAM	Serbia and Montenegro
SEE	South Eastern Europe

## Foreword

Poverty remains a major problem in much of the world, and there has been growing evidence over the past two decades of the importance of good governance to poverty reduction. Governments that are efficient, effective, and accountable design better public policies and provide better public services. Controlling corruption is an essential part of good governance, and it is an enormous challenge for governments all around the world.

For nearly a decade the World Bank has worked intensively with many countries of Central and Eastern Europe and the former Soviet Union to strengthen governance and address the problem of corruption. In addition to providing technical assistance and support for policy and institutional reforms in many countries, the Bank has sought to deepen our understanding of this phenomenon that was all around us yet so poorly understood. A special report, prepared for the occasion of the Bank-Fund Annual Meetings in Prague in September 2000, sought to help bridge this knowledge gap. *Anticorruption in Transition: A Contribution to the Policy Debate* represented the first comprehensive study of corruption faced by the business community in the transition countries of Central and Eastern Europe and the former Soviet Union.

While the first report focused on the levels, causes and consequences of corruption, this report adds a dynamic dimension, helping to clarify the direction, magnitude and drivers of change in corruption in transition countries. While the overall trends from 1999 to 2002 are complex, the analysis points to some encouraging signs that the magnitude and negative impact that corruption exerts on businesses may be declining in many countries in the region. The longer-term sustainability of recent improvements is not certain, however, and the challenges ahead remain formidable. Many factors influence the extent and nature of corruption. This report focuses on corruption in interactions between businesses and government and affirms that economic and institutional reforms help to reduce such corruption over time. Corruption in public service delivery at the household level will be explored in future work. The World Bank remains deeply committed to this agenda and will continue to work with the countries in the region to improve governance and strengthen public institutions in support of poverty reduction and economic growth.

Shigeo Katsu, Vice-President  
Europe and Central Asia Region



## Executive Summary

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In September 2000, the World Bank launched a report, *Anticorruption in Transition: A Contribution to the Policy Debate (ACT)*, at the Bank-Fund Annual Meetings in Prague. The report was the first comprehensive study of corruption faced by the business community in the transition countries of Central and Eastern Europe and the former Soviet Union. It was based on an extensive survey of firms, the “EBRD-World Bank Business Environment and Enterprise Performance Survey” (BEEPS), carried out in 1999 in collaboration with the European Bank for Reconstruction and Development (EBRD). The report demonstrated the variation not only in the level of business-related corruption across the transition countries but also in the different forms and patterns of corruption that characterized different groups of countries. By unbundling the concept of corruption, the report offered a new approach towards tailoring anticorruption strategies to the specific contours of the problem in each country.

The current report, *Anticorruption in Transition 2: Corruption in Enterprise-State Interactions 1999–2002 (ACT2)*, is the second in what is intended to become a series of reports monitoring progress in combat-

ing corruption in the Europe and Central Asia (ECA) region. It is based on the results of a second series of firm-level surveys in 2002—BEEPS2—also carried out in collaboration with EBRD. While ACT laid out a framework for analysis and data on corruption in transition economies, ACT2 provides an in-depth measure of trends in corruption over time and attempts to explain what is driving patterns of corruption in the region. The BEEPS data provide several indicators of corruption that can be used to measure patterns and trends. These include the frequency of various types of bribes (both bribes paid for regular administrative dealings with the state and bribes paid to influence laws and regulations—i.e., “state capture”), the share of annual revenues paid in bribes (the “bribe tax”), and managers’ perceptions of the extent to which corruption is an obstacle to business and capture has an impact on the firm. Each indicator provides different and complementary information. While most indicators are designed to measure actual levels rather than subjective perceptions of corruption, in practice there is inevitably some intermingling of the two; in any case, both objective reality and subjective perceptions are important in shaping the business climate and in motivating

or deterring investment and growth. The sample of firms surveyed in BEEPS was stratified to ensure a significant number of firms in each category of interest; thus it is important to keep in mind that comparisons of the levels of different forms of corruption across countries refer to the corruption experienced by that broad grouping of firm type.

The analysis presents mixed but somewhat encouraging results concerning trends in corruption in the transition economies of Central and Eastern Europe (CEE) and the Commonwealth of Independent States (CIS). On the positive side, sample firms in at least 10 of the 24 countries that were covered in both BEEPS viewed corruption as less of an obstacle to business in 2002 than in 1999. Significant declines in the perception of corruption as an obstacle occurred in some of the countries where 1999 levels were high, including Azerbaijan, Croatia, Kazakhstan, the Kyrgyz Republic, Lithuania, and Russia. In contrast, ratings of corruption as an obstacle stayed relatively constant at high levels in Bosnia and Herzegovina, Bulgaria, FYR Macedonia, Georgia, Romania, the Slovak Republic, and Ukraine. The only countries where sample firms reported a significant increase in the perception of corruption as an obstacle to business were Belarus and Poland, both of which ranked in the lower half of transition countries in 1999. These modestly favorable results do not mean that corruption is not still a major problem in many settings. It continued to rank among the top third of business ob-

stacles in over half of the countries, most notably in the Balkans and the Caucasus. Perhaps not surprisingly, in the most advanced European Union (EU) accession countries (where levels of corruption are relatively low) and in some of the least reform-minded countries of the region (where tight state controls remain and private businesses face many other restrictions), corruption was seen as less problematic than most of the other obstacles that firms face in the investment climate.

Specific trends in the frequency of administrative corruption were more mixed than general perceptions of corruption as an obstacle to business. Overall, sample firms in at least 9 of the 24 countries surveyed in both BEEPS reported a significant reduction in the overall frequency of bribes from 1999 to 2002. The reduction looks much smaller, however, when one studies the average frequency of bribes for specific public services; bribes paid in dealings with courts and public service providers appear to have declined in many settings, while bribes appear to have increased in tax collection and public procurement. The highest bribe frequencies are reported by sample firms in the CIS and South Eastern Europe (SEE). Firms in the EU accession countries (other than the Slovak Republic) report lower bribe frequencies, which is consistent with the lower perceptions by managers of corruption as an obstacle to business.

Findings concerning the cost of administrative corruption—the “bribe tax”—were also mixed. The relative rankings of coun-

tries on the bribe tax indicator are similar to their rankings on the frequency measure, with firms in CIS and SEE countries indicating higher bribe taxes than firms in CEE and the Baltics. There are a few notable exceptions to this similarity among indicators, however. In particular, Russia appears higher on the frequency measure but more moderate on the bribe tax (suggesting more widespread but less costly “petty corruption”), while Azerbaijan appears higher on the bribe tax but more moderate on frequency (suggesting more concentrated bribery).

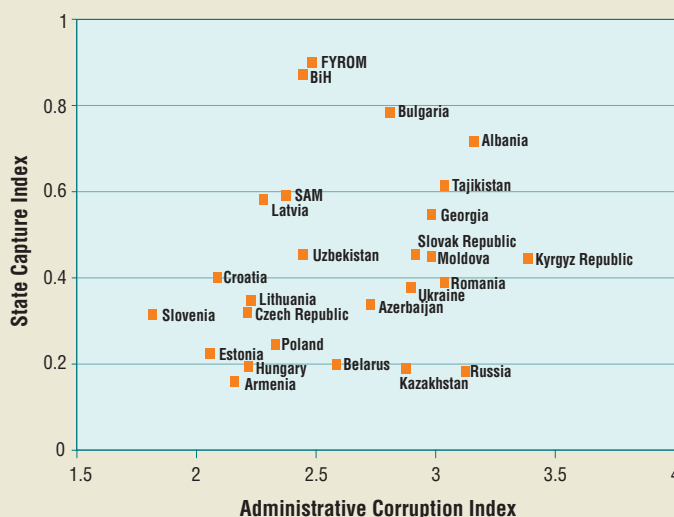
The BEEPS results also point to the significant impact of state capture on sample firms in many countries of the region, with particularly high impacts in the countries of

South Eastern Europe. Among public institutions, the impact of capture appears most significant in commercial courts and least significant in central banks, with parliaments, political parties, and criminal courts in between. The number of firms directly engaging in capture behavior increased in many countries from 1999 to 2002, in some cases very significantly. It appears that state capture is changing from a strategy of political influence practiced only by a small share of firms to a more widespread practice, although this does not necessarily translate into greater impact of capture on the business environment.

Figure E1.1 below illustrates the relative positions of transition countries along the two dimensions of administrative cor-

FIGURE E1.1

### Two Dimensions of Corruption: Administrative Corruption and State Capture



ruption and state capture in 2002, with administrative corruption measured by the frequency of bribery<sup>1</sup> and state capture measured by its perceived effect on sample firms. SEE countries tend to have relatively high levels of state capture but relatively lower levels of administrative corruption (except in the case of Albania, which is relatively high on both dimensions), while many CIS countries have relatively higher levels of administrative corruption. The countries of CEE and the Baltics and Armenia have relatively moderate levels of corruption on both dimensions. It is important to understand the limitations and caveats to these measures, however, which are described in detail in the report.

After describing the complex patterns and trends in corruption in transition countries, the report tries to examine the reasons behind these patterns and trends, exploring in particular the impact of five factors: specific firm characteristics, the policy and institutional setting, the optimism or pessimism of the managers surveyed, recent economic growth rates, and government tenure. First, the analysis points to the strong influence of firm characteristics on bribery. Private firms pay a larger share of their revenues in bribes, pay all types of bribes more often, and are more affected by all types of corruption than state-owned firms. In addition, smaller firms tend to pay more bribes and to pay bribes more often than larger ones, and younger firms pay more bribes and pay bribes more often than older ones, although smaller and younger firms do not appear to be quite

as disadvantaged in 2002 as they were in 1999. Foreign firms appear to pay most types of bribes less frequently, but they are equally likely to engage in state capture. Firms in large cities paid more bribes as a share of their revenues than firms in small towns and villages in 1999 but not in 2002—an indicator perhaps that as decentralization proceeds in many countries the locus of corruption may be shifting downward to the lower level. At the same time, firms located in large cities appear to bribe more often and, in 2002, to perceive corruption as having more of an effect on business than firms in smaller towns. Manufacturing firms pay more in bribes (particularly for government contracts) but engage in less state capture behavior than firms in other sectors. There is no difference among sectors in firms' perceptions of the systemic effects of state capture and of corruption as an obstacle to business.

Second, the analysis strongly supports the proposition that better public policies and institutions help to reduce corruption over the medium term. Many transition countries have undertaken policy and institutional reforms in recent years that have led to significant changes in the “rules of

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<sup>1</sup> In the analogous figure in *Anticorruption in Transition* (2000), administrative corruption was measured by the bribe tax rather than bribe frequency. Thus the two figures are not directly comparable, although the two measures yield similar results for most countries in 2002.

the game.” These changes and the resulting declines in corruption should in many cases prove sustainable. This is an important finding that underscores the critical importance of an active, credible, and well-implemented reform process.

Third, a novel finding in the analysis is the importance of “managerial optimism” in explaining perceived declines in certain indicators of corruption. This is particularly important given the increasing use of perception surveys to monitor corruption trends. Only part of the decline in perceptions of corruption as an obstacle to business, for example, can be explained by a fall in actual bribes paid. Much of the decline is explained by managers’ perceptions of improvements in the general business environment, and much of this is explained by our measure of managerial optimism rather than firm characteristics, policy and institutional reforms, or changes in the political landscape. Such optimism may reflect not only managers’ personal views, however, but could also capture other unidentified aspects of the business or political environment.

Fourth, although over the long term growth leads to lower corruption, in the short term growth rates seem to have relatively little impact on the various measures of corruption covered in the report. This is not surprising, as institutional development is a long-term task.

Fifth, various measures of government tenure also appear to have relatively little impact. Sample firms in countries where government leadership (i.e., the executive) has held longer tenure in office tend to report somewhat lower corruption, while recent legislative elections appear to have little or no impact. The analysis of political variables is fraught with complexity, however, and few conclusions can be drawn at this stage.

Finally, the analysis confirms that many firms obtain net benefits from bribery, particularly from engaging in state capture. The important role played by managerial optimism and the prevalence of net benefits from corrupt behavior make it somewhat difficult to predict whether improvements in corruption as measured by BEEPS2 can be continued and sustained.





# 1

CHAPTER

## Introduction

In September 2000, the World Bank launched a report, *Anticorruption in Transition: A Contribution to the Policy Debate (ACT)*, at the Bank-Fund Annual Meetings in Prague. The report was one of the first comprehensive studies of corruption faced by the business community in the transition countries of Central and Eastern Europe and the former Soviet Union. Based on extensive surveys of firms carried out in collaboration with the EBRD, the report demonstrated the tremendous variation not only in the level of business-related corruption across the transition countries, but also in the different forms and patterns of corruption that characterized different groups of countries. By unbundling the concept of corruption, the report offered a new approach towards tailoring anticorruption strategies to the specific contours of the problem in each country.

The report placed particular emphasis on explaining the persistence of corruption across the region despite a decade of reforms to reshape the relationship between the state and the economy. Liberalization, privatization, the development of a new legal and regulatory framework, and institutional reforms to strengthen public administration and financial management were all

intended to reduce both the incentives and opportunities to engage in corruption. Although these reforms are clearly essential to transition and longer-term economic growth, the new laws and regulations based on international best practice have often proven difficult to enforce. Technocratic reforms in the public sector have been rebuffed or poorly implemented in some countries. Liberalization and reductions in the size and control of the state have reduced the capacity of bureaucrats to intervene in the economy, but the process of privatization and the massive redistribution of formerly state-owned assets have also opened up new opportunities for corruption. Indeed, the report argued that in the high stakes rewriting of the basic rules of the game of the market economy and the political system, both politicians and firms have strong incentives to use corruption to shape those rules to their own advantage often at high cost to the rest of society. We called this *state capture* and explored how the political economy of transition could lock countries into a low-level equilibrium of poor governance and corruption.

The report was disseminated through workshops and presentations across the Europe and Central Asia region, as well as among donor partners, the media, and aca-

ademic and policy communities. In a number of countries, the findings had a catalytic effect, and the report provided a conceptual framework for a set of problems in the emerging relationship between politics and business that had been widely recognized but still poorly understood. It prompted substantial discussion in countries in Europe and Central Asia and in the development community on how to address the problem of state capture as a means of enabling further institutional reforms and breaking through the apparent political economy trap underlying the persistence of corruption. It also led to a greater recognition of the problems of state capacity that enabled corruption in the implementation of new laws, rules, and regulations—a problem we called *administrative corruption*. The report became an important foundation for the World Bank’s policy dialogue and operational work on combating corruption in the Europe and Central Asia region.

The current report, *Anticorruption in Transition 2: Corruption in Enterprise-State Interactions 1999–2002 (ACT2)*, is the sec-

ond report in what is intended to become a series of reports monitoring progress in combating corruption in transition countries. While ACT laid out a framework for analysis and data on corruption in transition economies, ACT2 provides an in-depth measure of trends in corruption over time across countries and attempts to explain what is driving those changes. Data on corruption for the first report came primarily from the EBRD-World Bank Business Environment and Enterprise Performance Survey (BEEPS), a face-to-face survey of owners and senior managers in over 4000 firms in 24 transition countries (plus Turkey) undertaken in mid-1999. A second round of the BEEPS was implemented in mid-2002 at over 6500 firms in 26 transition countries (plus Turkey). The two rounds of BEEPS provide an opportunity to marshal detailed data about changes in corrupt practices and to investigate the factors driving these changes. Box 1.1 describes the BEEPS2 sample, and Annex 1 has a fuller discussion of the strengths and limitations of BEEPS as a measurement tool.

## Changes in the Economic and Political Environment, 1999–2002

The overall environment in the transition countries has changed significantly since 1999, and these changes provide an important backdrop to any analysis of changes in corruption during the period. The data on corruption presented in

the first report were collected in a period still heavily influenced by the Russian financial crisis in 1998 and its ripple effects across the region. The Russian economy contracted by nearly 5 percent in 1998, and inflation spiked sharply upward in the following year

to nearly 90 percent. Given their strong remaining trade links to Russia, most of the other CIS countries were also hurt. In addition, many countries in the Balkans were just emerging from conflict and crisis at the time.

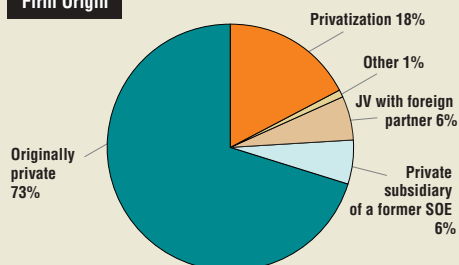
From the first to the second survey, most of the countries in the region enjoyed three years of solid economic growth, political stability, and improved macroeconomic performance. Foreign and domestic investment began to recover in many parts of the re-

### BOX 1.1

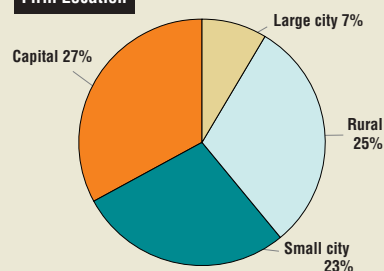
#### The BEEPS2 Sample

The BEEPS2 surveyed over 6500 firms in 26 transition countries (all countries in Central and Eastern Europe and the CIS, except Turkmenistan) in 2002, as compared to about 4000 firms in 24 transition countries (Tajikistan and Serbia and Montenegro (SAM) also excluded) in the original BEEPS in 1999. Turkey was also included in both BEEPS, but it is excluded from the analysis in this report as it is not a transition country. The breakdown of the BEEPS2 sample is shown in the four charts below. The sample was stratified to ensure broad sectoral coverage (with the exception of farms, which were excluded) and sufficient representation of firms of different sizes, ownership, and location. The number of firms interviewed by country range from a low of 170 in some of the smaller countries to a high of over 500 in Poland and Russia.

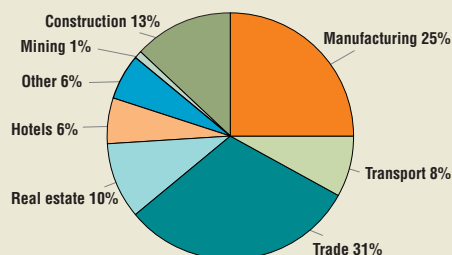
**Firm Origin**



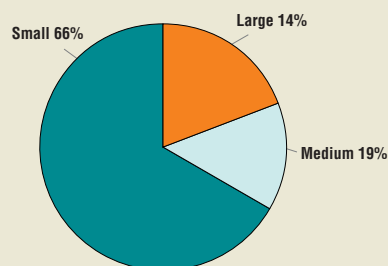
**Firm Location**



**Sector of Operations**



**Size of Firm**



gion. The accession or association process to the EU made strong progress not only for the countries of Central Europe and the Balkans, but also for some of the countries of South Eastern Europe (SEE). As a result, ACT2 analyzes corruption and governance in a very different overall environment, buoyed by a strong upturn in the business cycle, a return to stability after a tumultuous decade of transition, and enhanced optimism about the prospects for the future despite a weakening global economy.

There were other changes as well over the three years after the first report was released. Though the pace of economic reform slowed in many countries in comparison with the first decade of transition, difficult “second-generation” institutional reforms in areas such as banking and financial systems, capital markets, corporate governance, competition policy, and public administration continued to progress in many countries, especially as the accession countries accelerated efforts to comply with the *acquis communautaire*. These reforms were designed to strengthen the regulatory framework governing markets and to enhance the rule of law, thus reducing the discretionary authority of bureaucrats to intervene in the market. At the same time, the pace of large-scale privatizations slowed, reducing some of the opportunities for high-profile grand corruption in the redistribution of formerly state-owned assets.

The increasing global attention to the issue of corruption has also had an impact across the region.<sup>2</sup> Nearly every country in

the region has adopted some type of anti-corruption initiative, ranging from omnibus anticorruption laws and strategies to the creation of anticorruption commissions to the adoption of international anticorruption conventions and agreements. Anticorruption non-governmental organizations (NGOs) have mobilized in most countries in Europe and Central Asia, often launching their own efforts to monitor government performance in combating corruption. Corruption has become a major electoral issue, especially in the more competitive political systems in Central and Eastern Europe. Moreover, international donors have placed increasing emphasis on the need for credible anticorruption efforts as a condition for further assistance.

In sum, the overall environment changed significantly between 1999 and 2002, with improved macroeconomic conditions, greater political stability, gradual progress on second-generation institutional reforms, and increasing adoption of explicit anticorruption strategies. Of course, the extent and quality of these changes has varied considerably among the transition countries, but nearly all of the countries have seen some improvement in one or more of these dimensions.

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<sup>2</sup> This report does not attempt to cite the extensive literature on corruption that has emerged in the past decade. A review of the topic and links to relevant literature and other websites are available at [www.worldbank.org/publicsector/anticorrupt](http://www.worldbank.org/publicsector/anticorrupt).

Though it is often said that combating corruption is a long-term process with changes more appropriately measured on a scale of decades or generations rather than years, the confluence of positive developments in the Europe and Central Asia region might be expected to have some impact on particular dimensions of corruption even over a period of a few years. Macroeconomic stability creates a more predictable environment with fewer distortions and wild fluctuations in inflation rates, exchange rates, and interest rates that create opportunities and incentives for corrupt behavior. Macroeconomic growth increases the ability of the state to collect revenues and leads to an expansion in the middle class. Better revenue collection allows governments to reduce tax burdens, thereby reducing opportunities for corruption, and to more adequately fund public institutions and the civil service, thereby reducing incentives to extract bribes for basic services. A stronger

middle class can feel increasingly empowered to resist or even campaign actively against corruption. Political stability lengthens the time horizons of politicians and bureaucrats, mitigating their short-term interests in extracting as much rent from the economy as possible before they are forced from office. The progress of institutional reforms can bring greater transparency and accountability to public financial management, increasing the risks to public officials of engaging in corruption. Anticorruption measures, though very much dependent on the extent of the government's demonstrated commitment, can affect perceptions of corruption and likely sanctions for corrupt behavior. These relationships have all been established in the existing theoretical and empirical literature on the political economy of corruption. Are we beginning to see the same effects in the Europe and Central Asia region?

## Structure of the Report

This report begins in Chapter 2 with a detailed analysis of the dynamics of corruption reported by surveyed firms in the period covered by the two rounds of the BEEPS, 1999 and 2002. It goes beyond simple measurements of changes in the overall level of corruption to explore corruption in different types of interactions with the state. Recognizing the difficulties of measuring corruption (Box 1.2), it uses several differ-

ent measures of corruption, including perceptions about the impact of corruption as an obstacle to the success of the firm, the frequency of bribes, the financial cost of bribe payments to firms, and the impact of state capture on firms.

Having presented measurements of changes in corruption over time, the report then moves in Chapter 3 to an analysis of factors that may have caused those changes.

As described above, many things could have had an impact on corruption over time, including political changes, macroeconomic trends, structural reforms, anticorruption campaigns, and other factors. To develop a better understanding of what measures are proving effective in the fight against corruption and thus to tailor anticorruption efforts going forward, it is critical to be able to link patterns in corruption to appropriate patterns in the broader environment. Although this is an extremely difficult task, having data on corruption across a large number of coun-

tries over time allows us to begin to test our assumptions in the transition context.

Three important caveats are necessary in interpreting the results of this report. First, though the report focuses on patterns of corruption and changes over time, the three-year period analyzed here represents a very short time frame. It is possible that any trends over such a period are influenced by short-term factors—such as optimism buoyed by an upturn in the business cycle or pessimism rooted in a difficult election season (as discussed further in Chapter 3)—and do

#### BOX 1.2

##### The Difficulties of Measuring Corruption

Although much progress has been made over the last few years in measuring corruption, analysts increasingly recognize how difficult it is to measure the phenomenon adequately, especially over time. In one country, the amount of bribes paid may be declining while other less explicit forms of corruption become more prominent—like compulsory use of consultants with ties to politicians or demands for jobs for a bureaucrat’s relatives. In another country, demands for bribes may be the same, but increased economic growth and greater predictability have led firms to perceive this as less of an obstacle to their business. In still another country, the frequency of demands for bribe payments might go down as corruption becomes more predictable and “efficient,” though the amount of bribes collected might stay the same or even increase. These are difficult issues, both conceptually and empirically, that do not have simple answers. Corruption is a dynamic phenomenon; it develops and mutates, reacts and transforms to changing circumstances. We need to be aware of the limits of measurement. Measurements that focus in on one dimension might miss relevant and even contradictory changes in other dimensions. The more effective that existing measurement efforts are at shedding light on corrupt practices in a society, the more efforts will be made by corrupt members of that society to transform those practices into less visible and measurable forms. As a result, this report goes into considerably more detail than the previous one in measuring different aspects of the practice and patterns of corruption. We avoid presenting any single overall ranking or league table of countries on corruption, choosing instead to provide a more complex picture of many different aspects of corruption. Such a method is more appropriate to develop an understanding of how corruption changes over time.

not reflect underlying changes in the structure of incentives that are likely to be maintained over a longer period. This is especially true given the jarring difference in macroeconomic and political conditions in many countries of the region between the two rounds of the BEEPS. As a result, caution should be used in interpreting the likely sustainability of trends depicted within the period covered by this report (as discussed further in Chapter 4).

Second, given the short time frame, our efforts to attribute changes in corruption to different explanatory factors should be seen at this stage as preliminary, more indicative than conclusive. It is clear that all of the potential explanatory factors discussed above are inter-related and that it will be difficult to establish the relative weight of each in determining the variation in corruption indicators across countries and over time. Such a precise explanatory weighting is not the goal of the report. As the report is examining short-term trends in reform processes that are inherently long term, the analysis will be more focused on developing plausible hypotheses for explaining these trends rather

than conclusively testing alternative arguments.

