

Measuring Governance, Corruption, and State Capture

How Firms and Bureaucrats Shape the Business Environment in Transition Economies

Joel S. Hellman

Geraint Jones

Daniel Kaufmann

Mark Schankerman

In a new approach to measuring typically “subjective” variables, BEEPS—the 1999 Business Environment and Enterprise Performance Survey, the transition economies component of the World Business Environment Survey—quantitatively assesses governance from the perspective of about 3,000 firms in 20 countries. Unbundling the measurement of governance and corruption empirically suggests the importance of grand corruption in some countries, manifested in state capture by the corporate sector—through the “purchase” of decrees and legislation—and by graft in procurement.

The World Bank
World Bank Institute
Governance, Regulation and Finance
and
European Bank for Reconstruction and Development
Chief Economist’s Office
April 2000



Summary findings

As a symptom of fundamental institutional weaknesses, corruption needs to be viewed within a broader governance framework. It thrives where the state is unable to reign over its bureaucracy, to protect property and contractual rights, or to provide institutions that support the rule of law. Furthermore, governance failures at the national level cannot be isolated from the interface between the corporate and state sectors, in particular from the heretofore underemphasized influence that firms may exert on the state. Under certain conditions, corporate strategies may exacerbate misgovernance at the national level.

An in-depth empirical assessment of the links between corporate behavior and national governance can thus provide particular insights. The 1999 Business Environment and Enterprise Performance Survey (BEEPS)—the transition economies component of the ongoing World Business Environment Survey—assesses in detail the various dimensions of governance from the perspective of about 3,000 firms in 20 countries. After introducing the survey framework and measurement

approach, Hellman, Jones, Kaufmann, and Schankerman present the survey results, focusing on governance, corruption, and state capture.

By unbundling governance into its many dimensions, BEEPS permits an in-depth empirical assessment. The authors pay special attention to certain forms of grand corruption, notably state capture by parts of the corporate sector—that is, the propensity of firms to shape the underlying rules of the game by “purchasing” decrees, legislation, and influence at the central bank, which is found to be prevalent in a number of transition economies. The survey also measures other dimensions of grand corruption, including those associated with public procurement, and quantifies the more traditional (“pettier”) forms of corruption.

Cross-country surveys may suffer from bias if firms tend to systematically over- or underestimate the extent of problems within their country. The authors provide a new test for this potential bias, finding little evidence of country perception bias in BEEPS.

This paper—a joint product of Governance, Regulation, and Finance, World Bank Institute, and the Chief Economist’s Office, European Bank for Reconstruction and Development—is part of a larger program to measure governance and corruption worldwide. A companion paper that econometrically analyzes the effects of state capture is forthcoming. For further details, please visit <http://www.worldbank.org/wbi/governance>. Copies of this paper are available free from the World Bank, 1818 H Street, N.W., Washington, DC 20433. Please contact Diane Bouvet, Room J3-273, telephone 202-473-5818, fax 202-334-8350, email dbouvet@worldbank.org. This paper is also available on the Web at http://www.worldbank.org/wbi/governance/working_papers.htm. The authors may be contacted at dkaufmann@worldbank.org or hellmanj@ebrd.com.

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Joel S. Hellman¹
Geraint Jones¹
Daniel Kaufmann²
Mark Schankerman³

EBRD and the World Bank

Keywords: Governance, corruption, state capture, transition economies.

- 1. The European Bank for Reconstruction and Development*
- 2. World Bank*
- 3. London School of Economics and Political Science and the European Bank for Reconstruction and Development*

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1. Introduction

The search for effective methods of combating corruption has led to an increasingly wide recognition that corruption is fundamentally a problem of governance. Corruption thrives where states are too weak to control their own bureaucrats, to protect property and contract rights, and to provide the institutions that underpin an effective rule of law. Consequently, recent studies of corruption have tended to focus on key characteristics and policies of the state, especially the extent of state intervention in the economy and the degree of discretionary power of bureaucrats.¹ Yet the recognition that corruption is a symptom of the underlying weakness of the state, while important, has shifted the focus of analysis away from firms.² The links between corporate governance and national governance have been largely unexplored. Moreover, empirical efforts to assess governance and corruption across countries have generally overlooked the critical information that firms can provide about the nature and extent of these problems.