Finally, the BEEPS provides measures of corruption only from the perspective of the firm in relation to its interactions with the state. Consequently, the data do not capture a wide range of corrupt transactions that occur between public officials, between private sector actors, and between individuals and the state. Single country corruption surveys across the region have demonstrated the continued prominence of corruption in such areas as household access to health services and education. Interactions with the traffic police are also identified as one of the most common forms of corruption in the region. In some transition countries, direct theft or misappropriation of public funds by state officials may be even more important than corruption in the public-private nexus. Such forms of corruption can be analyzed through methods such as direct tracking of public expenditures to “follow the money” as it goes from the state budget to the intended recipients or comparisons of public procurement pricing both within and across countries.





# 2 CHAPTER

## Patterns of Corruption, 1999 and 2002

Citizens in the transition countries in Europe and Central Asia complain often about the widespread prevalence of corruption in their countries and its cost to the economy and the society. Governments across the region have undertaken a myriad of policy and institutional reforms and have promulgated anticorruption strategies in an effort to address the issue. The problem is, of course, not unique to the transition countries, however, but pervades much of the world. Yet there is little solid empirical evidence of how corruption is changing in form and/or magnitude in individual countries or regions and whether the reforms undertaken by governments have a positive, negative, or no impact. BEEPS 1 and 2 provide the first readily comparable and in-depth data across time on corruption faced by the business community in transition countries.

It is important to stress from the outset that one cannot necessarily draw conclusions from the BEEPS data about the levels of corruption experienced by all firms in the country as a whole. The sample of firms selected to be interviewed in each country is not fully representative of the universe of firms in that country; rather, the sample frame was designed (“stratified”)

to ensure a sufficient number of firms in each category of interest. This allows comparisons of the types and levels of corruption encountered by different types of firms, whether small or large, private or state-owned, and new or old. It also allows comparisons of the levels of different forms of corruption across countries *for that particular grouping of firm type*. Thus, for example, the bribes likely to be paid by a new small private firm in one country can be directly compared to the bribes likely to be paid by a new small private firm in another country. When country data are reported below, therefore, they should not be interpreted as an indicator of corruption for the country as a whole but rather as an indicator of the corruption faced by the mix of firms in the BEEPS stratified sample.<sup>3</sup>

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<sup>3</sup> The mix of firms in the stratified sample was similar but not identical in 1999 and 2002. As noted where relevant in subsequent footnotes, there are a few countries where changes in the characteristics of survey firms from 1999 to 2002 may partially explain changing patterns of corruption in that particular country.

## Types of Corruption: State Capture and Administrative Corruption

This chapter draws on a number of different indicators of corruption to explore the complex range of ways in which corruption can occur and can affect the business environment. The quantitative analysis begins by looking at managers' perceptions of the extent to which corruption is an obstacle to business. This variable provides an overall summary picture of the extent and impact of corruption without distinguishing among types of corruption or the many ways that it can affect business, whether directly or indirectly. Following this aggregate analysis, the chapter goes into greater detail by distinguishing between two basic types of corruption, *state capture* and *administrative corruption*, as was done in *Anticorruption in Transition*. Simply stated, state capture refers to the actions of individuals, groups, or firms in both the public and private sectors to influence the *formulation* of laws, regulations, decrees, and other government policies to their own advantage as a result of the illicit and non-transparent provision of private benefits to public officials. Administrative corruption refers to the provision of such benefits to influence how these established rules are *implemented*. Some examples might provide a clearer understanding of these definitions. When an influential oil company provides bribes to legislators to vote for a new law on production-sharing agreements that gives it a monopoly on ownership rights to a country's oil wealth,

that is an example of state capture. When a shop owner pays a bribe to a local health inspector to avoid frequent unauthorized visits or to overlook minor (or even major) infractions of existing regulations, that is an example of administrative corruption.

Both state capture and administrative corruption can cut across different levels of government, since different combinations of policy-making and implementation functions can often be found at both the central and regional/local levels of government. Moreover, both forms of corruption can be initiated either by public officials using their official powers to extract bribes or by businesses using their economic power to extract advantages from the state. Consequently, state capture and administrative corruption do not map easily into the more familiar distinction of grand versus petty corruption. All instances of state capture need not be "grand," since local level officials often have the capacity to issue regulations and decrees that shape the local business environment, in many cases in *de facto* if not *de jure* breach of national legislation. Similarly, all instances of administrative corruption cannot be considered "petty," as discretionary exemptions in the implementation of existing laws can be issued at all levels of government and may involve very substantial payments to highly placed officials.

The key difference between state capture and administrative corruption is neither who extracts the rents from the corrupt trans-

action nor how highly placed is the official who receives the bribe, but rather the nature of the political relationship underlying each form of corruption. State capture is rooted in the extent of competition, participation, and transparency in the state's policymaking and legislative processes. It thrives where economic power is highly concentrated, forms of collective interest representation beyond the firm remain underdeveloped, and the market for political influence is thus monopolized by dominant firms. Administrative corruption is rooted in the discretion of public officials to grant selective exemptions, to ration the delivery of public services, and to discriminate in the application of rules and regulations. Capture is a function of political influence, while administrative corruption is a function of bureaucratic discretion.

These forms of corruption also have different types of impacts on the economy and society in a country. State capture tends to undermine competition by restricting market entry and distributing preferences to influential incumbents. Administrative corruption weakens the rule of law by undermining the state's capacity to implement laws and regulations as well as the public's expectations that such rules will be consistently and im-

partially applied. The negative effects of state capture are institutionalized into the basic rules of the game creating and regulating the market economy, thus fundamentally distorting its development. The negative effects of administrative corruption lead to a weakening of property rights with serious consequences for investment, growth, and equity.

Though these forms of corruption are not unique to transition countries, they have been exacerbated by the simultaneity of the reforms necessitated by the transition: redistributing the bulk of state assets, redefining the role of the state, developing a system of political competition, and establishing the key laws and institutions of a market economy. In the face of such challenges, few transition countries have been able to define clear boundaries and effective forms of intermediation between the state and the private sector. The weak capacity of the state to delineate and enforce constraints on bureaucratic discretion creates fertile ground for administrative corruption. At the same time, the largely unregulated market for political influence in which such issues as lobbying, campaign financing, control over the media, and conflict of interest have only just begun to come onto the agenda is a very conducive environment for state capture.

## Corruption as an Obstacle to Business

During the first decade of transition, corruption was routinely cited as one of the most serious problems in the investment

climate across most countries of the region, particularly in the CIS countries. To assess how changes in the extent of corruption in

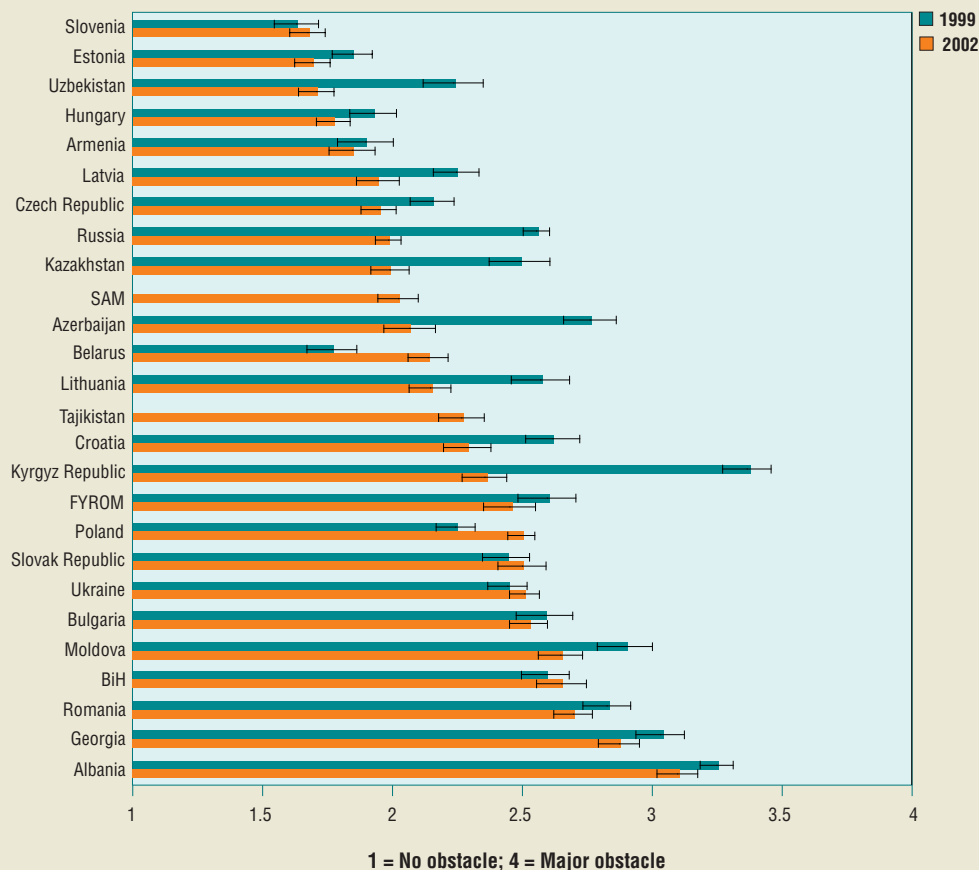
recent years have affected the investment climate, we need to examine the impact of corruption over time relative to the other obstacles that firms face. The BEEPS asks firms about a broad range of obstacles that they encounter in their business operations, including such issues as macroeconomic instability, business regulation, tax levels and tax administration, access to financing, the

quality of public infrastructure, the strength of the rule of law, as well as corruption. In each area, firms can rate, on a scale of 1 (no obstacle) to 4 (major obstacle), the extent to which the specific issue poses an obstacle to their business.

Figure 2.1 shows managers' perceptions of the extent to which corruption was an obstacle to business in 1999 and 2002, along

**FIGURE 2.1**

**Ratings by Sample Firms of Corruption as an Obstacle by Country, 1999 and 2002**



this 1 to 4 scale. The bars show the mean of managers' answers, by country, and the thin lines extending from each bar represent the standard error of the estimate.<sup>4</sup> Average ratings by sub-regional groupings are shown in Figure 2.2.<sup>5</sup> In general, corruption appears to be perceived as most problematic in South Eastern Europe (SEE) and the CIS. Sample firms in almost all of the SEE countries surveyed—including Albania, Bosnia and Herzegovina (BiH), Bulgaria, Croatia, FYR Macedonia (FYROM), and Romania—rate corruption relatively highly, as do those in several countries in the CIS (most notably

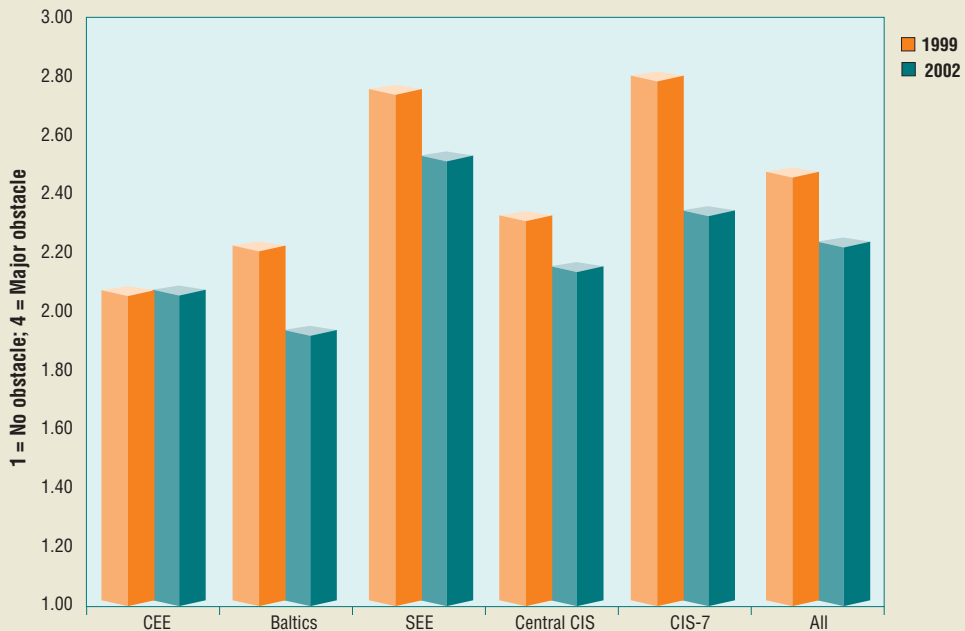
Georgia, Moldova, Ukraine, and the Kyrgyz Republic) and two countries in Central Europe (the Slovak Republic and Poland).

<sup>4</sup> For Figure 2.1 and subsequent similar bar charts, the thin lines measure the standard error of the mean of each indicator. Small changes in the length of the bar from 1999 to 2002 (changes of less than two standard errors) are not significant changes in a statistical sense. A t-test was used to determine whether differences between 1999 and 2002 are statistically significant, and the results are shown in Figure 2.3 and subsequent similar color-coded figures.

<sup>5</sup> Regional groupings are as follows: Central and Eastern Europe includes the Czech Republic,

**FIGURE 2.2**

**Ratings by Sample Firms of Corruption as an Obstacle by Sub-regional Grouping, 1999–2002**



**FIGURE 2.3**

**Trends in Corruption as an Obstacle by Country**



Comparing the results of the 1999 and the 2002 BEEPS, Figure 2.3 shows the countries where there has been a statistically significant decline in the perception of corruption as an obstacle (shown in orange), those where there has been no significant change (yellow), and those where there has been a significant increase (blue). Improvements are noted in 10 countries (11 if one

controls for firm characteristics<sup>6</sup>), with relatively large declines in some of the countries where 1999 levels were high, including Azerbaijan, Croatia, Kazakhstan, the Kyrgyz Republic, Lithuania, and Russia. In contrast,

Hungary, Poland, Slovenia, and the Slovak Republic; the Baltic states include Estonia, Latvia, and Lithuania; South Eastern Europe includes Albania, Bosnia and Herzegovina, Bulgaria, Croatia, FYR Macedonia, Romania, and Serbia and Montenegro (SAM); Central CIS includes Belarus, Kazakhstan, Russia, and Ukraine; and the CIS-7 countries include Armenia, Azerbaijan, Georgia, the Kyrgyz Republic, Moldova, Tajikistan, and Uzbekistan.

<sup>6</sup> Although the overall distribution of firm characteristics was similar between the 1999 and 2002 BEEPS (see Annex 3, Table A3.2), there were some differences at the country level that could have influenced the survey results and thus the reported trends in corruption between 1999 and 2002. In Albania, the 2002 sample had a larger share of private firms and a slightly smaller share of foreign firms than the 1999 sample. In Latvia, in contrast, the 2002 sample had a smaller share of private firms and a slightly larger share of foreign firms than in 1999. As discussed in Chapter 3, private firms tend to pay more bribes and foreign firms fewer bribes. In Belarus, the 2002 sample had a larger share of smaller and non-manufacturing firms, which tend to view corruption as more of an obstacle to business. If one controls for firm characteristics (which may, however, reflect real changes in the economy), the perception of corruption as an obstacle would decline (that is, be shown as orange) from 1999 to 2002 in Albania, Estonia, and Hungary and be neutral (that is, be shown as yellow) in Belarus, Latvia, and Moldova.

ratings of corruption as an obstacle have stayed relatively constant at high levels in Bosnia and Herzegovina, Bulgaria, FYROM, Georgia, Romania, the Slovak Republic, and Ukraine. The only countries where sample firms report a significant increase in the perception of corruption as an obstacle to business are Belarus and Poland, both of which ranked in the lower half of transition countries in 1999.

Figure 2.4 shows the average ranking by sample firms of corruption *relative to other obstacles* in 2002 (arranged in order from a ranking of 1, i.e., the highest obstacle of those listed, to a ranking of 22, i.e., the lowest obstacle of those listed). Sample firms in six countries—FYROM, Albania, BiH, Azerbaijan, Georgia, and Romania—rate corruption among the top five obstacles to business, and those in eight additional countries rate corruption as the sixth or seventh among the 22 obstacles. These relatively high rankings underscore the need for caution in evaluating corruption levels and trends. For example, sharp declines in reported corruption levels in Azerbaijan, however encouraging, should not give the misleading impression that corruption is no longer a major impediment in the investment climate

FIGURE 2.4

### Average Ranking by Sample Firms of Corruption as an Obstacle among 22 Obstacles, 2002

1	
2	
3	FYROM
4	Albania, BiH
5	Azerbaijan, Georgia, Romania
6	Croatia, Kyrgyz Republic, Moldova, Slovak Republic, Ukraine
7	Bulgaria, Kazakhstan, Lithuania
8	
9	Latvia, Tajikistan
10	Armenia, Poland, SAM, Uzbekistan
11	Belarus, Czech Republic, Hungary, Russia, Slovenia
12	
13	
14	Estonia
15–22	

in that country. Indeed, corruption clearly remains a major impediment to business in most countries in the region.

## Measuring Administrative Corruption Over Time

A manager's view of the extent to which corruption is an obstacle to business is a combination of several factors, including the actual costs of bribes imposed on the

firm by administrative corruption as well as the costs that state capture imposes on the firm due to distorted or discriminatory laws, regulations, and court decisions. It may also



include the costs that corruption imposes on the overall economy through forgone investment or misguided public policies. The data from BEEPS allow us to delve under the surface of this overall measure of corruption to study trends in specific subcomponents related to administrative corruption and state capture.

Administrative corruption can be measured along many different dimensions. How often does the firm pay bribes? How much does the firm pay in bribes? For what types of activities are bribes paid? There are risks in choosing any single dimension for comparing levels of administrative corruption over time or across countries. Firms might bribe less frequently but pay the same share of their annual revenues in bribes, suggesting not a decline in administrative corruption but merely a greater concentration of bribes. Firms might pay less of their annual revenues in bribes but pay just as or even more often, suggesting not a decline in corruption but a more competitive bribe “market” among bureaucrats. Firms might perceive corruption to be a less severe obstacle to their business but experience no change in their pattern of bribes, suggesting not an improvement in corruption but perhaps a more conducive overall environment in which the weight of corruption relative to other problems has declined. As is so often the case with complex phenomena, increasing precision in measuring one component could give a misleading picture of overall change in the phenomenon itself. We therefore examine several of these components.

### How Often?

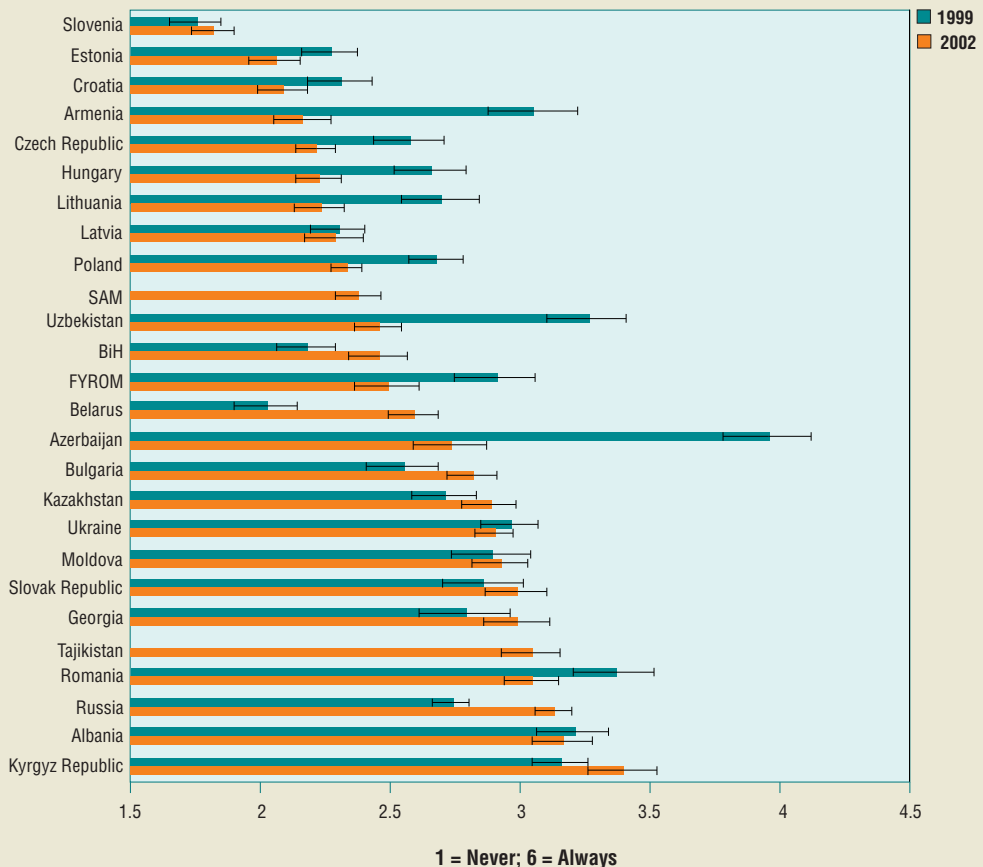
One of the more basic indicators of the extent of administrative corruption is the frequency of bribe payments. In the BEEPS, firms were asked for their response to the following statement: “It is common for firms in my line of business to have to pay some irregular additional payments/gifts to get things done with regard to customs, taxes, licenses, regulations, services, etc.” They responded on a scale of 1 to 6, where 1 signifies “never” and 2 to 6 signify “seldom,” “sometimes,” “frequently,” “usually,” and “always,” respectively.

Figure 2.5 compares the country averages on this six-point scale in 1999 and 2002, with countries arranged from lowest to highest frequency in 2002. Average frequencies by sub-regional groupings are shown in Figure 2.6. In general the highest bribe frequencies are reported by sample firms in the CIS and SEE. Firms in the EU accession countries (other than the Slovak Republic) report lower bribe frequencies, which is consistent with the lower perceptions by managers of corruption as an obstacle to business.

Sample firms in the Baltic countries show the lowest frequency of administrative corruption. The average firm in the Baltics reports that it “seldom” pays bribes, and only 17 percent of the firms responded in 2002 that they make such payments “frequently” or more often. In CIS countries, in contrast, 31 percent of sample firms reported paying administrative bribes “frequently” or more often in 2002. The CIS average is driven by

FIGURE 2.5

## Bribe Frequency Index for Sample Firms by Country, 1999 and 2002



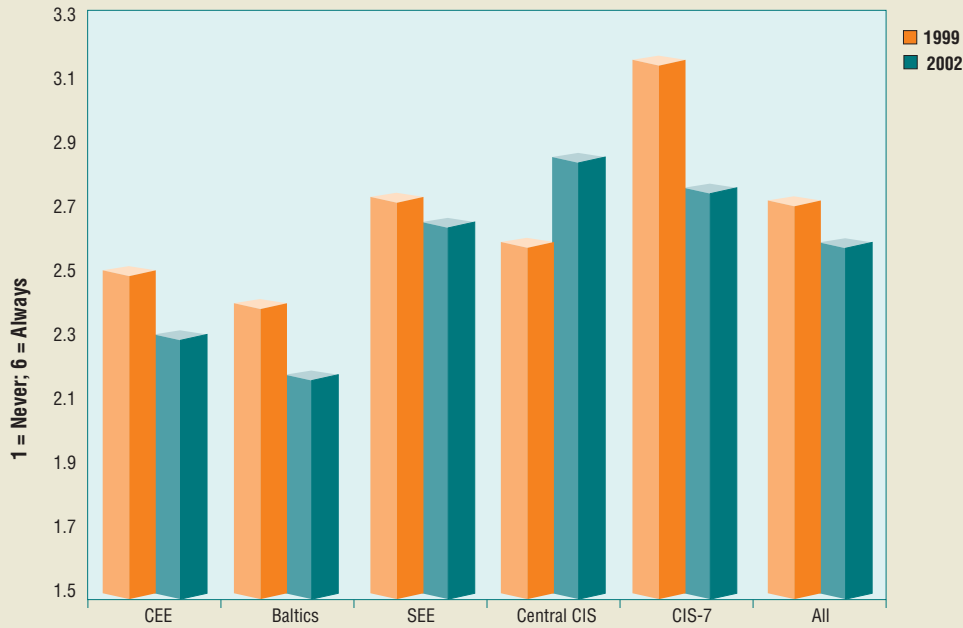
particularly high frequency rates—with scores of 4 reaching 36 percent or more of the firms—in such countries as Georgia, the Kyrgyz Republic, Russia, and Ukraine. There is considerable variation within Central and Eastern Europe. Only 13 percent of the firms in the Czech Republic reported paying administrative bribes frequently or more in 2002, while the share of firms more than

doubled to 36 percent in the Slovak Republic. Similarly, in South Eastern Europe, the frequency indicator ranges from 13 percent of the firms in Croatia to 36 percent of the firms in Albania.

Figure 2.7 indicates which countries have seen statistically significant changes in the frequency of administrative corruption from 1999 to 2002, with orange indicating

FIGURE 2.6

Frequency of Bribes Paid by Sample Firms by Sub-regional Grouping, 1999 and 2002



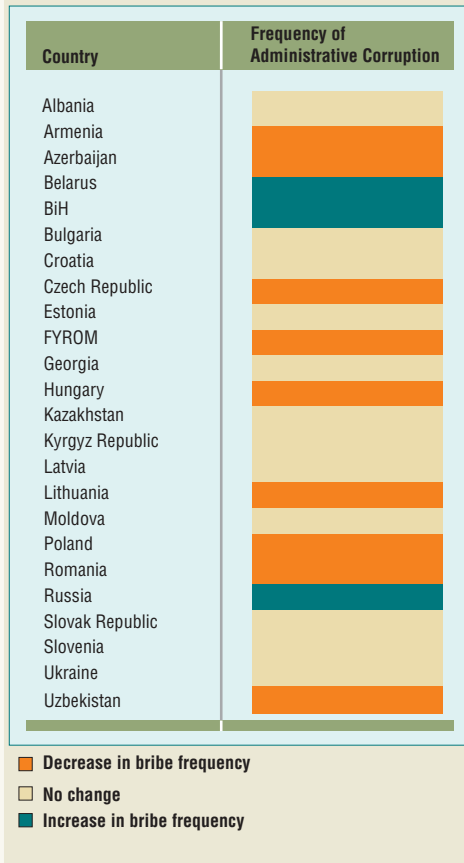
a decrease and blue an increase. Nine of the 24 countries (or 11 if firm characteristics are controlled for<sup>7</sup>) show a statistically significant decline in the frequency of administrative corruption. These include two countries in the Caucasus—Armenia and Azerbaijan—along with Uzbekistan, at least two countries in SEE (FYROM and Romania), and four countries in CEE and the Baltics. Three countries—Belarus, BiH, and Russia—have statistically significant increases in the frequency of such payments, while the rest record no significant change over the period.

It is important to note that declines in the frequency of administrative corruption do not necessarily indicate reduced corruption overall, but could reflect more efficient or more concentrated bribe extraction. Solid progress in combating corruption would re-

<sup>7</sup> As with corruption as an obstacle (Footnote 5), Albania and Croatia also show declines and BiH and Belarus show no statistically significant change in bribe frequency if the effect of changes in the characteristics of sample firms from 1999 to 2002 is controlled for.

FIGURE 2.7

## Trends in Bribe Frequency by Country



sult in declines in both the frequency and the total amount of bribes paid, as discussed further in the next section.

The frequency of administrative corruption can be further disaggregated to examine the patterns and dynamics of the problem in the provision of specific state services. The BEEPS survey asked firm managers to assess how often “firms like yours” make payments

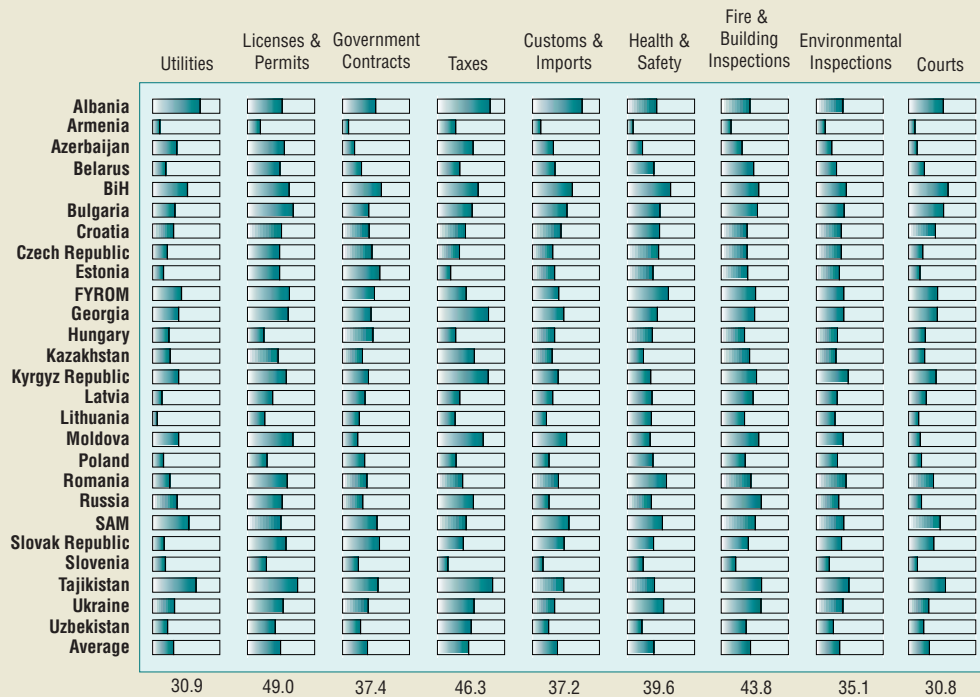
or gifts in obtaining a wide range of state services. Figure 2.8 shows the percentage of firms that expected to pay bribes at least occasionally for various services in 2002 (that is, all answers other than “never”). As with the overall indicator, the incidence of bribes for individual services appears highest in SEE countries, as well as the Kyrgyz Republic and Tajikistan. Among services, the most frequent bribes appear to be paid to license providers, fire and building inspectors, and tax officials.

Figure 2.9 shows the *change* in the frequency of such payments at the country level between 1999 and 2002 for a list of these services.<sup>8</sup> Orange boxes connote a statistically significant decrease in the frequency of such payments in the given sector, while blue boxes connote a statistically significant increase and yellow boxes suggest no significant change over the period. As the indicators of administrative corruption move from overall measures of the problem to more specific manifestations in particular sectors, the incidence of declines in the frequency of unofficial payments and gifts goes down substantially. Only a handful of countries—Armenia, Azerbaijan, and Lithuania—have statistically significant declines in nearly all of the interactions with the state listed in the survey. Across all of these different interactions, the number of areas of increased

<sup>8</sup> BEEPS did not collect data on the frequency of bribes to inspectors in 1999.

FIGURE 2.8

Percentage of Firms Who Expect to Pay Bribes for Public Services at Least Occasionally, 2002

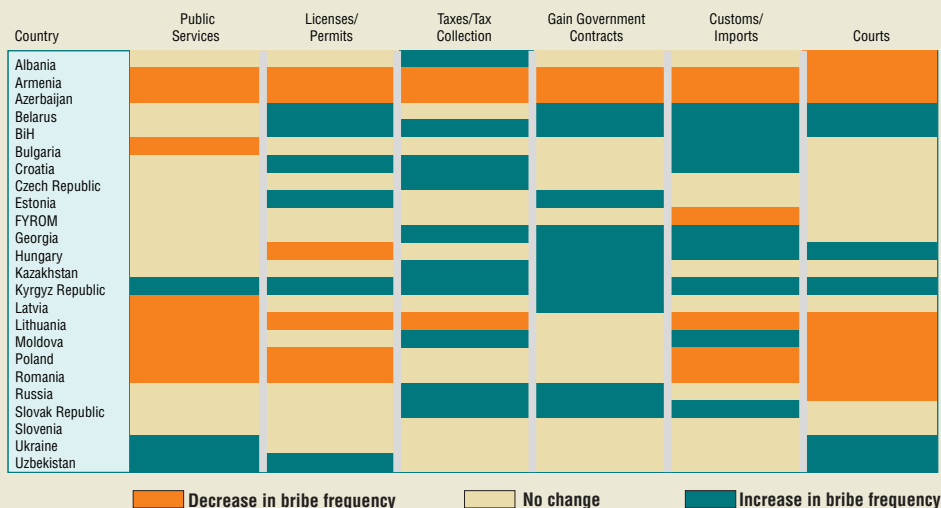


frequency of corruption exceeds the number of areas of decreased frequency. While the frequency of bribes in such activities as getting connected to public services and dealing with courts is declining in a number of countries, the frequency of bribes to deal with tax and customs collectors and to obtain government contracts appears to be increasing in many countries across the region. Notable is the increased frequency of unofficial payments with regard to government contracts in such advanced transition

countries as Estonia, Hungary, Latvia, and the Slovak Republic (albeit from a lower base than in many other countries in the region). In addition, increased corruption in tax and customs collection does not bode well for improving the chronic public finance problems in such poor transition countries as Albania, Georgia, the Kyrgyz Republic, and Moldova. In the areas of licenses and permits, there has been little overall change and absolute levels remain very high.

FIGURE 2.9

## Change in Frequency of Bribery by Type of Service



### How Much?

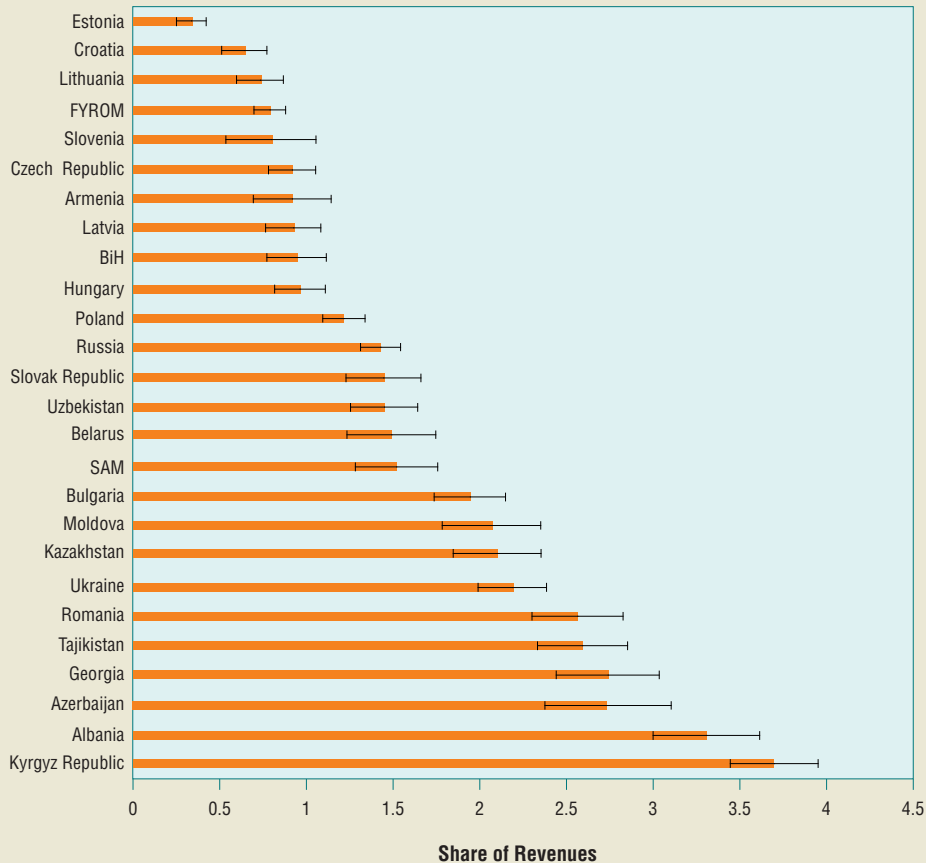
Another basic indicator of administrative corruption is the direct financial cost of bribes to the firm. Such cost can be seen as equivalent to a “bribe tax” on enterprises. In the BEEPS, respondents were asked to estimate the share of their total annual sales that “firms like yours typically pay in unofficial payments and gifts to public officials” with regard to such things as taxes, licenses, customs, inspections, etc. Figure 2.10 presents the average bribe tax on the stratified sample of firms in each of the transition countries in 2002, arranged in order from lowest to highest average bribe tax. Figure 2.11 shows the average bribe tax for sub-regional groupings of countries.<sup>9</sup>

The relative rankings of countries on the bribe tax indicator are similar to their rankings on the frequency measure, with firms in CIS and SEE countries paying higher bribe taxes than firms in CEE and the Baltics. There are a few notable exceptions to this similarity among indicators, however. In

<sup>9</sup> Data from 1999 are not included in Figures 2.10 and 2.11 because one cannot readily compare, from a methodological perspective, the results of the 1999 and the 2002 BEEPS along the bribe tax dimension. As explained in greater detail in Annex 2, the relevant questions in the BEEPS questionnaire differed somewhat between the two surveys.

FIGURE 2.10

Bribe Tax on Sample of Firms by Country, 2002



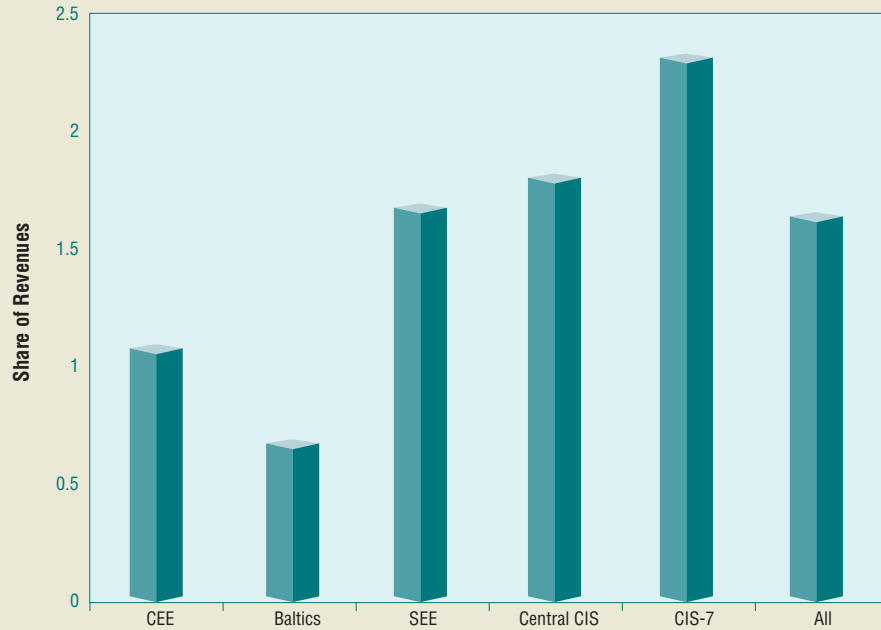
particular, Russia appears higher on the frequency measure but more moderate on the bribe tax (suggesting more widespread but less costly “petty corruption”), while Azerbaijan appears higher on the bribe tax but more moderate on frequency (suggesting more concentrated bribery).

Though the bribe tax may constitute a small percentage of the firm’s total annual

revenues, its share of the firm’s profits is much more significant. Data on profit margins for firms in transition countries are notoriously unreliable given the strong incentives to conceal profits from the tax authorities and other potential claimants. The BEEPS does provide, however, a rough estimate of the average gross profit margins (revenues minus current expenses) that can be used to

FIGURE 2.11

## Sub-regional Groupings of Bribe Tax for Sample Firms, 2002



calculate a rudimentary indicator for the bribe tax as a share of profits. Sample firms in the CIS appear to pay on average at least 10 percent of their gross margins in bribes,

while sample firms in Central and Eastern Europe and the Baltics pay roughly one-half that amount.

## Measuring State Capture Over Time

The BEEPS data provide an opportunity to explore the extent of state capture across the region—an issue that is more frequently discussed through stories about “oligarchs” and undue political influence in the media and electoral debates, but that has been rarely examined through the lens of

systematic data.<sup>10</sup> Both the impact of state capture on firms and direct participation in state capture activity can be explored.

<sup>10</sup> The BEEPS data only allow measurements of capture from the perspective of firms. However,



## Impact of State Capture

In the survey, respondents were asked to what extent the provision of unofficial private payments, gifts, or private benefits to public officials to gain advantages in the drafting of laws, decrees, regulations, and other binding government decisions has a *direct impact* on their business. Note that this question does not ask whether the firms engaged in such activities, but just whether such practices, undertaken by themselves or by other firms, had a direct impact, either positive or negative, on business.<sup>11</sup> In particular, they were asked to assess this impact in the following areas:

- ▲ payments to Parliamentarians to influence their votes;
- ▲ payments to government officials to affect the content of government legislation;
- ▲ payments to judges to affect the outcome of criminal cases;
- ▲ payments to judges to affect the outcome of commercial cases;
- ▲ payments to central bank officials to affect central bank policies and decisions; and
- ▲ illegal contributions to political parties or electoral campaigns to affect the decisions of elected officials.

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state capture need not be limited to firms. There are many other individuals, organizations or groups that could seek to use the power of the state to influence the formation of laws, regulations and rules to their own advantage through the illicit provision of private benefits to public officials, including such examples as the military, trade unions, or political parties. Kleptocratic political leaders themselves can also be seen as capturing the state to further their own private interests or, as in many cases, those of their immediate family. These forms of state capture cannot be examined through firm-level surveys. As a result, the BEEPS data examine only one form of state capture and should not be interpreted as a comprehensive measure of illicit forms of private influence on the legislative and policy-making functions of the state.

<sup>11</sup> In contrast to administrative corruption, the extent to which a state has been captured by pri-

ivate interests is not necessarily related to the number of firms that engage in this form of influence. Given that state capture is a function of the concentration of economic power and political influence, only a small share of firms can be expected to engage in such activity. But the impact of those firms on the laws, rules and regulations shape the environment for all other firms. Some commentators have suggested that small firms (which make up a preponderance of the BEEPS sample) may not be aware of state capture and its effect on their business. For most countries surveyed, however, small firms and larger firms answered the state capture questions similarly. The only three countries where the differences were substantial were the Kyrgyz Republic (where large firms reported higher levels of state capture) and Albania and Georgia (where large firms reported lower levels of state capture).

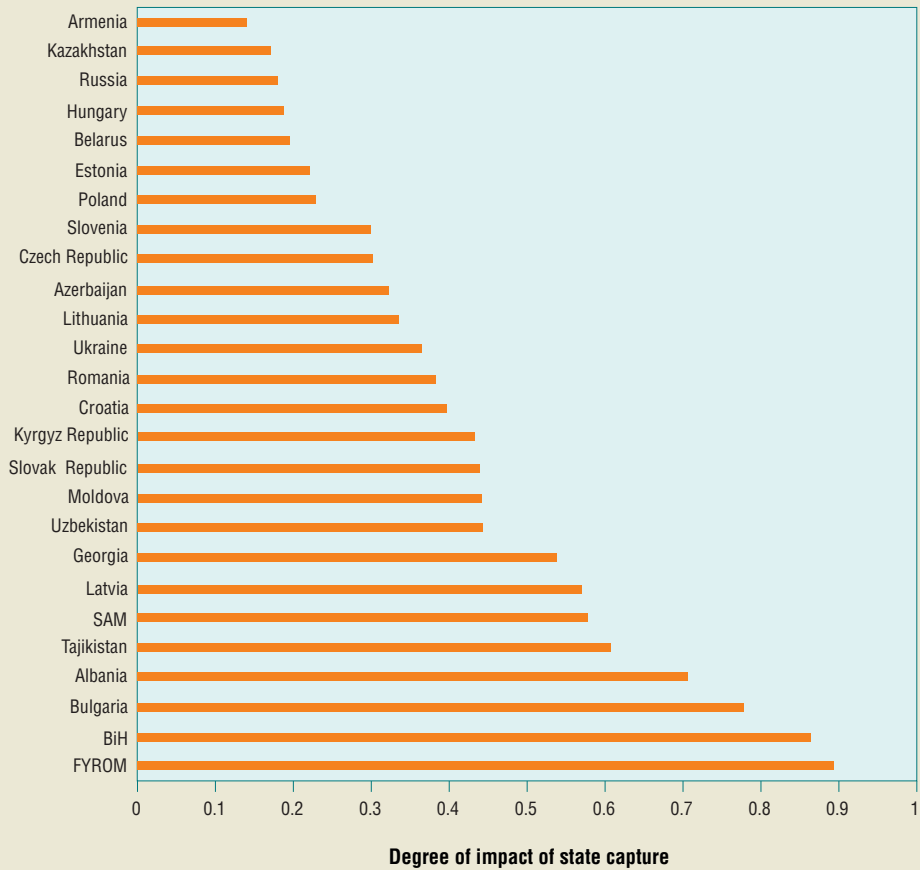
Figure 2.12 compares the extent of direct impact of state capture on sample firms averaged across all six of the institutions listed above (the “state capture index”), with the countries arranged in order from lowest to highest in 2002.<sup>12</sup> The average index by sub-regional grouping is shown in Figure 2.13. Only results from 2002 are shown in

the tables because these results are not directly comparable to those in 1999 due to

<sup>12</sup> There were five possible responses to this question in 2002 (0=no impact, 1=minor impact, 2=moderate impact, 3=major impact, and 4=decisive impact). To calculate the index for each firm, the firm’s answers were averaged across the six dimensions of capture listed in the question.

**FIGURE 2.12**

**State Capture Index for Sample Firms by Country, 2002**



*Note:* Possible values along the horizontal axis extend to four (see Footnote 12).

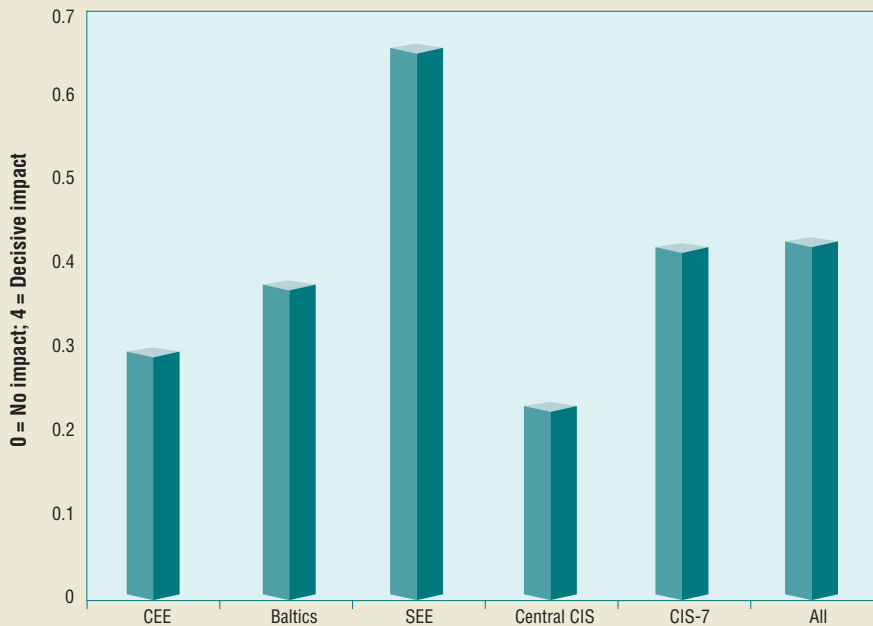
changes in the wording of the question (see Annex 2).

Two particularly interesting results emerge from this analysis. First, state capture appears to have the strongest impact on sample firms in South Eastern Europe. Almost all of the SEE countries, including Albania, BiH, Bulgaria, FYROM, and SAM, score relatively high among ECA countries. Although all SEE countries are now undertaking significant economic and governance reforms, some have begun the process only recently (in some cases in difficult post-con-

flict settings), and this may help explain why certain corruption indicators did not improve between 1999 and 2002 as they tended to do in countries with a longer history of reform. Second, as was evident in the results of the 1999 BEEPS reported in *Anticorruption in Transition*, the patterns of state capture across countries differ considerably from the patterns of administrative corruption. While most of the CEE and Baltic countries score relatively low on both dimensions, and some SEE and CIS countries score relatively high on both dimensions, there are a number of countries where the prevalence of

FIGURE 2.13

State Capture Index for Sample Firms by Sub-regional Grouping, 2002



the two types of corruption appear to vary significantly. For example, the large CIS countries—Kazakhstan, Russia, and Ukraine—appear to have relatively moderate levels of state capture (as measured by BEEPS, noting the caveats below) but higher levels of administrative corruption, while some SEE countries—BiH, FYROM, and SAM—tend to have relatively high levels of state capture combined with more moderate administrative corruption.

Several important caveats are in order here. First, empirically we would expect transition countries that have made very limited progress towards a market economy to have comparatively low levels of state capture. Where the economy is still largely dominated by state ownership and important practices of the command economy continue to operate, the very notion of a private sector capable of exerting substantial influence on the legislative functions of the state does not apply. In 1999, there was a group of countries whose low level of state capture was attributed in *Anticorruption in Transition* to the lack of a substantial, autonomous private sector to engage in state capture (such as in the least advanced transition countries of Belarus and Uzbekistan) or to the weaknesses of the state to intervene and regulate the economy in post-conflict situations (such as in the Balkans). In the previous report, we suggested that further market reform and continued stabilization in these countries could lead to increasing state capture. Indeed, although the data are not exactly comparable from 1999 to 2002, they do strongly

suggest that state capture has increased in most of these countries. This does not mean that these countries should not reform their economies, but rather that they should reform while also putting in place constraints on state capture, such as conflict of interest rules, regulation and restructuring of monopolies, and other measures to promote transparency and competition in both the private sector and the political system.

Second, our measure of state capture asks specifically about bribes paid by firms to influence decisions of public officials or the design of laws and regulations. It does not address more subtle forms of state capture, such as direct ownership by public officials of stakes in private firms or other intertwined networks of public and private power, wealth, and influence that do not directly involve bribery. These more subtle forms of state capture may well be prominent in some countries where our measure of state capture appears moderate.

Third, state capture may tend to be concentrated in a few sectors in some countries, particularly those with heavy economic dependence on oil and other natural resources. While the impact of state capture may be large for the country as a whole, it may not be seen by the majority of firms in the country's BEEPS sample as having a direct business impact. This may, for example, help to explain the relatively low state capture ratings in some resource-rich countries in central CIS.

The state capture index can be further disaggregated to examine relative levels of

state capture in the key state institutions in each country, as summarized in Figure 2.14. This table shows the percentage of sample firms that perceive at least a minor impact of state capture (i.e., any answer other than “none”) in each of the six institutions included in the question. In line with the aggregate numbers noted above, the high-

est percentages of state capture occur in SEE countries—Albania, Bosnia and Herzegovina, Bulgaria, FYR Macedonia, and Serbia and Montenegro—as well as in Tajikistan. Among public institutions, firms report the highest impact from capture in the commercial courts and the least impact from capture in central banks.