The 1999 Business Environment and Enterprise Performance Survey (BEEPS), building upon the World Bank's survey carried out for the *World Development Report* in 1997³ and the ongoing World Business Environment Survey, was designed to assess the quality of governance across 20 countries of Central and Eastern Europe and the former Soviet Union from a firm-level perspective.⁴ This perspective provides a number of advantages. First, it allows us to explore the relationship between different characteristics of firms (such as ownership, control, size, sector, etc.) and their effects on the firms' interactions with the state. Second, it provides an opportunity to investigate in depth the types of "services" for which firms pay bribes and the characteristics of these transactions. Third, it provides a micro-economic perspective on the costs and benefits to firms associated with corruption and different levels of governance.

Most importantly, the firm-level perspective provides one of the first opportunities to analyse empirically the problem of "state capture," that is, the efforts of firms to shape and influence the underlying rules of the game (i.e. legislation, laws, rules, and decrees) through private payments to public officials. There has been analysis of how firms in the transition economies use their political influence to distort both the legal framework and the policymaking process in an effort to gain concentrated rents with detrimental consequences for the economy and society at large.⁵ The BEEPS provides the first opportunity to explore empirically the methods and mechanisms by which firms seek to influence the state, providing a new perspective on the phenomenon of state capture in the region and opening insights into larger questions of the political economy of reform.

The BEEPS was designed to push further the empirical frontier in the analysis of governance and corruption at the country and firm levels. Most existing cross-country surveys of governance and corruption rely on the subjective views of outsiders, namely expert assessments, country analysts or foreign investors.⁶ Governance is often defined quite narrowly,

¹ For example, see the *World Development Report* (1997).

² An exception is the recent work by Shleifer and Vishny (1994).

³ See Brunetti, Kisunko and Weder (1997).

⁴ The BEEPS is the first stage of a world-wide survey of firms on the obstacles in the business environment conducted by the World Bank in co-operation with the European Bank for Reconstruction and Development (EBRD), Inter-American Development Bank and the Harvard Institute for International Development. It is anticipated that over 100 countries will be included in the survey encompassing countries at all levels of development. An earlier version of the World Business Environment Survey, comprising 69 countries, was carried out 1996 and presented in the World Bank's World Development Report 1997 (the data are available at www.worldbank.org/wbi/gac). Some of the data from the BEEPS were first published in the EBRD's Transition Report (1999).

⁵ See Aslund (1999) and Hellman (1998).

⁶ The most frequently used index of corruption is Transparency International's Corruption Perceptions Index, which is a survey of surveys based on outside assessments of corruption and on a particular methodology subject to changes over time (as well as its country coverage, which even though it has grown over the years, currently covers only about one-half of all countries for which there is data). At any rate, any such aggregate comparative index will have serious limitations in diagnosing in-depth governance and corruption challenges within a country. For that purpose, a new set of diagnostic survey tools (for public officials, enterprises and citizens) have been developed under a separate project to help countries in addressing governance challenges (Kaufmann, Pradhan and Ryterman, 1998).

taking a uni-dimensional view of the state's role in the economy or assessing the rule of law broadly defined. Corruption is typically limited to bribery and focused primarily on what is often described as "petty corruption" or "grease payments". The results of such surveys are thus highly subjective and estimated with a large margin of error that inhibits cross-country comparisons.⁷ Moreover, the assessment of governance and corruption as broad catch-all categories has not proven to be an effective tool for developing specific and well-targeted policy advice for governments, civil society and IFIs in these areas.

The BEEPS has a range of features to ensure higher reliability and greater depth in assessing these problems. Questions are based on the direct experience of firms rather than subjective comparisons across countries. Where possible, numerical cardinal estimates of problems are used (such as share of annual revenue spent on bribes) as opposed to subjective assessments of the extent of the problem. Data on firm-level performance in terms of sales, investment and employment provide specific estimates of the costs and benefits to firms associated with governance issues. These estimates enable us to measure the margin of error on many questions, which is explicitly depicted in many charts contained in the paper.