FIGURE 2.14

Percentage of Firms Affected by State Capture in Specific Public Institutions, 2002



### Engagement in Captor Behavior

In addition to questions on the impact of state capture on firms, the BEEPS asked respondents to assess how frequently “firms like yours” pay for a number of different types of activities, including “to influence the content of laws, regulations, and decrees.” On the basis of this question, the share of “captor” firms—those actively engaging in state

capture—can be compared across countries and over time. As this question was the same in both surveys, it is possible to compare the results in 1999 and 2002, as shown in Figure 2.15, arranged from lowest to highest percentage in 2002, and in Figure 2.16 by sub-regional grouping. Figure 2.17 indicates which countries have seen statistically significant increases (in blue) or decreases (in

FIGURE 2.15

Share of Captor Firms in Sample by Country, 1999 and 2002

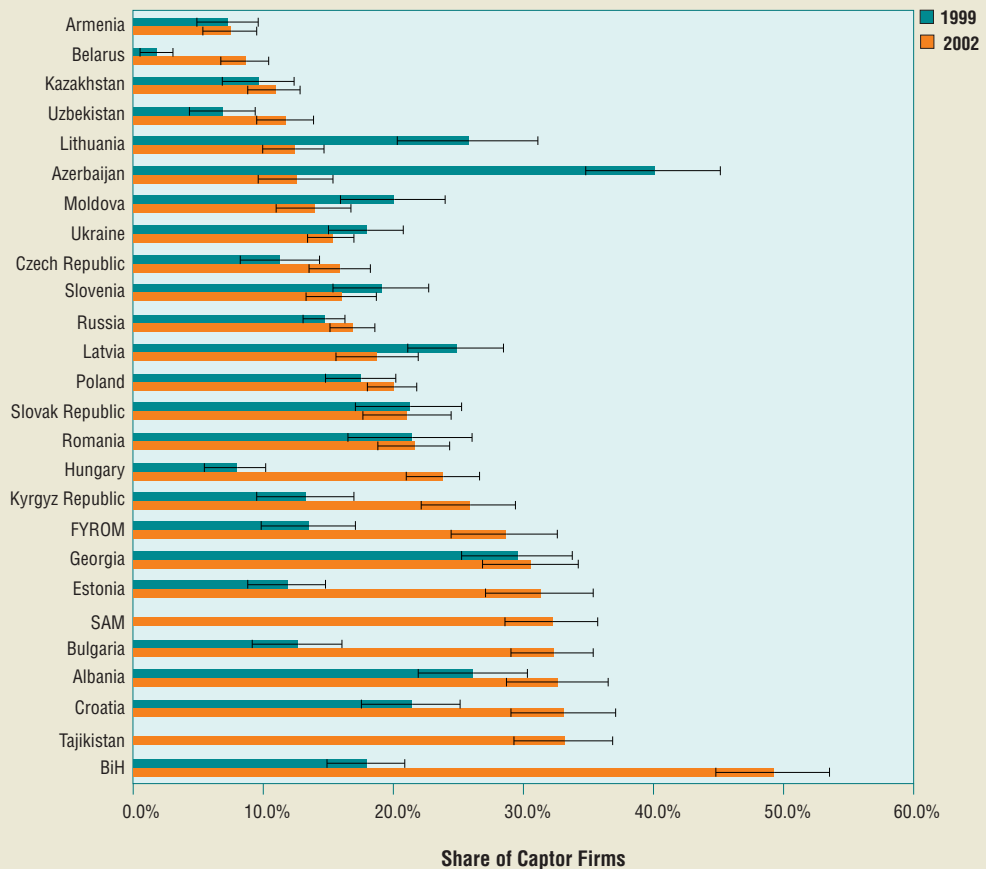
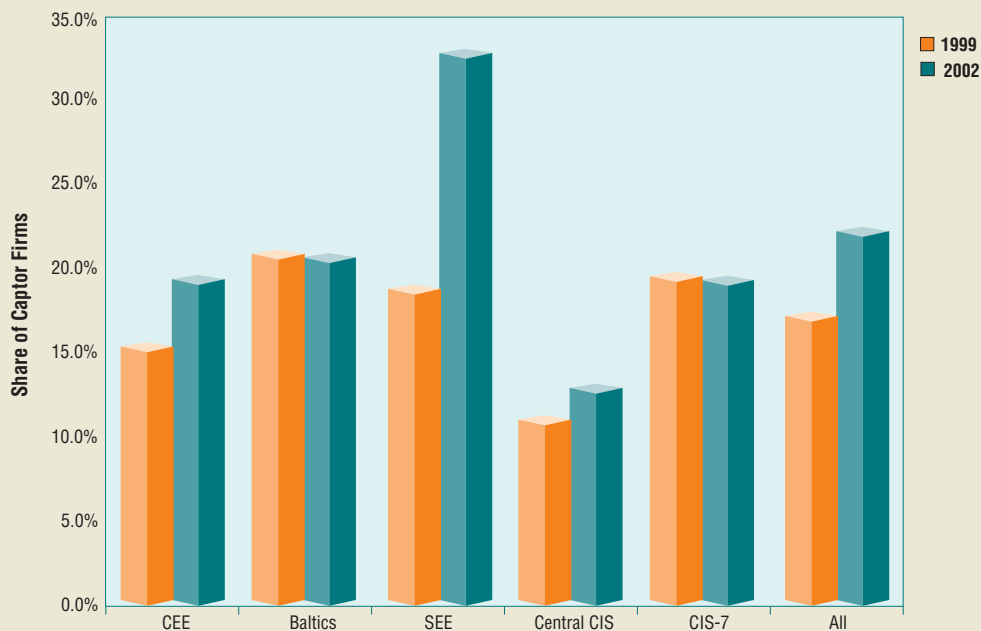


FIGURE 2.16

## Share of Captor Firms by Sub-regional Grouping, 1999 and 2002



orange) in the share of captor firms from 1999 to 2002.

In most of the countries, the share of captors has either stayed the same or increased, and in several cases this increase is quite substantial. The ongoing political and economic stabilization in several post-conflict countries, such as BiH and FYROM, has been associated with a large increase in the share of firms engaging in state capture. However, this is not just a post-conflict phenomenon, as increases in the share of firms engaging in state capture are prominent in several actual or potential EU accession can-

didates, such as Bulgaria, Croatia, Estonia, and Hungary. Indeed, in Estonia and Hungary, the share of captor firms has increased by a factor of three since 1999.<sup>13</sup> In the CIS, Belarus and the Kyrgyz Republic have also seen significant increases in the share of captor firms. The only two transition countries with significant declines are Azerbaijan

<sup>13</sup> Though we do not have data from the first round of BEEPS in Tajikistan, the evidence from 2002 shows a high share of captor firms as well.

and Lithuania (both from high levels in 1999).

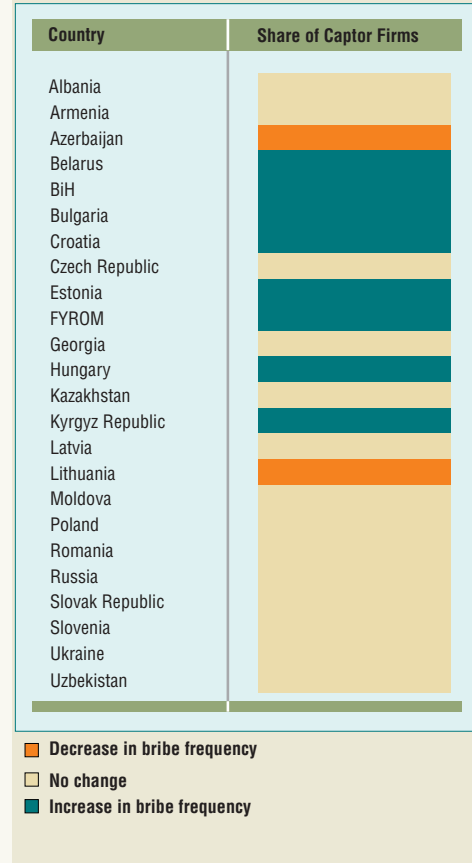
In 1999, state capture was a strategy of political influence practiced only by a small share of firms, though its perceived impact loomed large on all firms. In 2002, more firms have been using unofficial payments and gifts to try to influence laws, regulations and decrees in a number of transition countries. It is not necessarily true, however, that an increase in the number of captor firms translates into an increase in the impact of state capture on all firms; indeed, a brief look at data from 1999 and 2002 provides some evidence that the impact of state capture may on average have diminished across the region as a whole. It is possible that the illicit market for political influence has become more open to a wider range of firms, especially in the more politically competitive countries of Central and Eastern Europe and those post-conflict countries where stabilization has prompted more competition to establish a new legal and regulatory framework for the market economy. As more firms enter this market for political influence, the increased competition may be weakening the overall impact of state capture at the firm level.

## A Typology of Corruption

**A**nticorruption in Transition laid out a typology of transition countries along the two dimensions of state capture and administrative corruption, based on the results

FIGURE 2.17

### Share of Captor Firms Over Time



of the first BEEPS. It then described varying strategies that countries might use to tackle corruption, depending on which type of corruption was more problematic. Coun-



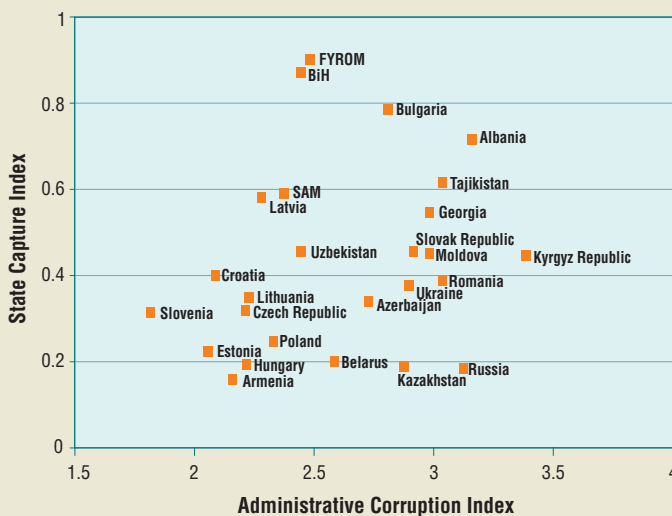
tries with particularly high levels of administrative corruption were advised to focus heavily on building state capacity to improve public service delivery, while countries with particularly high levels of state capture should focus more on enhancing political accountability and promoting greater competition in the economy through demonopolization and the entry of new firms. Figure 2.18 illustrates the same typology for BEEPS2, mapping transition countries along these two broad dimensions of corruption, with administrative corruption measured by the frequency of bribery<sup>14</sup> and state capture measured by its perceived effect on sample firms. SEE countries tend to have relatively high levels of state capture but relatively

lower levels of administrative corruption (except in the case of Albania, which is relatively high on both dimensions), while many CIS countries have relatively higher levels of administrative corruption. The countries of CEE and the Baltics—and notably, Armenia in the CIS—have relatively low levels of corruption on both dimensions.

<sup>14</sup> In the analogous figure in *Anticorruption in Transition*, administrative corruption was measured by the bribe tax rather than bribe frequency. Thus, the two figures are not directly comparable, although the two measures yield similar results for most countries in 2002.

FIGURE 2.18

Two Dimensions of Corruption: Administrative Corruption and State Capture



# 3 CHAPTER

## Understanding Corruption

As noted in Chapter 1, the transition countries have faced many changes since 1999, when the first BEEPS was undertaken. Most countries have seen steady economic growth, many have undertaken extensive institutional reforms, and virtually all have formulated strategies to address the problem of corruption. As noted in Chapter 2, significant changes in patterns of corruption occurred between 1999 and 2002. The goal of this chapter is to explore empirically what may be causing these changing patterns of corruption.

As in Chapter 2, the extent of corruption can be measured using five indicators surveyed in BEEPS:

- ▲ a manager's general impression of the extent to which corruption is an obstacle to his or her business;
- ▲ the frequency of bribes (in the aggregate and for various types of bribes);
- ▲ the share of annual revenues paid in bribes (the "bribe tax");
- ▲ the manager's perception of the impact of state capture on the firm; and
- ▲ the extent of direct participation of the firm in state capture (as a "captor" firm).

For purposes of analysis in this chapter, the first and fourth of these variables are lim-

ited to managers' perceptions of the indirect (or systemic) effects of corruption and state capture on the firm, after taking into account the direct cost of any bribes paid.<sup>15</sup>

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<sup>15</sup> The variable "corruption as an obstacle to doing business" is interpreted as the manager's rough estimate of the *full economic cost of corruption* to the firm, which can be decomposed conceptually into several parts. The first part is the *direct cost*, or actual bribes the firm pays. From this can be subtracted the *direct benefits* that the firm receives for paying the bribe. These benefits may include, for example, faster processing of a request for a permit or license or a reduction in the fine for not reporting income to tax authorities. The direct cost minus the direct benefit is a measure of the *net direct cost* of corruption to the firm. When it is positive, the direct cost outweighs the benefits, and the firm has an economic incentive to support anticorruption efforts. The final part is the *indirect cost*, or the manager's perception of the cost of corruption to the firm regardless of whether the firm pays bribes or not. Indirect costs may include more burdensome regulations, a justice system incapable of enforcing contracts fairly or ensuring the security of property rights, or a banking system in crisis due to its portfolio of non-performing loans awarded based on bribes. An analogous breakdown between direct bribery and indirect systemic effects can also be made in the case of state capture.

These five variables are interrelated; for example, firms that pay bribes more frequently will in many cases (though not necessarily all) be expected to pay a higher share of revenues in bribes. Furthermore, a manager's perceptions of the extent to which corruption is a systemic obstacle to business will be affected at least in part by how frequently bribes are paid and how much the firm pays in bribes (though there are other factors in the broader environment that affect managers' perceptions as well).

The analysis focuses on five independent variables that are often assumed to affect the extent of corruption in an economy. First, the analysis investigates the role of specific firm characteristics in affecting the extent of bribery and perceptions of corruption. Which type of firm pays larger or more frequent bribes, private or state-owned? What about domestic vs. foreign-owned firms? Are small firms disadvantaged relative to larger firms? Is bribery more prevalent in larger cities or in small towns or rural areas? Has the way in which different types of firms are treated by the state—especially new entrants, privately owned firms, and foreign firms—changed between 1999 and 2002? Answers to these questions may have implications for investment, growth, employment, and poverty reduction. Specific characteristics included in this analysis are the firm's age, size, sector, ownership form, national identity, and location (urban and rural).<sup>16</sup>

Second, the analysis looks at the impacts of a country's policy and institutional envi-

ronment on corruption. Policy reforms that liberalize the economy generally reduce the power and discretion of public officials and therefore reduce both their opportunities to demand bribes and the benefits that firms derive from bribery. Reforms in public sector management strengthen transparency and accountability and thereby reduce incentives for corrupt behavior. Eight core elements of the policy and institutional environment are used in this analysis:<sup>17</sup>

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<sup>16</sup> The underlying structure of the sample changed somewhat between 1999 and 2002, owing partly to changes in the actual industrial structure of the countries. The number of foreign-owned firms in the sample increased by more than 50 percent (but stayed a small portion of the sample), small firms increased by almost 40 percent, and manufacturing firms declined by about a quarter.

<sup>17</sup> Our composite indicator of the policy and institutional environment is the average of the indicators along the eight dimensions noted. As they are highly correlated with one another, there are not enough observations to assess the impact of any one element independently. The source is the Country Policy and Institutional Assessment (CPIA), compiled annually for internal use by the World Bank. A ninth statistic in the CPIA—*Transparency, Accountability, and Corruption in the Public Sector*—is deliberately excluded to ensure that our measure of policy and institutional development is fully exogenous to the decision of the firm to pay a bribe. We also tested numerous other aspects of the business environment that could affect corruption, including the independence of the media and the strength of voice and accountability mechanisms. These were all highly

- ▲ *Management of Inflation and Macroeconomic Imbalances*: whether a country has a consistent macroeconomic program that addresses inflation and internal and external imbalances;
- ▲ *Trade Policy and Foreign Exchange Regime*: how well the trade policy framework and the exchange rate regime fosters trade and capital movements;
- ▲ *Competitive Environment for the Private Sector*: whether firms face competitive pressure to behave efficiently, taking into account firm entry and exit regulations, the effectiveness of competition law and policy, and any restrictions on dealings of state-owned firms with the private sector;
- ▲ *Factor and Product Markets*: the extent of liberalization of market activity in land, labor, and goods markets;
- ▲ *Quality of Public Administration*: the extent to which civilian central government (including teachers, health workers, police, etc.) is structured to design and implement government policy and deliver public services effectively;
- ▲ *Quality of Budgetary and Financial Management*: the extent to which there are: (i) a comprehensive and credible budget, linked to policy priorities, which in turn are linked to a poverty reduction strategy; (ii) effective financial management systems to ensure that incurred expenditures are consistent with the approved budget, that budgeted revenues are achieved and that aggregate fiscal control is maintained; (iii) timely and accurate fiscal reporting, including timely and audited public accounts and effective arrangements for follow up; and (iv) clear and balanced assignment of expenditures and revenues to each level of government;
- ▲ *Efficiency of Revenue Mobilization*: the overall pattern of revenue mobilization—not only the tax structure as it exists on paper, but revenues from all sources as they are actually collected; and
- ▲ *Property Rights and Rule-Based Governance*: the extent to which private economic activity is facilitated by an effective legal system and rule-based governance structure in which property and contract rights are reliably respected and enforced.

Our indicators of the quality of the policy and institutional environment in Europe and Central Asia improved by 5.6 percent between 1999 and 2002. The last four components of this statistic, which measure the development of public sector institutions, increased by 15 percent, quite a significant increase given common views on the pace of institutional change.

The third variable explored in the analysis is the extent of the manager's optimism

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correlated with policy and institutional reforms and thus did not add significant explanatory power given the limited number of observations (i.e., countries).

or pessimism. This variable was included to test whether such predisposition can affect perceptions of the overall costs of corruption *independent of other explanatory factors*. To estimate it, we compare the manager's perception of macroeconomic uncertainty with actual levels of uncertainty. The amount not explained by actual macroeconomic performance is considered a reflection of the manager's optimism or pessimism.<sup>18</sup>

The fourth variable is the rate of economic growth, measured as the growth in GDP in the previous calendar year. As noted in Chapter 1, when the BEEPS was first conducted in 1999, most countries in the region were in economic crisis as a consequence of the collapse of the Russian financial system. By 2002, the growth performance of most countries had improved dramatically. The short-term impact of stronger economic growth is difficult to predict based on theory. On the negative side, some firms may use additional revenues to pay more bribes, and public officials may demand more in bribes knowing that firms have higher revenues. On the positive side, economic growth may open up other opportunities for firms to promote their success and thus avoid bribes altogether. More indirectly, higher growth may lead managers to be more optimistic about the future and perceive corruption to be less of a problem even if nothing has actually changed in practice.

Finally, the analysis looks at the effect on corruption of the length of tenure and contestability of the political leadership. Two variables are used in this analysis. First, for

how many consecutive years has the government (i.e., the executive) been in office? The longer the horizon of the executive, the greater its opportunity to implement institutional reforms and the weaker its incentive to strip a country of its resources; however, there are limits to these beneficial aspects of tenure if a government becomes ossified and unresponsive to public demands. Second, was a legislative election held in the previous year? While elections are needed to build contestable and accountable political systems, direct expenditures on corruption may increase during election years, especially if firms seek to diversify their influence over different political groups. In addition, candidates are likely to be vocal about their position on corruption and the media are likely to be especially aggressive about uncovering political scandals during election years, which could influence perceptions of the systemic costs of corruption. Between 1999 and 2002, government tenure increased on average by 13 percent, and the number of countries with recent legislative elections fell by almost one half.

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<sup>18</sup> The method we used to calculate the optimism or pessimism of the manager is explained in Annex 3 to this Report. The variable is a relative one, and the sum of the measure across all surveyed firms is equal to zero. The average measure for firms in a particular country is not equal to zero, however, and Annex 3 includes country-specific averages on the optimism-pessimism variable.

As noted earlier, the goal of this chapter is to test the importance of the various factors described above on the five indicators of corruption measured in the BEEPS. The remainder of the chapter summarizes the results of cross-country regression analysis

of BEEPS data for 1999 and 2002. (Annex 3 contains details on methodology and regression results.) This cross-country analysis provides empirical evidence regarding the impact of various aspects of the business environment on corruption.<sup>19</sup>

## Firm Characteristics

It has long been recognized that the experience of corruption within a country can vary dramatically for different types of firms. It is now common to talk about an “unlevel playing field” for business in many transition countries in which certain types of firms—usually large firms or those with political connections—can obtain a wealth of special privileges and preferences that give them competitive advantages. Corruption can play an important role in creating and maintaining this unlevel playing field. Firms may actively offer bribes and other transfers to public officials to buy influence to secure such privileges and preferences. At the same time, bureaucrats may discriminate against different types of firms, demanding bribes from the most vulnerable or from the most profitable while protecting favored firms.

Using the BEEPS data, we can examine the impact of different firm characteristics on the various indicators of corruption, including the age, size (number of employees), ownership (private vs. state owned; domestic vs. foreign), sector, and location (size of city). Figures 3.1 and 3.2 present information on the impact of different types

of firm characteristics on broad indicators of corruption and on the frequency of certain types of bribes. The most consistent finding is that private firms pay a larger share of their revenues in bribes, pay all types of bribes more often, and are more affected by all types of corruption than state owned firms. In addition, smaller firms tend to pay more bribes and to pay bribes more often than larger ones, and younger firms pay more bribes and pay

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<sup>19</sup> Some of these aspects—including growth rates, election cycles, government tenure, and policy and institutional reforms—changed significantly between 1999 and 2002 in many of the transition countries, and these changes are likely to help explain trends in corruption over time in individual countries, just as they help explain differences in corruption levels among countries. However, the shortness of the time period between 1999 and 2002 and the inability, from a methodological perspective, to compare changes over time at the firm level (given that different firms were surveyed in 1999 and 2002) make it difficult to say exactly what led to the changes in corruption from 1999 to 2002 in individual countries, as described in Chapter 2.

FIGURE 3.1

The Impact of Firm Characteristics on Corruption

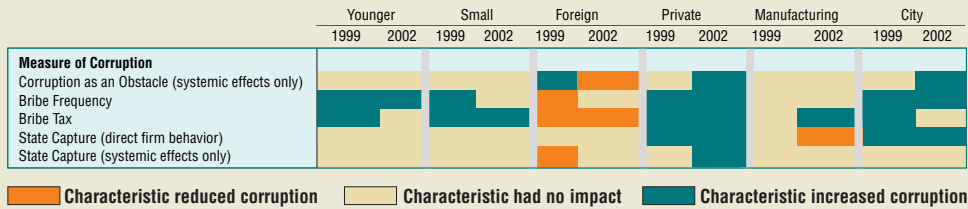
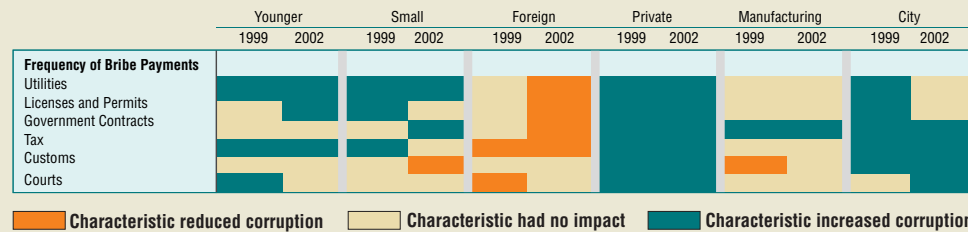


FIGURE 3.2

The Impact of Firm Characteristics on the Frequency of Various Types of Bribes



bribes more often than older ones, although smaller and/or younger firms do not appear to be quite as disadvantaged in 2002 as they were in 1999. These findings are particularly problematic given the importance of the private sector in general, and of small and medium enterprises in particular, to economic growth in the region.<sup>20</sup>

Interesting trends also emerge from this analysis. Foreign firms appear to pay most types of bribes less frequently, perhaps indicating an improvement in the environment

for foreign capital flows from 1999 to 2002. However, they are equally likely to engage in state capture. Firms located in large cities appear to bribe more often and, in 2002, to perceive corruption as having more of an effect on business than firms in smaller towns. The total share of revenues paid in bribes did not differ significantly by location in

<sup>20</sup> *Ten Years of Transition*, World Bank, 2002.

2002, however; perhaps firms in cities simply face a less “efficient” bribe practice that extracts smaller amounts more frequently. With regard to sector, it appears that manufacturing firms paid more in bribes (particularly for government contracts) but engaged in less state capture behavior in 2002 than firms in other sectors. While there was no

significant difference among sectors in the frequency of most types of bribes, manufacturing firms did pay bribes for government contracts more often than firms in other sectors. There was no difference among sectors in firms’ perceptions of the systemic effects of state capture and of corruption as an obstacle to business.

### Policy and Institutional Reform

From a policy perspective, the efficacy with which policy and institutional reforms reduce opportunities for corruption is one of the most important effects to evaluate. Figures 3.3 and 3.4 present information on the impact of market-friendly policies and institutions on the extent of corruption in

1999 and 2002. As can be seen from the many orange bars in both tables, better policies and institutions have a strong and beneficial impact on most indicators of corruption. This analysis provides clear support to the view that economic and governance reforms can help both to lower the

FIGURE 3.3

#### The Impact of Policies and Institutions on Corruption

Measure of Corruption	1999	2002
Corruption as an Obstacle (systemic effects only)	Orange	Orange
Bribe Frequency	Orange	Orange
Bribe Tax	Orange	Orange
State Capture (direct firm behavior)	Yellow	Yellow
State Capture (systemic effects only)	Orange	Yellow

- Better policies and institutions reduced corruption
- No impact

FIGURE 3.4

#### The Impact of Policies and Institutions on the Frequency of Various Types of Bribes

Frequency of Bribe Payments	1999	2002
Utilities	Orange	Yellow
Licenses and Permits	Orange	Orange
Government Contracts	Yellow	Yellow
Tax	Orange	Yellow
Customs	Orange	Yellow
Courts	Orange	Orange

- Better policies and institutions reduced corruption
- No impact



level and frequency of bribes and to reduce perceptions of the systemic costs of corruption over the medium term.<sup>21</sup>

Two exceptions in both 1999 and 2002 are in the frequency of bribery in public procurement and in direct state capture behavior,

where stronger policies and institutions do not appear to have a significant impact. It may be the case, as with state capture, that corruption in procurement typically involves politicians and thus may be shaped more by political institutions than bureaucratic ones.

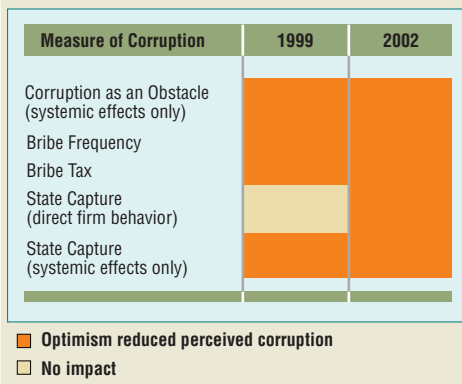
## Respondent Attitudes

A surprisingly strong result of this analysis is the very important role of managers' attitudes in determining their views on corruption. Figures 3.5 and 3.6 illustrate the impact of optimism on the five indicators of corruption used in the analysis and on the frequency of various types of bribes in 1999 and 2002. Optimistic managers report lower levels of corruption along all broad

measures, including their direct experience of the frequency and amount of bribes and their perceptions of the systemic impacts of state capture and of corruption as an obstacle to business. When disaggregated frequencies are examined, optimism reduces the reported frequency of bribes across the board in 2002, although the results are less definitive in 1999.

FIGURE 3.5

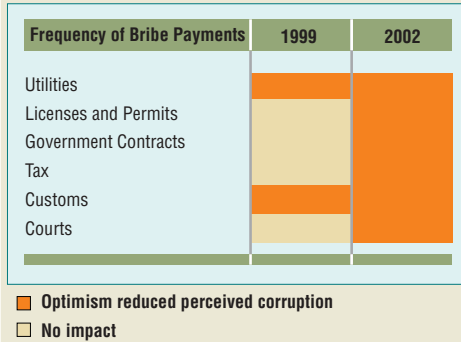
### The Impact of Optimism on Perceptions of Corruption



<sup>21</sup> The quality of the policy and institutional environment is highly correlated with the level of per capita income in the countries in our sample (with a correlation of over 80 percent). Thus, when per capita income is used in the analysis instead of the policy and institutional indicator, the overall regression results are similar. Because of the high correlation, it is not possible to test the effects of these two variables separately. The policy and institutional variable is used in this analysis because economic theory suggests it is the causal factor behind both lower corruption and economic development.

**FIGURE 3.6**

**The Impact of Optimism on the Frequency of Various Types of Bribes**



The role of optimism in affecting corruption perceptions leads to a broader point. While perceptions of corruption are in part

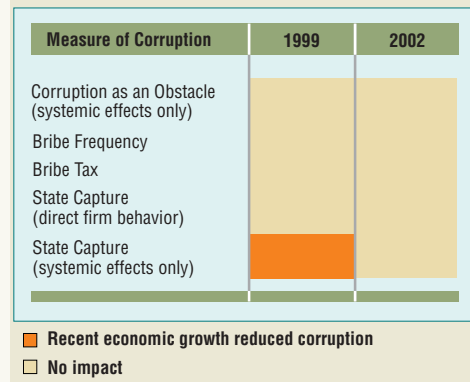
a function of a firm’s direct experience with bribery, the importance of respondent attitudes suggest that it is also a function of one’s perceptions of the fairness and equity of broader economic and political processes. Managers think that a system is corrupt not only because they have to pay bribes, but because they think that economic and political power is skewed to favor others as a result of illicit influence and nepotism. Corruption is as much a characterization of the political system or environment for business as it is a transaction or exchange between state officials and firms. Changes in a country’s average optimism level between 1999 and 2002 (see Annex 3) may well be to some extent a proxy for changes in certain aspects of the business environment over that period.

**Economic Growth**

The rate of recent economic growth does not appear to be a factor in explaining most aspects of corruption, as shown in Figure 3.7. It has a significant impact on only one measure of corruption: managers perceived less systemic state capture in 1999 in countries with higher growth rates. However, this effect appears only marginally significant even in 1999 and was not evident in 2002. For other measures of corruption, including perceptions of corruption as an obstacle to business, the frequency of bribes, the bribe tax, and state captor behavior, the

**FIGURE 3.7**

**The Impact of Recent Economic Growth on Corruption**



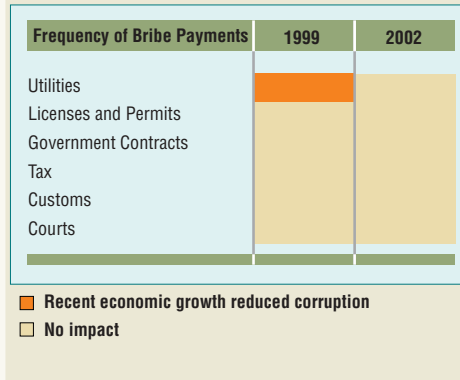
rate of recent economic growth appears to have no significant explanatory power.

Figure 3.8 summarizes the impact of growth on the frequency of individual types of bribe payments in 1999 and 2002. As noted above, economic growth has very little impact; the only case where growth seems to have had an effect is in the payment of bribes in 1999 to connect to public utilities, which was less frequent in faster-growing countries.

This is not to say, however, that growth does not affect corruption over the longer term. Richer countries have lower corruption levels than poorer countries on average, and this effect is captured in the policy and institutional variable discussed above.

**FIGURE 3.8**

**The Impact of Recent Economic Growth on the Frequency of Various Types of Bribes**



## Tenure of Political Leadership

Politics almost certainly has an important impact on corruption, albeit one that generally is not well understood. As shown in Figure 3.9, neither the length of tenure in office of the executive nor recent legislative elections are associated in the BEEPS data with higher bribe taxes or greater bribe frequency among sample firms in either year. Longer government (i.e., executive) tenure appears to be associated with reduced state capture behavior and improved perceptions of corruption as an obstacle in 1999, and with improved perceptions of the systemic impact of state capture in 2002. Similarly corruption is perceived to be less of an obstacle in coun-

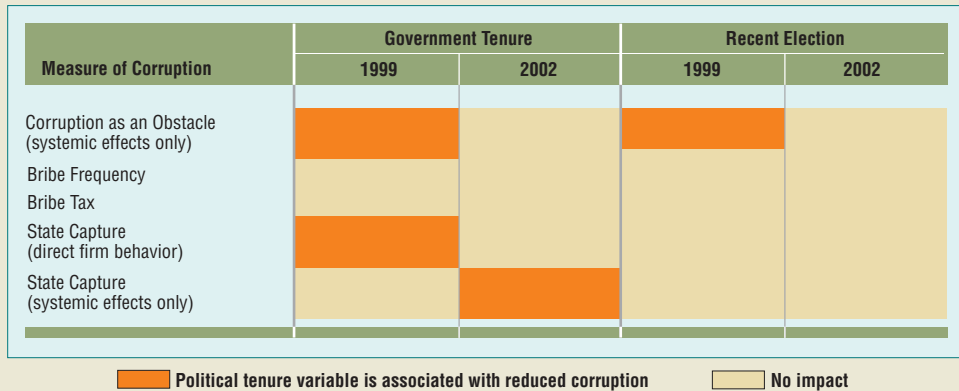
tries with recent elections, but this effect disappears in 2002.

Figure 3.10 shows the association in the BEEPS data between political tenure and the frequency of various types of bribes. As with the aggregate results noted above, longer government tenure appears to have had a positive impact on many types of administrative corruption in 1999, but this effect is less pronounced in 2002. Recent parliamentary elections has little significant impact in either year.

Analysis of political variables is extremely complex, however, and it is impossible to draw clear conclusions from this preliminary analysis. The change over time

**FIGURE 3.9**

**The Impact of Political Tenure on Corruption**

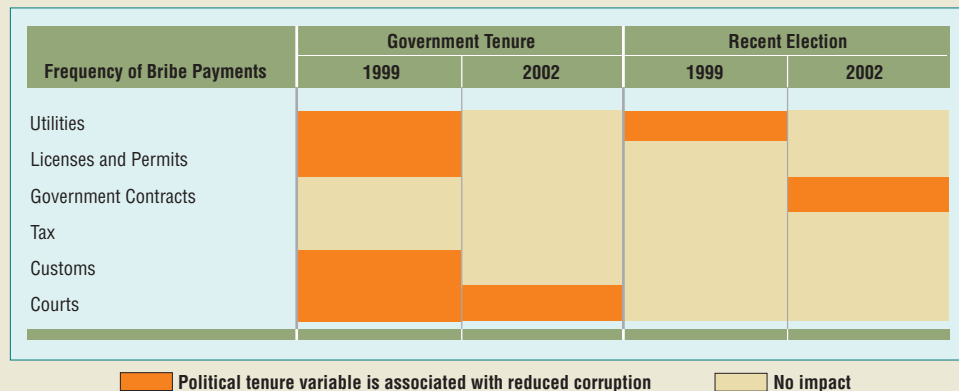


in the impact of elections and government tenure on corruption underscores how little we know about the links between politics and anticorruption. Certainly the political

context of most countries in transition continues to change, as political parties deepen and mature. Perhaps the impact of political factors on corruption is country specific, and

**FIGURE 3.10**

**The Impact of Political Tenure on the Frequency of Various Types of Bribes**



the results in Figures 3.9 and 3.10 are driven by idiosyncrasies regarding where different countries were in their election cycles at the time the surveys were conducted. At this point it is not possible to draw strong and robust conclusions regarding the effects of political tenure on corruption from the BEEPS data.

This chapter has tried to help untangle the intricate web of factors that contributes to different patterns of corruption across transition economies. Although much remains to be explained, the analysis has un-

derscored the importance of three factors—firm characteristics (most notably the disadvantaged position of small, young private firms and the advantaged position of foreign-owned firms), the policies and institutions that shape the business environment, and the degree of managerial optimism. The first two are amenable to influence through strong leadership and good public policy; the third may be less subject to influence, but the extent of its explanatory power is an interesting outcome of the analysis nonetheless.

# 4 CHAPTER

## Summary and Conclusions: Are Changes in Corruption Sustainable?

This Report has presented mixed but somewhat encouraging results about trends in corruption faced by the business community in the transition economies of Central and Eastern Europe and the CIS. On the positive side, sample firms in over 40 percent of the countries covered in both BEEPS viewed corruption as less of an obstacle to business in 2002 than in 1999, and firms in only two countries thought corruption was more of an obstacle.<sup>22</sup> This is not to say that corruption is not still a major problem in many settings: It continued to rank among the top third of 22 business obstacles in over half of the countries, most notably in the Balkans and the Caucasus. Perhaps not surprisingly, in the most advanced European Union (EU) accession countries (where levels of corruption are relatively low) and in some of the least reform-minded countries of the region (where tight state controls remain and private businesses face many other restrictions), corruption was seen as less problematic than most of the other obstacles that firms face in the investment climate.

Trends in the frequency of administrative corruption were more mixed. Overall, sample firms in at least 9 of the 24 coun-

tries surveyed in both BEEPS reported a reduction in the overall frequency of bribes from 1999 to 2002. The reduction seems to

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<sup>22</sup> Not all studies undertaken to date concur that corruption is becoming less of an obstacle in transition economies. In *Governance Matters III* (Kaufmann, Kraay, and Mastruzzi, 2003), the authors used available statistics from various expert polls and surveys to compute a composite indicator of corruption for a large number of countries in various parts of the world. The analysis concludes that between 1996 and 2002 there was virtually no change in the ability of CEE countries and a slight deterioration in the ability of the countries of the former Soviet Union to control corruption. The BEEPS data were included in the analysis but had little overall impact because the BEEPS results differed markedly from the results of other polls and surveys. Transparency International's latest Corruption Perceptions Index uses a similar methodology and reports similar findings. In contrast, other country-specific studies—such as the repeat surveys of Russian small and medium enterprises conducted by the Center for Economic Financial Institutional Research—concur with the BEEPS findings that corruption is becoming less of an obstacle to business in that country. These differences in findings among polls and surveys of various types raise interesting and important questions for further analysis.

be less, however, when one studies the average frequency of bribes for specific public services; the frequency of bribes paid in dealings with courts and public service providers appears to have declined in many settings, while the frequency of bribes appear to have increased in tax collection and public procurement. Trends in the cost of administrative corruption—the “bribe tax”—are also mixed. With a few exceptions, the relative rankings of countries on the bribe tax indicator are similar to their rankings on the frequency measure, with firms in CIS and SEE countries indicating higher bribe taxes than firms in CEE and the Baltics.

The results also point to the continuing impact of state capture on sample firms in many countries of the region, with particularly high impacts in the countries of South Eastern Europe. The number of firms engaging in capture increased in most countries from 1999 to 2002, in some cases very significantly. It appears that state capture is changing from a strategy of political influence practiced only by a small share of firms to a more widespread practice, although this does not necessarily translate into greater impact of capture on the business environment.

### **What Is Causing These Changes and Are They Sustainable?**

The reasons for these changing patterns of corruption are interesting and provide some clues as to the sustainability of these reductions over time. Firm characteristics have a significant impact on corruption, with pri-

vate, small, and new firms relatively disadvantaged. However, there is some evidence that these differences are declining over time. Lower corruption is clearly correlated with better public policies and institutions, and economic and governance reforms will in many cases prove sustainable. This is an important finding and underscores the critical importance of an active, credible, and effective reform process that leads over the medium term to sustained economic growth. Neither the rate of recent economic growth nor the length of political tenure appear to have significant effects on most measures of corruption. The analysis of political influence is fraught with complexity, and few conclusions can be drawn at this stage. Finally, perhaps the most novel finding in the analysis is the importance of managerial optimism in explaining certain indicators of corruption. Perceptions of corruption as an obstacle to business, for example, can only in part be explained by the amount of actual bribes paid. They are also shaped by managerial optimism, which in turn may be shaped by different features in the general business environment. Therefore it is somewhat difficult to predict the extent to which changes in corruption can be sustained.

### **Do Firms Have an Incentive to Reduce Corruption?**

An important dimension in the sustainability of any reduction in corruption is how it is affecting the willingness of firms to tolerate or even participate in corruption. For corruption to fall, it is important that the in-

centives of firms be aligned with anticorruption efforts. Firms form an important interest group whose behavior has obvious ramifications for a country's prospects for successful anticorruption reform.

Understanding whether corruption is a direct net cost or benefit to the firm is critical for thinking about the political economy of reform. Many managers tend to focus on the direct costs and benefits of corruption when deciding whether to pay a bribe in any given situation. By focusing only on immediate costs and benefits, these firms unfortunately ignore the fact that their bribery contributes to systemic costs that they view as detrimental to the growth of their firms. Until the direct costs substantially outweigh the benefits, the hope of enlisting the support of firms in anticorruption remains thin.

The BEEPS data provide an opportunity to estimate whether firms perceive bribery as a net cost or a net benefit, and Figure 4.1 presents the results of the analysis. A blue cell indicates that the direct costs (here measured in terms of the frequency of bribes paid) are positive, a yellow cell indicates that the direct costs are insignificant and roughly equal the direct benefits, and an orange cell indicates that the direct costs are negative (i.e., there is a direct benefit from bribery). The estimates in the figure suggest a mixed picture regarding the prospects for enlisting the cooperation of firms. Not surprisingly perhaps, in many countries firms who pay bribes perceive benefits equal to or greater than the amount of the bribe. Especially worrisome is state capture, which appears to impose a

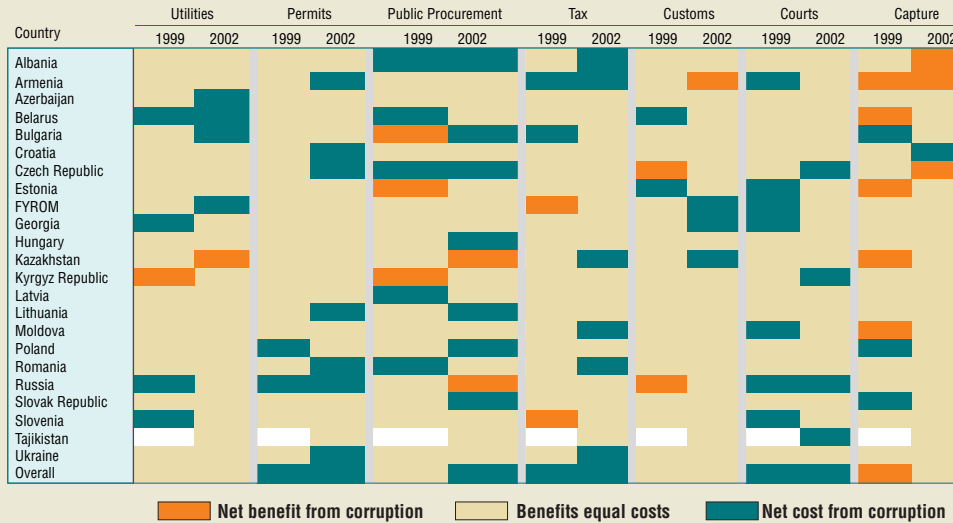
net cost on firms in only one country in 2002—Croatia. The types of corruption that appear to impose a net cost in the greatest number of countries in 2002 are in licensing (i.e., permits), public procurement, tax, and courts. Almost no country-specific patterns are evident in these results.

The trend in net direct costs, however, is more encouraging. Figure 4.2 presents changes in net direct costs (aggregated over all of the specific types of corruption listed in Figure 4.1), as well as changes in the systemic or “indirect” costs of corruption (i.e., the costs of corruption perceived by firms outside of their direct expenditures on bribes) over time by country. Overall indirect costs appear to be decreasing, while the net direct cost of corruption appears to be increasing in many countries. When the fall in the indirect cost of corruption is accompanied by a corresponding increase in the net cost of corruption to the firms actually paying the bribes, the costs of corruption can be seen as increasingly *internalized*. That is, the cost of corruption is being borne more directly by the very firms responsible for paying bribes, with smaller external effects. This suggests, in a sense, that the market for corruption is becoming more compact or efficient, with the cost of corruption being increasingly borne by firms with the more direct power to reduce bribery. For sectors where corruption imposes a net cost on firms—utility connections, licenses and permits, tax administration, and courts—this internalization may help induce the firms paying bribes to reconsider their actions.



FIGURE 4.1

Net Direct Costs of Corruption



In conclusion, this report is cautiously optimistic about the trends in corruption in some of the transition countries and the sustainability of change. Not only are the actual and perceived costs of corruption falling in many settings, but it appears that they are slowly becoming increasingly internalized by firms, even though they continue to be outweighed by the benefits of bribery in many instances. It also appears that there are clear steps that countries can take—and in many cases are taking—to design and implement policies and institutional reforms that will have a positive and sustainable impact on reducing corruption (see Box 4.1<sup>23</sup>). But the BEEPS results do not pro-

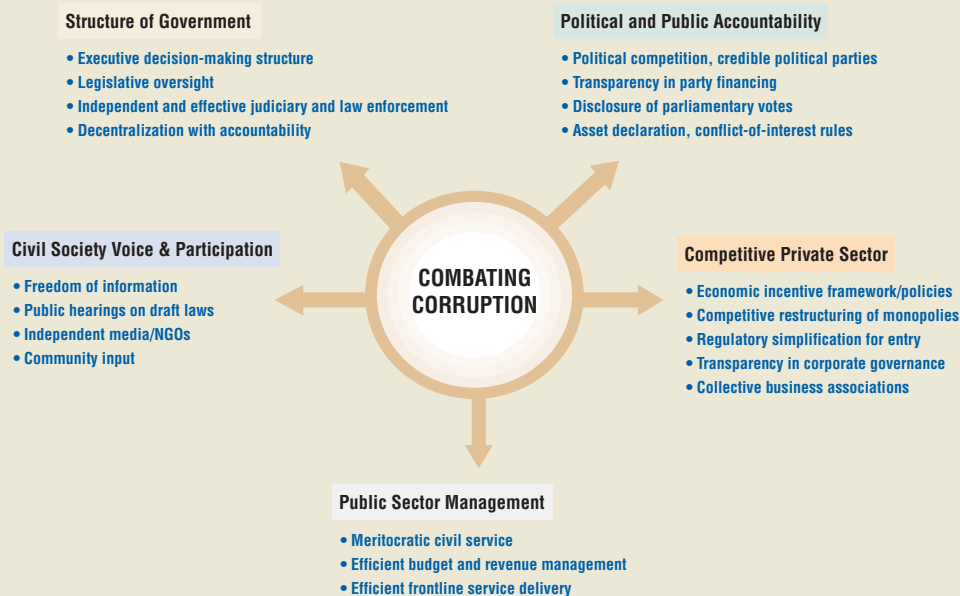
vide grounds for complacency. Many of the positive trends noted by BEEPS2 when compared with the first BEEPS appear to result from increasingly optimistic attitudes of managers rather than from real changes on the ground. Optimism is reversible and is not a basis for lasting progress in and of itself. Countries must continue the difficult

<sup>23</sup> For an analysis of anticorruption programs in transition countries, see Alan Rousso and Franklin Steves, “Anticorruption Programmes in Postcommunist Transition Countries and Changes in the Business Environment 1999-2002,” EBRD Working Paper (forthcoming).

## BOX 4.1

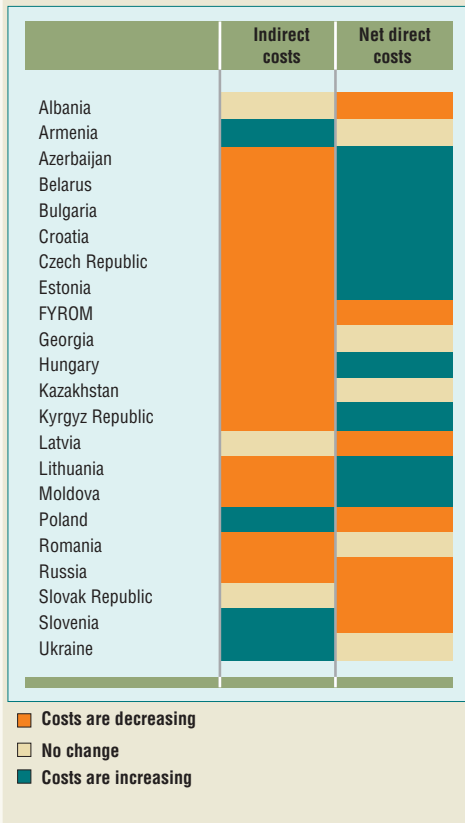
**Combating Corruption through Economic and Institutional Reform**

As discussed in *Anticorruption in Transition* (2000), a strategy to combat corruption should ideally help to strengthen a wide array of institutions and mechanisms that constrain arbitrary action and promote transparency in a society. Illustrated below are some aspects of the overall political and economic system that can lead to stronger accountability and help to reduce administrative corruption and state capture. First, the structure of government can provide institutional restraints that limit the arbitrary exercise of state power. Second, political institutions can promote contestability, transparency, and accountability in the political system. Third, a vibrant civil society can contribute to government decision-making and oversight through voice and participation. Fourth, competition can constrain monopoly power in the private sector and reduce incentives and opportunities for state capture. Finally, effective public sector management can promote strong policy making and efficient public service delivery. Although countries will differ in the relative emphasis they give to various dimensions of this overall system of accountability, it is important for leaders to consider a multi-pronged approach if they are to reach the roots of corruption and take effective actions to combat it.



**FIGURE 4.2**

**Changes in Indirect and Net Direct Costs Over Time**



process of policy and institutional reform if they are to successfully tackle the problem of corruption.

More generally, the effort undertaken in BEEPS and BEEPS2 to define trends in corruption through micro-level surveys across countries and over time suggests the complexity of the task of measuring corruption and the ever-shifting nature of the problem itself. One cannot simply say that corruption is going up or down in individual countries, as we find a complex web of movements and mutations across different forms, features and dimensions of corruption. We need to be cautious and modest and to constantly recognize the full complexity of the measurement effort.

# 1

## Annex

### Corruption Indicators and the BEEPS

One of the most concrete outcomes of the increased worldwide focus on governance and corruption has been a proliferation of efforts to measure the extent of corruption and the overall quality of governance across countries. Although the initial motivation for these efforts was to raise global awareness of the problem of corruption and to encourage countries to face up to systematic evidence comparing the problem across countries, corruption indicators are gradually becoming more important as a tool to enhance government accountability for addressing governance issues. By measuring the extent of corruption across countries and over time, these governance indicators are creating opportunities to assess the performance of national governments in fighting corruption and in implementing the institutional reforms necessary to improve governance. Governments and political parties use them in the electoral arena to demonstrate trends in corruption. Civil society groups use them to maintain pressure on national governments to show concrete results in the fight against corruption. Businesses use them to assess the rule of law across countries, a key aspect of their investment decisions. Donors use them as a way to prioritize assistance

programs and, in some cases, even to allocate aid. Clearly, there is a strong demand from a wide range of constituencies to monitor the problem of corruption over time through objective and reliable indicators.

Despite the wide range of newly developed corruption indicators, the challenge of developing reliable “over-time” measurements of corruption remains substantial. To date, the most widely known cross-country corruption indicators are based largely on subjective perceptions of corruption derived from in-country surveys, expert assessments and foreign investors. Perceptions-based measurements are an important component of monitoring the quality of governance, since perceptions of corruption may have a direct impact on a wide range of actual behaviors, such as investment decisions, voting, and the allocation of donor assistance. Yet such indicators do raise issues, which must be recognized explicitly:

- ▲ *Unbundling corruption*: Perception-based indicators tend to be based on questions about the general level of corruption in a given country. Yet previous efforts to unbundle corruption have shown that the problem can be disaggregated along many different dimensions—the level

of the political system at which it occurs, the kinds of benefits exchanged, the types of actors involved in the transaction, etc. Moreover, these different forms and modalities of corruption are not necessarily correlated within and across countries. This creates a particular problem for measuring corruption over time through people's perceptions of the overall extent of the problem: some types of corruption may have a much greater influence on those perceptions than others, and the nature of that influence itself can vary across countries. Media revelations of high-level privatization kickbacks might have a much greater impact on popular corruption perceptions in some countries than genuine improvements in reducing petty corruption in basic public service delivery. The shift of corruption from direct bribes to more subtle institutionalized forms of exchange, such as forced contributions to public foundations or compulsory use of private intermediaries for access to public services, could improve perceptions of corruption without changing the underlying problem. Consequently, while perceptions of the overall level of corruption might be very revealing about popular attitudes, they do not necessarily translate into an effective tool for monitoring changes in the diverse range of corrupt practices.

- ▲ *Time lags*: It is often said that combating corruption is a long-term project. The institutional reforms necessary to

address the roots of corruption cannot be expected to demonstrate results in the short term as they require changes in expectations and behaviors that take considerable time to achieve. Similarly, there may also be time lags between actual improvements in reducing corruption and changes in popular perceptions of corruption, especially in countries where corruption has been entrenched for a long period. Analysis of recent survey evidence suggests that, in some countries, evaluations of the extent of corruption in particular state institutions is higher among respondents who had never interacted with those institutions than those who had.<sup>24</sup> In such cases, where perceptions of corruption are not necessarily linked to direct experience but rather deeply ingrained biases, the time lag between changes in practice and perception may be considerable.

- ▲ *Causality confusion*: If perceptions of the extent of corruption increase or decrease, it is usually assumed that they have been caused by changes in the actual experience of corruption in a given country. But, of course, these perceptions can be influenced by other factors beyond the actual changes in the extent

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<sup>24</sup> For interesting studies of this issue with respect to survey evidence in Bulgaria, see the work of Bulgarian political scientist Ivan Krastev.

of corrupt practices. Perceptions of corruption can be affected by general economic conditions (such as macroeconomic instability) or by political changes (such as elections or government transitions) that affect overall levels of such attitudes as optimism, confidence and uncertainty. The same level of corruption in a highly uncertain macroeconomic environment, for example, could have a much greater impact on businesses than in a more stable environment and thus generate more intensive concerns about the problem. Corruption can often become a high profile issue in election political campaigns prompting greater awareness of the problem during elections regardless of any developments in the actual level of corruption. Consequently, when confronted with a change in perceptions of corruption, it is necessary to examine all the factors that could influence perceptions without assuming direct causation from practice to perceptions.

To address these issues, the World Bank and the European Bank for Reconstruction and Development designed the BEEPS to track progress in governance and the quality of the business environment across the transition countries. In contrast to most corruption surveys and expert assessments, the BEEPS explicitly unbundles corruption to compare different forms of the problem in specific sectors and levels of the economy and policymaking process in which firms

interact with the state. The BEEPS can generate measures of corruption based on both the perceptions and the experience of firms. In addition to asking firms about the impact of corruption on their activities, it provides more direct measures of different forms of corruption based on the frequency of bribe payments and the estimated share of bribe payments as measured against the firms' annual revenue. As a firm level survey, the BEEPS also provides an opportunity to relate the perceptions and experience of corruption to different characteristics of the firm. Not all firms face the same type or degree of obstacles from corruption even within the same country. Firms having greater leverage with the government might be able to shield themselves from certain corruption pressures or might use corruption to secure certain advantages in these still highly regulated markets. The BEEPS allows us to disaggregate corruption according to the specific characteristics of firms and to determine the impact of different forms of corruption on the firm's performance.

It is important to recognize as well that the BEEPS provides measures of corruption only from the perspective of the firm in relation to its interactions with the state. Consequently, the data do not capture a wide range of corrupt transactions that occur between public officials, between private sector actors, and between individuals and the state. Single country corruption surveys across the region have demonstrated the continued prominence of corruption in such areas as household access to health services

and education. Interactions with the traffic police are also identified as one of the most common forms of corruption in the region. In some transition countries, direct theft or misappropriation of public funds by state officials may be even more important than corruption in the public-private nexus. Such forms of corruption can be analyzed through methods like direct tracking of public expenditures to “follow the money” as it goes from the state budget to the intended recipients or comparisons of public procurement pricing both within and across countries.

Moreover, the BEEPS data cannot encompass all the different types of exchanges that might be considered corruption. The survey focuses on forms of corruption in the enterprise sector that are subject to reliable measurement. As a result, the questions ask about direct payments and gifts to public officials by enterprises. This leaves out a very wide range of corrupt transactions in which other forms of benefits that are more difficult to identify and measure are transferred to public officials and/or their families, such as equity stakes in firms, free or under-priced services or products, promises of future jobs, compulsory use of favored firms or consultants with connections to public officials, or coerced donations to affiliated foundations. Many of these types of transactions are concerned with the issue of conflicts of interest among public officials that are inherently difficult to identify, much less to measure and compare across countries. There is some

evidence to suggest that as the interaction between markets and states develops in transition countries, corruption is also “maturing” from direct payments to more institutionalized forms of exchange that are less susceptible to detection and prosecution.

Despite the advantages of BEEPS in comparison to other perceptions-based corruption indicators, it still provides a very incomplete measurement of corruption within each country and across the region. Moreover, we should remain cautious in assuming that all of these different manifestations of corruption are highly correlated, since there is increasing anecdotal evidence that new and institutionally complex forms of corruption may substitute for direct bribe payments as political and economic systems develop. This would suggest that countries at different levels of development may differ less in the extent of corruption than in the prevalence of different forms of corruption. As the development gaps among the transition countries become increasingly pronounced, these differences may become even more important. Consequently, the BEEPS data measure only a subset of corruption as faced by a particular constituency—the business community. The data, and hence this report, cannot be read as a statement of “how corrupt” each country is relative to the rest of the region and over time, but rather as a more detailed investigation of the corruption that businesses encounter in their direct interactions with the state.

## Issues of Data Comparability and “Don’t Know” Responses

Certain changes were made in the BEEPS questionnaire from 1999 to 2000, many in response to questions that had been raised during dissemination of the 1999 results about the clarity of the survey and the reliability of the responses. Because of these changes it is difficult in certain cases to make direct comparisons of the data from the two rounds of BEEPS.

The clearest case in which changes in the questionnaire compromise comparability is the measure of the bribe tax on firms, where three differences exist between the 1999 and 2002 questionnaires. First, the wording of the question varies slightly between the two years:

1999: “What percent of revenues do firms like yours pay in unofficial payments to public officials?”

2002: “On average, what percent of total annual sales do firms like yours typically pay in unofficial payments/gifts to public officials?”

Second, the 1999 questionnaire provided seven specific response categories (0 percent, less than 1 percent, 1-1.99 percent, 2-9.99 percent, 10-12 percent, 13-25 percent,

over 25 percent), and each manager was asked to check one of the categories. In contrast, in 2002 each manager was asked to provide an exact answer (in percent) to the question. Comparisons between bribe tax levels in 1999 and 2002 look very different depending on whether one assumes that the actual 1999 figure is nearer the upper or lower end of the relevant response category.<sup>25</sup>

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<sup>25</sup> If one takes a conservative interpretation of the 1999 results—namely, assuming that all answers fall at the *bottom* end of the category indicated by the respondent (thus minimizing any declines from 1999 to 2002), there would be a statistically significant decline in the bribe tax in six countries: Armenia, Azerbaijan, Estonia, Lithuania, Ukraine, and Uzbekistan. This decline is primarily attributable to an increase in the percentage of firms who report paying no bribes; among those who report paying bribes at least occasionally it is not clear that the average bribe tax has fallen even in these countries. If one assumes that the *midpoint* of the range is the appropriate answer in 1999 or if one controls for firm characteristics (as smaller firms and private firms tend to report higher bribe taxes and both were more prevalent in the 2002 sample than in the 1999 sample in several countries), 14 more countries would join the number of countries seeing a statistically significant fall in the bribe



There is no easy way around this comparison problem other than to do sensitivity tests using various assumptions for 1999. Third, managers were asked to answer the bribe tax in 1999 only if they had answered the previous question in the affirmative, “[It is] common in my line of business to have to pay some irregular ‘additional payments’ to get things done.” Otherwise, they were expected to skip the bribe tax question. In contrast, this “filtering” mechanism was not included in the 2002 questionnaire; rather, all managers were asked to answer the bribe tax question. Thus the 1999 data set contains a much larger proportion of “N.A.” (“not answered”) responses to the specific bribe tax question than the 2002 data set; a researcher seeking to compare the 1999 and 2002 results must consider the responses to both questions in 1999 (i.e., the “filtering” question and the specific bribe tax question) to get an accurate picture of how many firms faced zero bribe tax. For purposes of the analysis in this report, we assumed that an answer of “never” in the filtering question meant a bribe tax of zero as long as such an answer was consistent with other answers in the survey (most notably questions concerning bribe frequency).

Similar data issues affect several other comparisons between 1999 and 2002 BEEPS data, although in most cases to a lesser extent. The wording of the questions on the impact of state capture of various parts of the public sector (Parliament, political parties, the courts, etc.) on sample firms varied enough between 1999 and 2002 that we did

not feel comfortable drawing conclusions on trends across years. The report thus presents only the 2002 results on state capture. The measures of two key variables—managers’ perceptions of corruption as an obstacle to business and the frequency of bribe payments—are very similar in the two BEEPS questionnaires, facilitating direct comparisons over time. Issues of data comparability do not affect the analysis of causes of corruption in Chapter 3, as all regressions cited in the chapter use only cross-country data for a single year.

As occurs in any survey, respondents to the BEEPS sometimes responded that they do not know the answer to a particular question. The percentage of responses of “don’t know” ranged from 6 to 16 percent in 2002, and from 8 to 39 percent in 1999. Questions that were worded in a similar way on the two surveys, such as overall frequency of bribery and corruption as an obstacle to doing business, generally had similar frequencies of “don’t know” in 1999 and 2002. The questions receiving the highest percentage

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tax. The only countries that would not see a reduction in the bribe tax under any scenario are Belarus, Bulgaria, Latvia, and Romania. Of these, Latvia’s corruption indicators are relatively low in both years compared to other transition countries, and indicators in Belarus are not particularly high but could be worsening. In contrast, corruption indicators in Bulgaria and Romania were relatively high in 1999 and remained so in 2002.

of responses of “don’t know” were the questions related to state capture in 1999. The revisions to the state capture questions, while making the data incomparable (see above), did apparently succeed in adding sufficient precision that responses of “don’t know” were much less frequent in 2002.

This report has taken the usual approach of dropping responses of “don’t know” from the analysis. However, we also examined how some of the results presented here would be different under two alternative ways of treating responses of “don’t know.” For example, if some respondents answer “don’t know” because there is no corruption and that is why they don’t know about it, then one alternative way of treating these responses is to set them equal to the lowest level of corruption for that question (Alternative 1). Conversely, if some respondents answer

“don’t know” because there really is a tremendous amount of corruption and they are afraid of answering, then a second alternative way of treating these responses is to set them equal to the highest level of corruption for that question (Alternative 2). This is clearly the more extreme assumption. The country-level indices of the major corruption variables under these two alternative treatments are very highly correlated with the indices used in the report. For both 1999 and 2002, correlations using Alternative 1 exceed 0.92 for all key corruption variables and range between 0.56 and 0.98 using Alternative 2. For some of the key variables, such as corruption as an obstacle and the overall frequency of bribery, the correlations range between 0.90 and 0.99 under both alternatives.



# 3

Annex

## Methodology and Detailed Regression Results

The analysis of causes of corruption in Chapter 3 is based on a series of regressions. The dependent variable in each regression was one of 11 different measures of corruption from BEEPS:

- ▲ Corruption as an obstacle to business;
- ▲ Overall bribe frequency;
- ▲ Disaggregated bribe frequencies for utilities, licenses, public procurement, taxes, customs and imports, and courts;
- ▲ Bribe tax;
- ▲ Impact of state capture on firm; and
- ▲ Frequency of state capture.

The independent variables included in each regression included the following:

- ▲ Firm characteristics (age, size, foreign, private, location, sector);
- ▲ Macroeconomic conditions (GDP growth lagged one year);
- ▲ Political tenure and contestability (government tenure, recent election);
- ▲ Optimism; and
- ▲ Policy and institutional environment.

To measure managerial optimism, we regressed a variable measuring macroeconomic perceptions from the survey<sup>26</sup> on ac-

tual levels of inflation and exchange rate volatility in the country, adding two dummy variables for firms that export products and/or import supplies from other countries. Calculating the residuals from this regression (the difference between the fitted value of the regression and the actual macroeconomic perception), we obtain a pessimism/optimism indicator at the firm level. A higher value denotes a manager whose perspectives about the macroeconomic environment are more optimistic.

Tables A3.1 and A3.2 present the definitions and the summary statistics, respectively, for the variables used in Chapter 3. Table A3.3 presents the values of selected variables for each country and region. The OLS regression results are attached as Tables A3.4-A3.14. We also tested 2-stage least squares and ordered logit models but felt that OLS models were most appropriate (and the results were similar in all models).

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<sup>26</sup> “Can you tell me how problematic is macroeconomic instability (inflation, exchange rate) for the operation and growth of your business?” 1 = No obstacle, 2 = minor obstacle, 3 = moderate obstacle, 4 = major obstacle (Q80 in Beeps 2002, Q49 in Beeps 1999).

Figure 4.1 in Chapter 4 presents a graphic summary of the net direct costs of corruption in each country for each of the disaggregated bribe frequencies in both 1999 and 2002 (i.e., whether firms perceive bribery as a net cost or a net benefit). Tables A3.15-A3.25 in this annex present the country-specific regressions in each year that underlie the representation in Figure 4.1. Corruption as an obstacle is regressed on the disaggregated frequencies, optimism, and firm characteristics. An orange cell in Figure 4.1 indicates that the direct costs (here measured in terms of the frequency of bribes paid) outweigh the benefits (i.e., the coefficient is negative and significant at the 10 percent level), a yellow cell indicates that the direct costs roughly equal the direct ben-

efits (i.e., a non-significant coefficient), and a blue cell indicates that the direct benefits outweigh the direct costs (i.e., a positive and significant coefficient).

Figure 4.2 in Chapter 4 shows the changes in indirect and net direct costs over time by country. Net direct costs are represented by the sum of the contribution of the frequency of bribes in the seven sectors shown under “Bribery” in Figure 4.1. Indirect costs are the sum of the contribution of the constant term plus the firm characteristics and the optimism variable. The contribution of each variable is calculated using the coefficient for it in tables A3.15-A3.25 for each particular country and its mean. A simple t-test with a 10 percent margin of error is performed to evaluate the significance of changes over time.

**TABLE A3.1: DEFINITION OF VARIABLES**

Variable	Definition
<b>Corruption as an obstacle</b>	“Can you tell me how problematic is corruption for the operation and growth of your firm?” 1 = no obstacle; 2 = minor obstacle, 3 = moderate obstacle, 4 = major obstacle
<b>Bribetax</b>	“On average, what percent of total annual sales do firms like yours typically pay in unofficial payments/gifts to public officials after?”
<b>Bribefreq</b>	“It is common for firms in my line of business to have to pay some irregular “additional payments/gifts” to get things done with regard to customs, taxes, licenses, regulations, services, etc” 1 = never; 2 = seldom; 3 = sometimes; 4 = frequently; 5 = usually; 6 = always
<b>State Capture</b>	To what extent have the following practices (payments or gifts to Parliamentarians, government officials, in criminal and commercial cases, central bank officials, and political parties) had a direct impact on your business? 0 = No impact; 1 = Some impact
<b>BRIBERY</b>	“How often would firms like yours make unofficial payments/gifts for the following purposes?” 1 = never; 2 = seldom; 3 = sometimes; 4 = frequently; 5 = usually; 6 = always
Utilities	“To get connected to and maintain public services (electricity and telephone)”
Licenses & Permits	“To obtain business licenses and permits”
Public Procurement	“To obtain government contracts”

(continued on next page)

**TABLE A3.1: DEFINITION OF VARIABLES** *(continued)*

<b>Variable</b>	<b>Definition</b>
Taxes & Tax collection	"To deal with taxes and tax collection"
Customs & Import	"To deal with customs and imports"
Courts	"To deal with courts"
State Capture	"To influence the content of new legislation, rules, decrees, etc."
<b>FIRM CHARACTERISTICS</b>	
Age	Years since the firm began operations in the country (as of 2002), in logs
Small	Firms with no more than 50 full-time employees
City	Population of the city where the firm is located: 1 = under 50,000; 2 = between 50 and 250 thousands 3 = between 250,000 and 1 million; 4 = over 1 million; 5 = capital
Foreign	Firms with holdings or operations in other countries
Private	Firms with a private legal organization; private ownership
Sector	Firms where manufacturing is the main area of activity in terms of sales
<b>MACRO OPTIMISM</b>	Residuals of regressing macroeconomic perception ("How problematic is macroeconomic instability for the operation and growth of your business?") on actual levels of inflation and exchange rate volatility, adding dummies for firms that export products and/or import supplies. A higher score represents a more optimist view and a lower score a more pessimistic view about macroeconomic conditions
<b>GROWTH</b>	Growth rate of GDP, 1 year lag.
<b>INSTITUTIONS</b> text;	Country Policy and Institutional Assessment (CPIA): average of eight variables described in text; Minimum = 1; Maximum = 6
<b>POLITICAL VARIABLES</b>	
Government Tenure	How many years has the chief executive been in office?
Recent Elections	Was there a legislative election in the previous year? 1 = Yes; 0 = No

TABLE A3.2: SUMMARY OF STATISTICS

Variable	Mean	BEEPS 1999			Mean	BEEPS 2002		
		SD	Min	Max		SD	Min	Max
<b>Corruption as an obstacle</b>	2.47	1.15	1	4	2.24	1.16	1	4
<b>Bribetax</b>	2.92	4.77	0	25	1.62	3.30	0	50
<b>Bribefreq</b>	2.74	1.61	1	6	2.63	1.50	1	6
<b>State Capture</b>	0.34	0.39	0	1	0.19	0.33	0	1
<b>BRIBERY</b>								
Utilities	1.74	1.30	1	6	1.55	1.03	1	6
Licenses & Permits	2.05	1.45	1	6	2.06	1.37	1	6
Public Procurement	1.80	1.46	1	6	1.92	1.46	1	6
Taxes & Tax collection	1.86	1.30	1	6	2.04	1.41	1	6
Customs & Imports	1.82	1.36	1	6	1.85	1.38	1	6
Courts	1.73	1.24	1	6	1.60	1.12	1	6
State Capture	1.34	0.91	1	6	1.40	0.95	1	6
<b>FIRM CHARACTERISTICS</b>								
Age	2.30	0.75	0.69	5.28	2.25	0.84	1.10	5.31
Small	0.49	0.50	0	1	0.68	0.47	0	1
City	3.01	1.63	1	5	2.95	1.60	1	5
Foreign	0.02	0.13	0	1	0.03	0.16	0	1
Private	0.85	0.36	0	1	0.86	0.35	0	1
Sector	0.51	0.50	0	1	0.39	0.49	0	1
<b>MACRO OPTIMISM</b>	-1.4E-09	0.94	-2.01	2.83	-9.8E-06	1.09	-1.48	2.45
<b>GROWTH</b>	2.30	5.16	-6.50	15.60	5.31	3.26	-4.10	13.50
<b>POLITICAL VARIABLES</b>								
Government Tenure	4.74	2.31	1	8	5.77	3.36	1	11
Recent Elections	0.27	0.44	0	1	0.16	0.37	0	1

For access to the BEEPS2 database, see <http://info.worldbank.org/governance/beeps2002/>.

TABLE A3.3: COUNTRY AND REGIONAL STATISTICS (SELECTED VARIABLES)

Country	Growth		Optimism		Corruption as an Obstacle	
	1999	2002	1999	2002	1999	2002
Albania	8.00	6.50	0.10	-0.63	3.25	3.10
Armenia	7.30	9.60	-0.19	0.08	1.90	1.85
Azerbaijan	10.00	9.90	0.19	0.91	2.76	2.07
Belarus	8.40	4.10	0.38	-0.01	1.77	2.14
BiH	15.60	4.50			2.73	2.65
Bulgaria	4.00	4.00	0.06	-0.18	2.59	2.53
Croatia	2.50	3.80	-0.07	0.21	2.62	2.29
Czech Republic	-1.00	3.30	0.15	0.18	2.15	1.95
Estonia	4.60	5.00	0.45	0.53	1.85	1.69
FYROM	3.40	-4.10	0.45	-0.04	2.60	2.45
Georgia	2.90	4.50	-0.34	-0.42	3.03	2.87
Hungary	4.90	3.70	0.41	0.52	1.93	1.77
Kazakhstan	-1.90	13.50	-0.80	0.41	2.49	1.99
Kyrgyz Republic	2.10	5.30	-0.80	-0.03	3.37	2.36
Latvia	4.80	7.70	0.30	0.25	2.25	1.94
Lithuania	5.10	5.90	0.31	0.04	2.57	2.15
Moldova	-6.50	6.10	-0.54	-0.77	2.90	2.65
Poland	4.80	1.00	0.22	-0.47	2.24	2.50
Romania	-4.80	5.30	-0.61	-0.28	2.83	2.70
Russia	-4.90	5.00	0.06	0.16	2.56	1.99
SAM	1.90	5.50			2.34	2.02
Slovak Republic	4.10	3.30	-0.10	-0.36	2.44	2.50
Slovenia	3.80	3.00	0.53	0.64	1.63	1.67

(continued on next page)



**TABLE A3.3: COUNTRY AND REGIONAL STATISTICS (SELECTED VARIABLES)** *(continued)*

Country	Growth		Optimism		Corruption as an Obstacle	
	1999	2002	1999	2002	1999	2002
Tajikistan		10.30		0.31		2.27
Ukraine	-1.90	9.10	-0.28	-0.28	2.44	2.51
Uzbekistan	4.30	4.50			2.24	1.71
CEE	<b>3.32</b>	<b>2.86</b>	<b>0.24</b>	<b>0.10</b>	<b>2.08</b>	<b>2.08</b>
SEE	<b>4.37</b>	<b>3.64</b>	<b>-0.02</b>	<b>-0.18</b>	<b>2.71</b>	<b>2.53</b>
BALTICS	<b>4.83</b>	<b>6.20</b>	<b>0.35</b>	<b>0.27</b>	<b>2.22</b>	<b>1.93</b>
CIS	<b>1.98</b>	<b>7.45</b>	<b>-0.26</b>	<b>0.04</b>	<b>2.54</b>	<b>2.22</b>
CIS-7	<b>3.35</b>	<b>7.17</b>	<b>-0.34</b>	<b>0.01</b>	<b>2.70</b>	<b>2.25</b>
Central CIS	<b>-0.08</b>	<b>7.92</b>	<b>-0.16</b>	<b>0.07</b>	<b>2.31</b>	<b>2.16</b>
ALL	<b>3.26</b>	<b>5.40</b>	<b>-0.01</b>	<b>0.03</b>	<b>2.46</b>	<b>2.24</b>

*Note:* Optimism and Corruption as an Obstacle are country means across firms

*Growth:* annual change (%), previous year

*Optimism:* negative = pessimistic; positive = optimistic

*Corruption:* 1 = no obstacle; 4 = major obstacle

In calculating the regional averages, each country is given the same weight, regardless of number of firms

TABLE A3.4: DEPENDENT VARIABLE: BRIBE TAX		
	1999	2002
Older	-0.417*** <b><i>0.002</i></b>	-0.111 <b><i>0.298</i></b>
Small	1.448*** <b><i>0.001</i></b>	0.482*** <b><i>0.001</i></b>
Private	0.614** <b><i>0.029</i></b>	1.012*** <b><i>0</i></b>
Foreign	-1.959*** <b><i>0.003</i></b>	-0.713*** <b><i>0.003</i></b>
Sector	-0.04 <b><i>0.897</i></b>	0.157** <b><i>0.05</i></b>
City	0.203** <b><i>0.014</i></b>	0.05 <b><i>0.272</i></b>
Growth	0.034 <b><i>0.327</i></b>	0.063 <b><i>0.168</i></b>
Government Tenure	0.082 <b><i>0.168</i></b>	0.04 <b><i>0.436</i></b>
Recent Election	0.57 <b><i>0.105</i></b>	0.274 <b><i>0.298</i></b>
Institutions	-1.055*** <b><i>0.001</i></b>	-0.497** <b><i>0.044</i></b>
Optimism	-0.349** <b><i>0.014</i></b>	-0.299*** <b><i>0</i></b>
Constant	6.605*** <b><i>0</i></b>	2.150* <b><i>0.074</i></b>
Observations	2324	4645
Adjusted R-squared	0.090	0.055

Robust p values in bold and italics

\* significant at 10 percent

\*\* significant at 5 percent

\*\*\* significant at 1 percent

TABLE A3.5: DEPENDENT VARIABLE: BRIBE FREQUENCY		
	1999	2002
Older	-0.142*** <b><i>0</i></b>	-0.078* <b><i>0.06</i></b>
Small	0.407*** <b><i>0.001</i></b>	0.071 <b><i>0.251</i></b>
Private	0.411*** <b><i>0.005</i></b>	0.641*** <b><i>0</i></b>
Foreign	-0.469** <b><i>0.017</i></b>	-0.039 <b><i>0.726</i></b>
Sector	0.013 <b><i>0.863</i></b>	0.073 <b><i>0.123</i></b>
City	0.090** <b><i>0.013</i></b>	0.051*** <b><i>0.009</i></b>
Growth	-0.001 <b><i>0.97</i></b>	0.017 <b><i>0.458</i></b>
Government Tenure	-0.034 <b><i>0.124</i></b>	0.03 <b><i>0.206</i></b>
Recent Election	0.059 <b><i>0.583</i></b>	0.052 <b><i>0.763</i></b>
Institutions	-0.290** <b><i>0.014</i></b>	-0.275** <b><i>0.046</i></b>
Optimism	-0.120** <b><i>0.035</i></b>	-0.204*** <b><i>0</i></b>
Constant	4.009*** <b><i>0</i></b>	3.168*** <b><i>0</i></b>
Observations	2855	4717
Adjusted R-squared	0.083	0.090

Robust p values in bold and italics

\* significant at 10 percent

\*\* significant at 5 percent

\*\*\* significant at 1 percent

TABLE A3.6: DEPENDENT VARIABLE: STATE CAPTURE		
	1999	2002
bribe_LawContent	0.105*** <i>0</i>	0.104*** <i>0</i>
Older	0.01 <i>0.459</i>	0.006 <i>0.408</i>
Small	-0.021 <i>0.439</i>	-0.007 <i>0.624</i>
Private	0.043 <i>0.279</i>	0.037*** <i>0.004</i>
Foreign	-0.130*** <i>0.006</i>	0.006 <i>0.842</i>
Sector	-0.012 <i>0.528</i>	-0.017 <i>0.167</i>
City	-0.005 <i>0.568</i>	0.002 <i>0.657</i>
Growth	-0.015* <i>0.055</i>	-0.000 <i>0.939</i>
Government Tenure	-0.002 <i>0.878</i>	-0.008* <i>0.078</i>
Recent Election	0.042 <i>0.528</i>	0.026 <i>0.604</i>
Institutions	-0.056** <i>0.011</i>	-0.013 <i>0.565</i>
Optimism	-0.043*** <i>0.004</i>	-0.016** <i>0.035</i>
Constant	0.386*** <i>0.002</i>	0.100 <i>0.342</i>
Observations	1465	3908
Adjusted R-squared	0.138	0.116

Robust p values in bold and italics

\* significant at 10 percent

\*\* significant at 5 percent

\*\*\* significant at 1 percent

TABLE A3.7: DEPENDENT VARIABLE: STATE CAPTURE (LAW CONTENT)		
	1999	2002
Older	0.000 <i>0.998</i>	-0.015 <i>0.484</i>
Small	-0.031 <i>0.598</i>	-0.01 <i>0.822</i>
Private	0.117* <i>0.056</i>	0.115** <i>0.017</i>
Foreign	-0.143 <i>0.216</i>	-0.087 <i>0.291</i>
Sector	-0.09 <i>0.107</i>	-0.061** <i>0.04</i>
City	0.033* <i>0.088</i>	0.024** <i>0.046</i>
Growth	-0.002 <i>0.77</i>	-0.011 <i>0.265</i>
Government Tenure	-0.029*** <i>0.007</i>	-0.008 <i>0.331</i>
Recent Election	-0.01 <i>0.832</i>	-0.015 <i>0.844</i>
Institutions	-0.051 <i>0.335</i>	-0.012 <i>0.826</i>
Optimism	-0.033 <i>0.194</i>	-0.066*** <i>0.001</i>
Constant	1.754*** <i>0</i>	1.575*** <i>0</i>
Observations	2485	4453
Adjusted R-squared	0.010	0.011

Robust p values in bold and italics

\* significant at 10 percent

\*\* significant at 5 percent

\*\*\* significant at 1 percent

TABLE A3.8: DEPENDENT VARIABLE: CORRUPTION AS AN OBSTACLE		
	1999	2002
bribetax	0.051*** <i>0</i>	0.055*** <i>0</i>
Older	-0.014 <i>0.705</i>	0.001 <i>0.967</i>
Small	0.028 <i>0.666</i>	0.012 <i>0.834</i>
Private	0.054 <i>0.488</i>	0.205*** <i>0.001</i>
Foreign	0.194* <i>0.095</i>	-0.183* <i>0.082</i>
Sector	0.06 <i>0.253</i>	0.048 <i>0.246</i>
City	0.027 <i>0.329</i>	0.026* <i>0.066</i>
Growth	-0.012 <i>0.444</i>	-0.008 <i>0.591</i>
Government Tenure	-0.071* <i>0.051</i>	-0.02 <i>0.106</i>
Recent Election	-0.261** <i>0.046</i>	0.118 <i>0.107</i>
Institutions	-0.193** <i>0.033</i>	-0.138* <i>0.09</i>
Optimism	-0.327*** <i>0</i>	-0.431*** <i>0</i>
Constant	3.473*** <i>0</i>	2.718*** <i>0</i>
Observations	2141	4394
Adjusted R-squared	0.188	0.249

Robust p values in bold and italics

\* significant at 10 percent

\*\* significant at 5 percent

\*\*\* significant at 1 percent

TABLE A3.9: DEPENDENT VARIABLE: UTILITIES		
	1999	2002
Older	-0.119*** <i>0.001</i>	-0.059** <i>0.024</i>
Small	0.283*** <i>0.001</i>	0.106*** <i>0.006</i>
Private	0.134** <i>0.041</i>	0.180*** <i>0</i>
Foreign	-0.201 <i>0.26</i>	-0.166* <i>0.077</i>
Sector	0.088 <i>0.161</i>	-0.001 <i>0.985</i>
City	0.082*** <i>0.004</i>	0.022 <i>0.11</i>
Growth	-0.025** <i>0.016</i>	0.006 <i>0.716</i>
Government Tenure	-0.108*** <i>0</i>	0.008 <i>0.645</i>
Recent Election	-0.175* <i>0.100</i>	-0.012 <i>0.922</i>
Institutions	-0.225*** <i>0.003</i>	-0.102 <i>0.219</i>
Optimism	-0.127*** <i>0.003</i>	-0.053** <i>0.018</i>
Constant	3.387*** <i>0</i>	1.791*** <i>0.001</i>
Observations	2884	4785
Adjusted R-squared	0.099	0.029

Robust p values in bold and italics

\* significant at 10 percent

\*\* significant at 5 percent

\*\*\* significant at 1 percent

TABLE A3.10: DEPENDENT VARIABLE: LICENSES AND PERMITS		
	1999	2002
Older	-0.078 <b><i>0.154</i></b>	-0.077* <b><i>0.074</i></b>
Small	0.295*** <b><i>0.005</i></b>	0.088 <b><i>0.204</i></b>
Private	0.406*** <b><i>0</i></b>	0.400*** <b><i>0</i></b>
Foreign	-0.243 <b><i>0.106</i></b>	-0.279** <b><i>0.014</i></b>
Sector	0.051 <b><i>0.493</i></b>	0.022 <b><i>0.516</i></b>
City	0.076*** <b><i>0.003</i></b>	0.024 <b><i>0.187</i></b>
Growth	-0.02 <b><i>0.179</i></b>	0.014 <b><i>0.557</i></b>
Government Tenure	-0.059** <b><i>0.037</i></b>	-0.007 <b><i>0.73</i></b>
Recent Election	-0.045 <b><i>0.717</i></b>	0.044 <b><i>0.838</i></b>
Institutions	-0.177** <b><i>0.028</i></b>	-0.259** <b><i>0.021</i></b>
Optimism	-0.079 <b><i>0.168</i></b>	-0.117*** <b><i>0</i></b>
Constant	2.925*** <b><i>0</i></b>	2.825*** <b><i>0</i></b>
Observations	2862	4749
Adjusted R-squared	0.063	0.053

Robust p values in bold and italics

\* significant at 10 percent

\*\* significant at 5 percent

\*\*\* significant at 1 percent

TABLE A3.11: DEPENDENT VARIABLE: GOVERNMENT CONTRACTS		
	1999	2002
Older	-0.011 <b><i>0.808</i></b>	-0.004 <b><i>0.923</i></b>
Small	0.168 <b><i>0.147</i></b>	0.160** <b><i>0.032</i></b>
Private	0.346*** <b><i>0.002</i></b>	0.330*** <b><i>0</i></b>
Foreign	-0.067 <b><i>0.53</i></b>	-0.197** <b><i>0.049</i></b>
Sector	0.182*** <b><i>0.005</i></b>	0.335*** <b><i>0</i></b>
City	0.080** <b><i>0.018</i></b>	0.075*** <b><i>0.002</i></b>
Growth	0.009 <b><i>0.596</i></b>	-0.03 <b><i>0.211</i></b>
Government Tenure	-0.059 <b><i>0.153</i></b>	-0.025 <b><i>0.17</i></b>
Recent Election	0.005 <b><i>0.981</i></b>	-0.327** <b><i>0.015</i></b>
Institutions	-0.069 <b><i>0.521</i></b>	0.062 <b><i>0.402</i></b>
Optimism	-0.002 <b><i>0.966</i></b>	-0.170*** <b><i>0</i></b>
Constant	2.147*** <b><i>0.001</i></b>	1.740*** <b><i>0</i></b>
Observations	2519	4506
Adjusted R-squared	0.028	0.051

Robust p values in bold and italics

\* significant at 10 percent

\*\* significant at 5 percent

\*\*\* significant at 1 percent

TABLE A3.12: DEPENDENT VARIABLE: TAXES		
	1999	2002
Older	-0.072* <b><i>0.051</i></b>	-0.087** <b><i>0.016</i></b>
Small	0.218*** <b><i>0.009</i></b>	0.059 <b><i>0.358</i></b>
Private	0.274*** <b><i>0</i></b>	0.409*** <b><i>0</i></b>
Foreign	-0.375*** <b><i>0.002</i></b>	-0.291*** <b><i>0.004</i></b>
Sector	-0.045 <b><i>0.461</i></b>	-0.035 <b><i>0.449</i></b>
City	0.054*** <b><i>0.002</i></b>	0.037* <b><i>0.057</i></b>
Growth	0.015 <b><i>0.193</i></b>	0.037 <b><i>0.288</i></b>
Government Tenure	-0.022 <b><i>0.202</i></b>	0.037 <b><i>0.221</i></b>
Recent Election	0.018 <b><i>0.9</i></b>	0.076 <b><i>0.713</i></b>
Institutions	-0.459*** <b><i>0</i></b>	-0.311 <b><i>0.127</i></b>
Optimism	-0.038 <b><i>0.367</i></b>	-0.179*** <b><i>0</i></b>
Constant	3.639*** <b><i>0</i></b>	2.707** <b><i>0.014</i></b>
Observations	2851	4739
Adjusted R-squared	0.096	0.104

Robust p values in bold and italics

\* significant at 10 percent

\*\* significant at 5 percent

\*\*\* significant at 1 percent

TABLE A3.13: DEPENDENT VARIABLE: CUSTOMS AND IMPORTS		
	1999	2002
Older	-0.043 <b><i>0.297</i></b>	-0.04 <b><i>0.306</i></b>
Small	0.09 <b><i>0.313</i></b>	-0.141* <b><i>0.073</i></b>
Private	0.364*** <b><i>0.001</i></b>	0.475*** <b><i>0</i></b>
Foreign	0.166 <b><i>0.205</i></b>	0.102 <b><i>0.43</i></b>
Sector	-0.103* <b><i>0.086</i></b>	0.053 <b><i>0.205</i></b>
City	0.094*** <b><i>0.004</i></b>	0.057*** <b><i>0.006</i></b>
Growth	0.006 <b><i>0.618</i></b>	0.009 <b><i>0.663</i></b>
Government Tenure	-0.118*** <b><i>0.001</i></b>	-0.04 <b><i>0.123</i></b>
Recent Election	-0.145 <b><i>0.241</i></b>	0.113 <b><i>0.558</i></b>
Institutions	-0.229** <b><i>0.013</i></b>	-0.237** <b><i>0.028</i></b>
Optimism	-0.065* <b><i>0.098</i></b>	-0.150*** <b><i>0</i></b>
Constant	3.332*** <b><i>0</i></b>	2.820*** <b><i>0</i></b>
Observations	2534	4533
Adjusted R-squared	0.085	0.062

Robust p values in bold and italics

\* significant at 10 percent

\*\* significant at 5 percent

\*\*\* significant at 1 percent

TABLE A3.14: DEPENDENT VARIABLES: COURTS

	1999	2002
Older	-0.068* <i><b>0.089</b></i>	-0.006 <i><b>0.812</b></i>
Small	0.13 <i><b>0.127</b></i>	-0.045 <i><b>0.375</b></i>
Private	0.242*** <i><b>0.003</b></i>	0.273*** <i><b>0</b></i>
Foreign	-0.360*** <i><b>0.001</b></i>	-0.134 <i><b>0.107</b></i>
Sector	-0.024 <i><b>0.549</b></i>	0.001 <i><b>0.962</b></i>
City	0.047 <i><b>0.103</b></i>	0.024* <i><b>0.091</b></i>
Growth	-0.003 <i><b>0.825</b></i>	-0.011 <i><b>0.523</b></i>
Government Tenure	-0.099*** <i><b>0.001</b></i>	-0.029* <i><b>0.099</b></i>
Recent Election	-0.081 <i><b>0.527</b></i>	-0.121 <i><b>0.483</b></i>
Institutions	-0.265** <i><b>0.018</b></i>	-0.156* <i><b>0.076</b></i>
Optimism	-0.033 <i><b>0.376</b></i>	-0.128*** <i><b>0</b></i>
Constant	3.275*** <i><b>0</b></i>	2.295*** <i><b>0</b></i>
Observations	2588	4501
Adjusted R-squared	0.067	0.042

Robust p values in bold and italics

\* significant at 10 percent

\*\* significant at 5 percent

\*\*\* significant at 1 percent

TABLE A3.15: ALBANIA

Dependent Variable: Corruption as an Obstacle Method of Estimation: OLS		
	1999	2002
Utilities	0.028 <i><b>0.737</b></i>	-0.104 <i><b>0.234</b></i>
Licenses & Permits	-0.017 <i><b>0.765</b></i>	0.063 <i><b>0.391</b></i>
Govt. Contracts	0.118** <i><b>0.047</b></i>	0.080** <i><b>0.047</b></i>
Tax	-0.019 <i><b>0.784</b></i>	0.120* <i><b>0.098</b></i>
Customs & Imports	-0.078 <i><b>0.156</b></i>	-0.032 <i><b>0.619</b></i>
Courts	0.002 <i><b>0.984</b></i>	-0.004 <i><b>0.947</b></i>
State Capture	0.152 <i><b>0.168</b></i>	-0.182** <i><b>0.039</b></i>
Optimism	-0.114 <i><b>0.281</b></i>	-0.553*** <i><b>0</b></i>
Older	-0.344* <i><b>0.069</b></i>	0.039 <i><b>0.837</b></i>
Small	0.278 <i><b>0.153</b></i>	0.228 <i><b>0.236</b></i>
City	0.125** <i><b>0.046</b></i>	-0.182*** <i><b>0</b></i>
Foreign	-0.559*** <i><b>0.006</b></i>	-1.128*** <i><b>0</b></i>
Private	0.139 <i><b>0.568</b></i>	0.019 <i><b>0.96</b></i>
Sector	0.212 <i><b>0.302</b></i>	0.149 <i><b>0.408</b></i>
Constant	3.783*** <i><b>0</b></i>	1.825** <i><b>0.012</b></i>
Observations	85	120
R-squared	0.384	0.411

p values in bold and italics

\* significant at 10 percent

\*\* significant at 5 percent

\*\*\* significant at 1 percent

TABLE A3.16: ARMENIA		
Dependent Variable: Corruption as an Obstacle Method of Estimation: OLS		
	1999	2002
Utilities	-0.063 <i>0.542</i>	0.041 <i>0.766</i>
Licenses & Permits	0.096 <i>0.369</i>	0.333*** <i>0</i>
Govt. Contracts	-0.147 <i>0.17</i>	-0.141 <i>0.529</i>
Tax	0.237** <i>0.02</i>	0.294*** <i>0.001</i>
Customs & Imports	-0.044 <i>0.631</i>	-0.348*** <i>0.007</i>
Courts	0.350** <i>0.01</i>	0.078 <i>0.711</i>
State Capture	-0.383** <i>0.02</i>	-0.421** <i>0.04</i>
Optimism	0.01 <i>0.935</i>	-0.527*** <i>0</i>
Older	-0.116 <i>0.653</i>	-0.049 <i>0.606</i>
Small	-0.476 <i>0.162</i>	-0.155 <i>0.443</i>
City	-0.135* <i>0.052</i>	0.046 <i>0.283</i>
Foreign	-0.129 <i>0.661</i>	0.979*** <i>0</i>
Private	-0.056 <i>0.902</i>	0.246 <i>0.198</i>
Sector	0.043 <i>0.873</i>	0.012 <i>0.935</i>
Constant	1.599* <i>0.083</i>	2.054*** <i>0</i>
Observations	93	136
R-squared	0.340	0.491

p values in bold and italics  
 \* significant at 10 percent  
 \*\* significant at 5 percent  
 \*\*\* significant at 1 percent

TABLE A3.17: AZERBAIJAN		
Dependent Variable: Corruption as an Obstacle Method of Estimation: OLS		
	1999	2002
Utilities	0.197 <i>0.352</i>	0.401*** <i>0.008</i>
Licenses & Permits	0.081 <i>0.81</i>	0.162 <i>0.17</i>
Govt. Contracts	0.188 <i>0.506</i>	0.048 <i>0.75</i>
Tax	-0.353 <i>0.248</i>	0.011 <i>0.927</i>
Customs & Imports	-0.29 <i>0.332</i>	-0.026 <i>0.812</i>
Courts	0.42 <i>0.146</i>	0.166 <i>0.359</i>
State Capture	-0.015 <i>0.948</i>	-0.006 <i>0.952</i>
Optimism	-0.570*** <i>0.001</i>	-0.574*** <i>0</i>
Older	0.256 <i>0.48</i>	0.227* <i>0.081</i>
Small	0.371 <i>0.364</i>	-0.088 <i>0.698</i>
City	0.032 <i>0.718</i>	0.172*** <i>0.007</i>
Foreign	0 <i>.</i>	0.407 <i>0.123</i>
Private	0.085 <i>0.863</i>	0.469 <i>0.136</i>
Sector	0.27 <i>0.318</i>	-0.187 <i>0.28</i>
Constant	1.289 <i>0.314</i>	1.280** <i>0.032</i>
Observations	56	113
R-squared	0.551	0.600

p values in bold and italics  
 \* significant at 10 percent  
 \*\* significant at 5 percent  
 \*\*\* significant at 1 percent



TABLE A3.18: BELARUS		
Dependent Variable: Corruption as an Obstacle Method of Estimation: OLS		
	1999	2002
Utilities	0.728*** <i>0</i>	0.241* <i>0.089</i>
Licenses & Permits	0.073 <i>0.72</i>	0.09 <i>0.283</i>
Govt. Contracts	1.233*** <i>0</i>	0.053 <i>0.535</i>
Tax	0.062 <i>0.784</i>	0.052 <i>0.552</i>
Customs & Imports	0.282* <i>0.062</i>	-0.125 <i>0.186</i>
Courts	-0.065 <i>0.816</i>	0.135 <i>0.217</i>
State Capture	-2.595*** <i>0</i>	0.073 <i>0.501</i>
Optimism	-0.449** <i>0.015</i>	-0.419*** <i>0</i>
Older	-0.235 <i>0.324</i>	-0.168 <i>0.114</i>
Small	0.645* <i>0.067</i>	-0.187 <i>0.361</i>
City	-0.184 <i>0.186</i>	0.031 <i>0.571</i>
Foreign	1.271*** <i>0.004</i>	-1.324*** <i>0</i>
Private	-1.136** <i>0.016</i>	0.132 <i>0.485</i>
Sector	-0.506 <i>0.129</i>	-0.307* <i>0.082</i>
Constant	3.117*** <i>0.003</i>	2.040*** <i>0</i>
Observations	51	191
R-squared	0.608	0.289

p values in bold and italics  
 \* significant at 10 percent  
 \*\* significant at 5 percent  
 \*\*\* significant at 1 percent

TABLE A3.19: BULGARIA		
Dependent Variable: Corruption as an Obstacle Method of Estimation: OLS		
	1999	2002
Utilities	-0.036 <i>0.792</i>	0.127* <i>0.071</i>
Licenses & Permits	0.219 <i>0.137</i>	0.064 <i>0.359</i>
Govt. Contracts	-0.253** <i>0.05</i>	0.127* <i>0.072</i>
Tax	0.323*** <i>0</i>	0.12 <i>0.116</i>
Customs & Imports	-0.116 <i>0.27</i>	-0.041 <i>0.504</i>
Courts	-0.014 <i>0.92</i>	0.088 <i>0.26</i>
State Capture	0.340** <i>0.011</i>	0.058 <i>0.48</i>
Optimism	-0.268 <i>0.184</i>	-0.298*** <i>0</i>
Older	-0.181 <i>0.383</i>	0.114 <i>0.192</i>
Small	0.047 <i>0.906</i>	0.496** <i>0.01</i>
City	-0.097 <i>0.511</i>	-0.032 <i>0.521</i>
Foreign	0 <i>.</i>	0.316 <i>0.229</i>
Private	-0.356 <i>0.373</i>	0.403* <i>0.062</i>
Sector	-0.377 <i>0.494</i>	0.194 <i>0.334</i>
Constant	2.556*** <i>0.004</i>	0.281 <i>0.479</i>
Observations	59	188
R-squared	0.369	0.333

p values in bold and italics  
 \* significant at 10 percent  
 \*\* significant at 5 percent  
 \*\*\* significant at 1 percent

TABLE A3.20: CROATIA

Dependent Variable: Corruption as an Obstacle Method of Estimation: OLS		
	1999	2002
Utilities	0.185 <i><b>0.286</b></i>	0.041 <i><b>0.731</b></i>
Licenses & Permits	-0.282 <i><b>0.127</b></i>	0.382** <i><b>0.047</b></i>
Govt. Contracts	0.178 <i><b>0.171</b></i>	0.098 <i><b>0.314</b></i>
Tax	0.013 <i><b>0.942</b></i>	-0.195 <i><b>0.292</b></i>
Customs & Imports	0.141 <i><b>0.434</b></i>	-0.147 <i><b>0.276</b></i>
Courts	0.085 <i><b>0.624</b></i>	0.047 <i><b>0.672</b></i>
State Capture	0.018 <i><b>0.904</b></i>	0.186* <i><b>0.084</b></i>
Optimism	-0.281** <i><b>0.041</b></i>	-0.412*** <i><b>0</b></i>
Older	-0.008 <i><b>0.955</b></i>	0.036 <i><b>0.752</b></i>
Small	0.071 <i><b>0.831</b></i>	-0.06 <i><b>0.808</b></i>
City	0.048 <i><b>0.499</b></i>	0.023 <i><b>0.696</b></i>
Foreign	0 <i><b>.</b></i>	-0.433 <i><b>0.163</b></i>
Private	0.128 <i><b>0.643</b></i>	0.624** <i><b>0.032</b></i>
Sector	-0.062 <i><b>0.822</b></i>	0.164 <i><b>0.456</b></i>
Constant	2.077*** <i><b>0.001</b></i>	1.026** <i><b>0.042</b></i>
Observations	96	120
R-squared	0.216	0.364

p values in bold and italics

\* significant at 10 percent

\*\* significant at 5 percent

\*\*\* significant at 1 percent

TABLE A3.21: CZECH REPUBLIC

Dependent Variable: Corruption as an Obstacle Method of Estimation: OLS		
	1999	2002
Utilities	-0.191 <i><b>0.372</b></i>	0.103 <i><b>0.155</b></i>
Licenses & Permits	0.195 <i><b>0.311</b></i>	0.152* <i><b>0.08</b></i>
Govt. Contracts	0.271*** <i><b>0.007</b></i>	0.151** <i><b>0.017</b></i>
Tax	-0.033 <i><b>0.845</b></i>	-0.166 <i><b>0.112</b></i>
Customs & Imports	-0.339* <i><b>0.059</b></i>	0.113 <i><b>0.321</b></i>
Courts	0.246 <i><b>0.264</b></i>	0.368*** <i><b>0.003</b></i>
State Capture	-0.094 <i><b>0.603</b></i>	-0.321*** <i><b>0.003</b></i>
Optimism	-0.374** <i><b>0.027</b></i>	-0.171*** <i><b>0.01</b></i>
Older	-0.025 <i><b>0.866</b></i>	0.219** <i><b>0.017</b></i>
Small	0.014 <i><b>0.973</b></i>	0.057 <i><b>0.688</b></i>
City	-0.008 <i><b>0.908</b></i>	-0.008 <i><b>0.857</b></i>
Foreign	-0.301 <i><b>0.617</b></i>	0.529 <i><b>0.199</b></i>
Private	0.204 <i><b>0.685</b></i>	0.07 <i><b>0.666</b></i>
Sector	0.359 <i><b>0.187</b></i>	0.292* <i><b>0.067</b></i>
Constant	1.690** <i><b>0.021</b></i>	0.49 <i><b>0.125</b></i>
Observations	72	211
R-squared	0.262	0.296

p values in bold and italics

\* significant at 10 percent

\*\* significant at 5 percent

\*\*\* significant at 1 percent

TABLE A3.22: ESTONIA		
Dependent Variable: Corruption as an Obstacle Method of Estimation: OLS		
	1999	2002
Utilities	0.159 <i><b>0.625</b></i>	0.095 <i><b>0.543</b></i>
Licenses & Permits	-0.041 <i><b>0.662</b></i>	0.149 <i><b>0.205</b></i>
Govt. Contracts	-0.178*** <i><b>0.002</b></i>	0.034 <i><b>0.676</b></i>
Tax	0.016 <i><b>0.94</b></i>	0.028 <i><b>0.871</b></i>
Customs & Imports	0.235*** <i><b>0.006</b></i>	-0.039 <i><b>0.816</b></i>
Courts	0.385*** <i><b>0.006</b></i>	0.122 <i><b>0.465</b></i>
State Capture	-0.509*** <i><b>0</b></i>	-0.029 <i><b>0.82</b></i>
Optimism	-0.253** <i><b>0.018</b></i>	-0.453*** <i><b>0</b></i>
Older	0.073 <i><b>0.611</b></i>	-0.234* <i><b>0.053</b></i>
Small	0.131 <i><b>0.494</b></i>	0 <i><b>0.998</b></i>
City	-0.082 <i><b>0.105</b></i>	0.005 <i><b>0.913</b></i>
Foreign	0.585* <i><b>0.056</b></i>	-0.486 <i><b>0.433</b></i>
Private	-0.165 <i><b>0.545</b></i>	0.078 <i><b>0.722</b></i>
Sector	0.335* <i><b>0.088</b></i>	-0.018 <i><b>0.907</b></i>
Constant	1.370*** <i><b>0.003</b></i>	1.865*** <i><b>0</b></i>
Observations	102	116
R-squared	0.206	0.353

p values in bold and italics  
 \* significant at 10 percent  
 \*\* significant at 5 percent  
 \*\*\* significant at 1 percent

TABLE A3.23: FYROM		
Dependent Variable: Corruption as an Obstacle Method of Estimation: OLS		
	1999	2002
Utilities	-0.086 <i><b>0.709</b></i>	0.241** <i><b>0.04</b></i>
Licenses & Permits	0.067 <i><b>0.779</b></i>	-0.079 <i><b>0.269</b></i>
Govt. Contracts	0.032 <i><b>0.865</b></i>	0.071 <i><b>0.324</b></i>
Tax	-0.370* <i><b>0.062</b></i>	0.113 <i><b>0.288</b></i>
Customs & Imports	0.122 <i><b>0.494</b></i>	0.212** <i><b>0.031</b></i>
Courts	0.541*** <i><b>0.001</b></i>	-0.101 <i><b>0.368</b></i>
State Capture	0.183 <i><b>0.247</b></i>	0.096 <i><b>0.353</b></i>
Optimism	-0.406* <i><b>0.06</b></i>	-0.609*** <i><b>0</b></i>
Older	-0.541*** <i><b>0.006</b></i>	-0.308** <i><b>0.023</b></i>
Small	-0.321 <i><b>0.562</b></i>	0.498** <i><b>0.037</b></i>
City	0.003 <i><b>0.977</b></i>	0.123* <i><b>0.051</b></i>
Foreign	-0.171 <i><b>0.853</b></i>	0.554 <i><b>0.126</b></i>
Private	-0.033 <i><b>0.95</b></i>	0.008 <i><b>0.974</b></i>
Sector	0.012 <i><b>0.962</b></i>	0.534** <i><b>0.015</b></i>
Constant	3.460*** <i><b>0</b></i>	2.024*** <i><b>0.001</b></i>
Observations	62	103
R-squared	0.637	0.602

p values in bold and italics  
 \* significant at 10 percent  
 \*\* significant at 5 percent  
 \*\*\* significant at 1 percent

TABLE A3.24: GEORGIA

Dependent Variable: Corruption as an Obstacle Method of Estimation: OLS		
	1999	2002
Utilities	0.144* <b><i>0.095</i></b>	-0.022 <b><i>0.798</i></b>
Licenses & Permits	-0.089 <b><i>0.354</i></b>	-0.032 <b><i>0.721</i></b>
Govt. Contracts	-0.141 <b><i>0.219</i></b>	0.017 <b><i>0.841</i></b>
Tax	0.065 <b><i>0.464</i></b>	0.001 <b><i>0.99</i></b>
Customs & Imports	-0.101 <b><i>0.542</i></b>	0.160** <b><i>0.038</i></b>
Courts	0.205* <b><i>0.063</i></b>	-0.018 <b><i>0.85</i></b>
State Capture	0.124 <b><i>0.288</i></b>	0.062 <b><i>0.508</i></b>
Optimism	-0.550*** <b><i>0</i></b>	-0.409*** <b><i>0</i></b>
Older	0.447** <b><i>0.012</i></b>	0.012 <b><i>0.893</i></b>
Small	0.02 <b><i>0.934</i></b>	-0.129 <b><i>0.531</i></b>
City	0.071 <b><i>0.203</i></b>	-0.018 <b><i>0.737</i></b>
Foreign	0.379 <b><i>0.224</i></b>	0.482 <b><i>0.351</i></b>
Private	0.332 <b><i>0.41</i></b>	-0.318 <b><i>0.219</i></b>
Sector	-0.227 <b><i>0.275</i></b>	0.366* <b><i>0.084</i></b>
Constant	1.658*** <b><i>0.008</i></b>	2.463*** <b><i>0</i></b>
Observations	90	142
R-squared	0.372	0.298

p values in bold and italics  
 \* significant at 10 percent  
 \*\* significant at 5 percent  
 \*\*\* significant at 1 percent

TABLE A3.25: HUNGARY

Dependent Variable: Corruption as an Obstacle Method of Estimation: OLS		
	1999	2002
Utilities	-0.106 <b><i>0.481</i></b>	-0.042 <b><i>0.67</i></b>
Licenses & Permits	0.268 <b><i>0.149</i></b>	-0.098 <b><i>0.386</i></b>
Govt. Contracts	-0.054 <b><i>0.777</i></b>	0.141** <b><i>0.047</i></b>
Tax	-0.098 <b><i>0.661</i></b>	0.075 <b><i>0.482</i></b>
Customs & Imports	0.102 <b><i>0.617</i></b>	0.038 <b><i>0.676</i></b>
Courts	0.035 <b><i>0.953</i></b>	0.157 <b><i>0.238</i></b>
State Capture	0.14 <b><i>0.744</i></b>	-0.037 <b><i>0.755</i></b>
Optimism	-0.316** <b><i>0.039</i></b>	-0.305*** <b><i>0</i></b>
Older	-0.514*** <b><i>0.007</i></b>	-0.118 <b><i>0.163</i></b>
Small	0.663* <b><i>0.052</i></b>	0.06 <b><i>0.704</i></b>
City	-0.113 <b><i>0.136</i></b>	-0.026 <b><i>0.547</i></b>
Foreign	-0.559* <b><i>0.085</i></b>	0.677 <b><i>0.325</i></b>
Private	-0.294 <b><i>0.418</i></b>	0.155 <b><i>0.424</i></b>
Sector	0.058 <b><i>0.818</i></b>	-0.064 <b><i>0.687</i></b>
Constant	2.408*** <b><i>0.001</i></b>	1.531*** <b><i>0</i></b>
Observations	97	209
R-squared	0.259	0.233

p values in bold and italics  
 \* significant at 10 percent  
 \*\* significant at 5 percent  
 \*\*\* significant at 1 percent

TABLE A3.26: KAZAKHSTAN

Dependent Variable: Corruption as an Obstacle Method of Estimation: OLS		
	1999	2002
Utilities	0.114 <i>0.332</i>	-0.204** <i>0.012</i>
Licenses & Permits	0.093 <i>0.554</i>	0.076 <i>0.225</i>
Govt. Contracts	-0.014 <i>0.899</i>	-0.105** <i>0.033</i>
Tax	-0.034 <i>0.824</i>	0.210*** <i>0.002</i>
Customs & Imports	0.073 <i>0.648</i>	0.138** <i>0.014</i>
Courts	0.184 <i>0.173</i>	-0.149 <i>0.145</i>
State Capture	-0.250** <i>0.037</i>	0.118 <i>0.256</i>
Optimism	-0.389 <i>0.177</i>	-0.398*** <i>0</i>
Older	-0.314 <i>0.223</i>	0.084 <i>0.355</i>
Small	0.025 <i>0.958</i>	-0.037 <i>0.802</i>
City	0.066 <i>0.733</i>	-0.095* <i>0.064</i>
Foreign	-0.306 <i>0.475</i>	-0.272 <i>0.468</i>
Private	0.237 <i>0.726</i>	0.017 <i>0.925</i>
Sector	-0.276 <i>0.464</i>	0.246* <i>0.094</i>
Constant	2.832*** <i>0.006</i>	1.248*** <i>0</i>
Observations	61	204
R-squared	0.282	0.353

p values in bold and italics  
 \* significant at 10 percent  
 \*\* significant at 5 percent  
 \*\*\* significant at 1 percent

TABLE A3.27: KYRGYZ REPUBLIC

Dependent Variable: Corruption as an Obstacle Method of Estimation: OLS		
	1999	2002
Utilities	-0.541** <i>0.042</i>	0.074 <i>0.46</i>
Licenses & Permits	0.356 <i>0.369</i>	0.095 <i>0.214</i>
Govt. Contracts	-1.387* <i>0.05</i>	-0.014 <i>0.811</i>
Tax	-0.093 <i>0.698</i>	0.03 <i>0.615</i>
Customs & Imports	0.116 <i>0.19</i>	0.047 <i>0.438</i>
Courts	0.72 <i>0.293</i>	0.218** <i>0.026</i>
State Capture	0.628 <i>0.165</i>	0.004 <i>0.961</i>
Optimism	-1.247*** <i>0</i>	-0.367*** <i>0</i>
Older	0.22 <i>0.631</i>	0.062 <i>0.547</i>
Small	0.812** <i>0.049</i>	0.005 <i>0.982</i>
City	-0.181 <i>0.121</i>	0.053 <i>0.323</i>
Foreign	0 <i>.</i>	-0.27 <i>0.476</i>
Private	-0.46 <i>0.511</i>	-0.603*** <i>0.003</i>
Sector	0.961* <i>0.068</i>	-0.079 <i>0.657</i>
Constant	0.622 <i>0.705</i>	1.952*** <i>0</i>
Observations	29	132
R-squared	0.630	0.446

p values in bold and italics  
 \* significant at 10 percent  
 \*\* significant at 5 percent  
 \*\*\* significant at 1 percent

TABLE A3.28: LATVIA

Dependent Variable: Corruption as an Obstacle Method of Estimation: OLS		
	1999	2002
Utilities	-0.01 <i>0.942</i>	0.048 <i>0.681</i>
Licenses & Permits	-0.009 <i>0.951</i>	0.118 <i>0.352</i>
Govt. Contracts	0.316** <i>0.018</i>	0.155 <i>0.121</i>
Tax	-0.181 <i>0.518</i>	0.158 <i>0.122</i>
Customs & Imports	0.066 <i>0.644</i>	-0.084 <i>0.491</i>
Courts	0.135 <i>0.318</i>	0.18 <i>0.275</i>
State Capture	0.24 <i>0.146</i>	-0.137 <i>0.291</i>
Optimism	-0.320*** <i>0.008</i>	-0.289*** <i>0.003</i>
Older	-0.165 <i>0.352</i>	0.223* <i>0.065</i>
Small	-0.185 <i>0.472</i>	0.284 <i>0.283</i>
City	-0.075 <i>0.273</i>	-0.07 <i>0.114</i>
Foreign	0 .	-0.054 <i>0.915</i>
Private	0.254 <i>0.558</i>	0.12 <i>0.649</i>
Sector	-0.157 <i>0.575</i>	0.394 <i>0.152</i>
Constant	1.388** <i>0.039</i>	0.261 <i>0.567</i>
Observations	87	121
R-squared	0.309	0.367

p values in bold and italics  
 \* significant at 10 percent  
 \*\* significant at 5 percent  
 \*\*\* significant at 1 percent

TABLE A3.29: LITHUANIA

Dependent Variable: Corruption as an Obstacle Method of Estimation: OLS		
	1999	2002
Utilities	-0.112 <i>0.582</i>	0.189 <i>0.24</i>
Licenses & Permits	-0.137 <i>0.631</i>	0.146* <i>0.079</i>
Govt. Contracts	0.209 <i>0.344</i>	0.294*** <i>0</i>
Tax	-0.301 <i>0.169</i>	-0.138 <i>0.289</i>
Customs & Imports	-0.159 <i>0.643</i>	0.098 <i>0.266</i>
Courts	0.237 <i>0.296</i>	0.177 <i>0.315</i>
State Capture	-0.213 <i>0.311</i>	-0.022 <i>0.895</i>
Optimism	0.823*** <i>0.002</i>	-0.153** <i>0.034</i>
Older	-0.967* <i>0.05</i>	-0.153 <i>0.168</i>
Small	0.645 <i>0.34</i>	-0.231 <i>0.19</i>
City	0.057 <i>0.641</i>	-0.023 <i>0.632</i>
Foreign	0 .	-0.204 <i>0.568</i>
Private	0 .	-0.034 <i>0.888</i>
Sector	1.137** <i>0.025</i>	-0.473*** <i>0.002</i>
Constant	4.635*** <i>0.001</i>	1.735*** <i>0.002</i>
Observations	41	176
R-squared	0.577	0.280

p values in bold and italics  
 \* significant at 10 percent  
 \*\* significant at 5 percent  
 \*\*\* significant at 1 percent

**TABLE A3.30: MOLDOVA**

Dependent Variable: Corruption as an Obstacle Method of Estimation: OLS		
	1999	2002
Utilities	-0.044 <i><b>0.782</b></i>	-0.08 <i><b>0.552</b></i>
Licenses & Permits	-0.014 <i><b>0.915</b></i>	0.099 <i><b>0.26</b></i>
Govt. Contracts	0.067 <i><b>0.42</b></i>	0.167 <i><b>0.206</b></i>
Tax	-0.061 <i><b>0.748</b></i>	0.245** <i><b>0.016</b></i>
Customs & Imports	-0.258 <i><b>0.183</b></i>	-0.096 <i><b>0.247</b></i>
Courts	0.798*** <i><b>0.008</b></i>	0.038 <i><b>0.754</b></i>
State Capture	-0.532* <i><b>0.062</b></i>	-0.076 <i><b>0.456</b></i>
Optimism	-0.343 <i><b>0.291</b></i>	-0.392*** <i><b>0</b></i>
Older	0.354 <i><b>0.134</b></i>	0.131 <i><b>0.346</b></i>
Small	0.888 <i><b>0.118</b></i>	-0.199 <i><b>0.337</b></i>
City	-0.125 <i><b>0.194</b></i>	-0.136** <i><b>0.017</b></i>
Foreign	0.677 <i><b>0.354</b></i>	0.791** <i><b>0.023</b></i>
Private	-0.255 <i><b>0.632</b></i>	-0.014 <i><b>0.96</b></i>
Sector	0.166 <i><b>0.725</b></i>	-0.267 <i><b>0.167</b></i>
Constant	0.921 <i><b>0.313</b></i>	1.122** <i><b>0.04</b></i>
Observations	55	131
R-squared	0.253	0.339

p values in bold and italics  
 \* significant at 10 percent  
 \*\* significant at 5 percent  
 \*\*\* significant at 1 percent

**TABLE A3.31: POLAND**

Dependent Variable: Corruption as an Obstacle Method of Estimation: OLS		
	1999	2002
Utilities	0.04 <i><b>0.698</b></i>	0.061 <i><b>0.453</b></i>
Licenses & Permits	0.170* <i><b>0.078</b></i>	0.101 <i><b>0.173</b></i>
Govt. Contracts	0.002 <i><b>0.982</b></i>	0.151*** <i><b>0.001</b></i>
Tax	-0.066 <i><b>0.548</b></i>	0.109 <i><b>0.115</b></i>
Customs & Imports	-0.026 <i><b>0.809</b></i>	-0.119 <i><b>0.117</b></i>
Courts	0.224 <i><b>0.1</b></i>	0.03 <i><b>0.726</b></i>
State Capture	0.172* <i><b>0.076</b></i>	0.013 <i><b>0.85</b></i>
Optimism	-0.386*** <i><b>0.002</b></i>	-0.454*** <i><b>0</b></i>
Older	-0.002 <i><b>0.984</b></i>	-0.028 <i><b>0.706</b></i>
Small	0.069 <i><b>0.702</b></i>	0.161 <i><b>0.176</b></i>
City	-0.036 <i><b>0.63</b></i>	0.03 <i><b>0.483</b></i>
Foreign	0.482 <i><b>0.354</b></i>	-0.029 <i><b>0.904</b></i>
Private	0.253 <i><b>0.339</b></i>	0.213 <i><b>0.248</b></i>
Sector	0.333* <i><b>0.067</b></i>	0.074 <i><b>0.509</b></i>
Constant	0.941** <i><b>0.03</b></i>	1.523*** <i><b>0</b></i>
Observations	143	368
R-squared	0.346	0.259

p values in bold and italics  
 \* significant at 10 percent  
 \*\* significant at 5 percent  
 \*\*\* significant at 1 percent

TABLE A3.32: ROMANIA		
Dependent Variable: Corruption as an Obstacle Method of Estimation: OLS		
	1999	2002
Utilities	-0.018 <i>0.867</i>	-0.102 <i>0.205</i>
Licenses & Permits	0.067 <i>0.685</i>	0.172*** <i>0.002</i>
Govt. Contracts	0.224* <i>0.074</i>	0.053 <i>0.435</i>
Tax	0.162 <i>0.275</i>	0.176*** <i>0.002</i>
Customs & Imports	-0.101 <i>0.397</i>	-0.077 <i>0.27</i>
Courts	0.066 <i>0.611</i>	0.129 <i>0.15</i>
State Capture	-0.154 <i>0.115</i>	-0.049 <i>0.552</i>
Optimism	0.006 <i>0.982</i>	-0.433*** <i>0</i>
Older	-0.216 <i>0.366</i>	0.223** <i>0.011</i>
Small	-0.51 <i>0.199</i>	0.092 <i>0.615</i>
City	-0.006 <i>0.962</i>	0.003 <i>0.944</i>
Foreign	0 <i>.</i>	0 <i>.</i>
Private	0.484 <i>0.301</i>	0.283 <i>0.158</i>
Sector	0.107 <i>0.76</i>	-0.073 <i>0.619</i>
Constant	2.890*** <i>0.003</i>	1.121*** <i>0.001</i>
Observations	54	195
R-squared	0.250	0.347

p values in bold and italics  
 \* significant at 10 percent  
 \*\* significant at 5 percent  
 \*\*\* significant at 1 percent

TABLE A3.33: RUSSIA		
Dependent Variable: Corruption as an Obstacle Method of Estimation: OLS		
	1999	2002
Utilities	0.123** <i>0.014</i>	-0.014 <i>0.75</i>
Licenses & Permits	0.128** <i>0.013</i>	0.087* <i>0.083</i>
Govt. Contracts	0.066 <i>0.202</i>	-0.084** <i>0.045</i>
Tax	0.08 <i>0.101</i>	-0.016 <i>0.747</i>
Customs & Imports	-0.148*** <i>0.006</i>	-0.021 <i>0.719</i>
Courts	0.143** <i>0.01</i>	0.174*** <i>0.007</i>
State Capture	-0.022 <i>0.782</i>	0.026 <i>0.715</i>
Optimism	-0.396*** <i>0</i>	-0.382*** <i>0</i>
Older	0.238* <i>0.056</i>	-0.093 <i>0.158</i>
Small	-0.084 <i>0.502</i>	-0.300*** <i>0.007</i>
City	0 <i>0.991</i>	-0.087** <i>0.016</i>
Foreign	-0.091 <i>0.755</i>	-0.483* <i>0.078</i>
Private	0.221 <i>0.48</i>	-0.068 <i>0.679</i>
Sector	0.068 <i>0.607</i>	0.201** <i>0.044</i>
Constant	1.203** <i>0.019</i>	1.917*** <i>0</i>
Observations	365	378
R-squared	0.204	0.252

p values in bold and italics  
 \* significant at 10 percent  
 \*\* significant at 5 percent  
 \*\*\* significant at 1 percent



TABLE A3.34: SLOVAK REPUBLIC

Dependent Variable: Corruption as an Obstacle Method of Estimation: OLS		
	1999	2002
Utilities	0.006 <i><b>0.972</b></i>	0.061 <i><b>0.663</b></i>
Licenses & Permits	0.217 <i><b>0.216</b></i>	0.004 <i><b>0.968</b></i>
Govt. Contracts	-0.078 <i><b>0.58</b></i>	0.184*** <i><b>0.007</b></i>
Tax	0.263 <i><b>0.23</b></i>	-0.051 <i><b>0.637</b></i>
Customs & Imports	-0.291 <i><b>0.167</b></i>	-0.011 <i><b>0.911</b></i>
Courts	-0.121 <i><b>0.399</b></i>	0.049 <i><b>0.639</b></i>
State Capture	0.627** <i><b>0.014</b></i>	0.194 <i><b>0.136</b></i>
Optimism	-0.032 <i><b>0.881</b></i>	-0.359*** <i><b>0</b></i>
Older	-0.317 <i><b>0.105</b></i>	-0.084 <i><b>0.529</b></i>
Small	0.139 <i><b>0.699</b></i>	-0.145 <i><b>0.447</b></i>
City	-0.083 <i><b>0.552</b></i>	-0.105 <i><b>0.102</b></i>
Foreign	0.885*** <i><b>0.006</b></i>	-1.035*** <i><b>0.007</b></i>
Private	0.376 <i><b>0.321</b></i>	0.837*** <i><b>0.007</b></i>
Sector	0.138 <i><b>0.663</b></i>	0.011 <i><b>0.961</b></i>
Constant	1.750* <i><b>0.074</b></i>	0.847 <i><b>0.104</b></i>
Observations	61	121
R-squared	0.342	0.411

p values in bold and italics  
 \* significant at 10 percent  
 \*\* significant at 5 percent  
 \*\*\* significant at 1 percent

TABLE A3.35: SLOVENIA

Dependent Variable: Corruption as an Obstacle Method of Estimation: OLS		
	1999	2002
Utilities	0.620*** <i><b>0.002</b></i>	-0.023 <i><b>0.856</b></i>
Licenses & Permits	-0.046 <i><b>0.743</b></i>	0.071 <i><b>0.56</b></i>
Govt. Contracts	0.03 <i><b>0.806</b></i>	0.169 <i><b>0.16</b></i>
Tax	-0.477*** <i><b>0.008</b></i>	0.002 <i><b>0.989</b></i>
Customs & Imports	-0.115 <i><b>0.312</b></i>	-0.093 <i><b>0.51</b></i>
Courts	0.399** <i><b>0.048</b></i>	0.159 <i><b>0.47</b></i>
State Capture	0.094 <i><b>0.636</b></i>	-0.157 <i><b>0.119</b></i>
Optimism	-0.249*** <i><b>0.002</b></i>	-0.328*** <i><b>0</b></i>
Older	-0.025 <i><b>0.767</b></i>	-0.004 <i><b>0.969</b></i>
Small	0.29 <i><b>0.277</b></i>	0.309* <i><b>0.098</b></i>
City	-0.002 <i><b>0.976</b></i>	-0.06 <i><b>0.137</b></i>
Foreign	0 <i><b>.</b></i>	-0.325** <i><b>0.038</b></i>
Private	0.338** <i><b>0.027</b></i>	-0.231 <i><b>0.395</b></i>
Sector	-0.22 <i><b>0.197</b></i>	0.235 <i><b>0.166</b></i>
Constant	0.890* <i><b>0.064</b></i>	1.431*** <i><b>0.004</b></i>
Observations	100	169
R-squared	0.356	0.256

p values in bold and italics  
 \* significant at 10 percent  
 \*\* significant at 5 percent  
 \*\*\* significant at 1 percent

TABLE A3.36: UKRAINE

Dependent Variable: Corruption as an Obstacle Method of Estimation: OLS		
	1999	2002
Utilities	-0.095 <b><i>0.325</i></b>	0.103 <b><i>0.103</i></b>
Licenses & Permits	0.123 <b><i>0.298</i></b>	0.099** <b><i>0.039</i></b>
Govt. Contracts	-0.013 <b><i>0.835</i></b>	0.041 <b><i>0.438</i></b>
Tax	0.13 <b><i>0.198</i></b>	0.111** <b><i>0.047</i></b>
Customs & Imports	0.15 <b><i>0.269</i></b>	0.005 <b><i>0.908</i></b>
Courts	0.131 <b><i>0.225</i></b>	0.067 <b><i>0.401</i></b>
State Capture	-0.087 <b><i>0.333</i></b>	-0.109 <b><i>0.16</i></b>
Optimism	-0.356** <b><i>0.013</i></b>	-0.407*** <b><i>0</i></b>
Older	0.009 <b><i>0.976</i></b>	0.095 <b><i>0.232</i></b>
Small	0.046 <b><i>0.841</i></b>	0.185 <b><i>0.132</i></b>
City	-0.108 <b><i>0.173</i></b>	0.033 <b><i>0.455</i></b>
Foreign	-0.593 <b><i>0.108</i></b>	-0.232 <b><i>0.436</i></b>
Private	-0.363 <b><i>0.57</i></b>	0.166 <b><i>0.356</i></b>
Sector	0.223 <b><i>0.29</i></b>	-0.032 <b><i>0.778</i></b>
Constant	1.349 <b><i>0.24</i></b>	1.352*** <b><i>0</i></b>
Observations	113	343
R-squared	0.329	0.275

p values in bold and italics

\* significant at 10 percent

\*\* significant at 5 percent

\*\*\* significant at 1 percent

TABLE A3.37: TAJIKISTAN

Dependent Variable: Corruption as an Obstacle Method of Estimation: OLS	
	2002
Utilities	0.02 <b><i>0.806</i></b>
Licenses & Permits	0.128 <b><i>0.188</i></b>
Govt. Contracts	0.021 <b><i>0.79</i></b>
Tax	0.007 <b><i>0.935</i></b>
Customs & Imports	-0.072 <b><i>0.326</i></b>
Courts	0.215** <b><i>0.016</i></b>
State Capture	-0.134 <b><i>0.122</i></b>
Optimism	-0.265*** <b><i>0.001</i></b>
Older	0.219* <b><i>0.068</i></b>
Small	0.026 <b><i>0.909</i></b>
City	-0.114* <b><i>0.052</i></b>
Foreign	0 <b><i>.</i></b>
Private	0.595** <b><i>0.016</i></b>
Sector	-0.005 <b><i>0.978</i></b>
Constant	0.344 <b><i>0.482</i></b>
Observations	128
R-squared	0.347

p values in bold and italics

\* significant at 10 percent

\*\* significant at 5 percent

\*\*\* significant at 1 percent

The 1999 survey does not include Tajikistan



THE WORLD BANK  
1818 H Street, NW  
Washington, D.C. 20433 USA

Telephone: 202-473-1000  
Facsimile: 202-477-6391  
Internet: [www.worldbank.org](http://www.worldbank.org)  
E-mail: [feedback@worldbank.org](mailto:feedback@worldbank.org)

Controlling corruption is an essential part of good governance and poverty reduction, and it poses an enormous challenge for governments all around the world. This report analyzes patterns and trends in corruption in business-government interactions in the transition economies of Central and Eastern Europe and the former Soviet Union. It points to some encouraging signs that the magnitude and negative impact that corruption exerts on businesses may be declining in many countries in the region. It also shows how some types of firms—most notably small private ones—encounter more corruption than others, and it underscores the importance of policy and institutional reforms in achieving long-term success in the fight against corruption. The longer-term sustainability of recent improvements is not certain, however, and the challenges ahead remain formidable.



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