By defining governance in terms of a number of distinct dimensions, the BEEPS provides a much more detailed and in-depth understanding of the nature of governance problems. The survey contains individual modules on taxes and regulation, macroeconomic management, physical infrastructure, competition and the provision of law and order. On corruption, the survey includes questions that distinguish among different forms of corruption, different recipients of bribes, and key characteristics of corrupt transactions. Moreover, the BEEPS represents the first major attempt to provide sound empirical measures of various forms of "grand" corruption, such as 'state capture' (purchase of laws and decrees by enterprises) as well as corruption in public procurement, and to measure the characteristics of firms that engage in such forms of corruption.

This is mostly a descriptive paper summarising the results of a subset of questions from the BEEPS relating to governance and corruption, as well as detailing the sample structure and methodology employed. For most questions, the results are reported at the country level, though the variation across different types of firms across countries is presented in some cases as well. Several indices are also constructed on the basis of different dimensions of governance to provide summary measures of broader concepts. We also address the problem of 'country perception bias', defined as the tendency of respondents from any country to systematically over- or under-estimate the extent of problems within their own country. A simple method for evaluating the extent of country perception bias is implemented, with little evidence found pointing to such bias in the BEEPS.

This paper is the first in this empirical project whose objective is to deepen our understanding of the linkages between corporate governance and national governance and how such interactions shape the environment faced by businesses in different countries. A forthcoming companion paper will analyse the characteristics and consequences of state capture in detail.

⁷ For an analysis of existing governance and corruption indicators, see Kaufmann, Kraay and Zoido-Lobaton (1999a and b).

2. The survey instrument

Background on the questionnaire

The BEEPS questionnaire for the transition economies was developed jointly by the World Bank⁸ and the Office of the Chief Economist at the EBRD.⁹ The survey presented here was implemented during the period June through August 1999 in the following countries:

Armenia, Azerbaijan, Belarus, Bulgaria, Croatia, Czech Republic, Estonia, Georgia, Hungary, Kazakhstan, Kyrgyzstan, Lithuania, Moldova, Poland, Romania, the Russian Federation, the Slovak Republic, Slovenia, Ukraine, Uzbekistan.

Structure of the questionnaire

The questionnaire has two separate parts:

An initial “screener” questionnaire contains questions on the characteristics of the responding firm covering ownership, area of major activity, number of employees and internationalisation (including degree of foreign ownership and level of exports). These questions, in addition to providing information on the responding firm for use in its own right, were used to establish sample quotas. The sample selection procedure will be described in section 3.

The main questionnaire contains over 70 questions. The focus of this paper is on the governance-related questions; other questions will be addressed elsewhere. The aspects of the investment climate with which the survey deals can be classified broadly into macro- and micro- dimensions as follows:

Institutions and policies – macro-dimensions

This section deals with a broad range of issues relating to the efficiency and efficacy of government institutions and policies. Firms were asked to rate the quality of public services across a number of dimensions including central government, parliament, the judiciary, utilities and the police, and to evaluate how serious various institutional obstacles are for their business, ranging across macro- and micro-economic policy, crime and corruption. Questions were asked about the legal system and its ability to protect property and contract rights and the predictability and transparency of policy making. Finally, firms were asked about the extent to which they use barter, which is symptomatic of major institutional failure.

Bureaucracy, state intervention and corruption – micro-dimensions

In contrast to the above questions which focus on the public goods and institutional environment provided or not provided by the state, the second set of questions investigates the nature of the direct interactions between firms and the state. This includes not only an analysis of the extent and types of state intervention in the operations of firms, but also the ways in which firms seek to influence the state. On corruption, firms were asked about the extent and frequency of bribery, the recipients of bribes and the nature of the corrupt transaction. Finally, firms were asked about the specific benefits they receive from the state in the form of subsidies and toleration of arrears.

⁸ The team at the World Bank comprised Daniel Kaufmann, Homi Kharas, Syamm Khemani, Guy Pfefferman, Andy Stone and Geeta Batra. We are grateful to Randi Ryterman for contributing to the BEEPS questionnaire.

⁹ The team at the EBRD comprised Steven Fries, Joel Hellman and Mark Schankerman.

3. Implementation and methodology

The survey instrument was prepared in English and then translated into the national language of each country. To ensure accuracy of translation the survey was independently translated back into English. The survey was extensively piloted in each of the countries in which it was implemented to ensure that respondents correctly understood the questions. As a quality-control measure, a sub-sample of respondents was telephoned on the following day and the responses to key questions checked for consistency.

The selection of a representative sample of firms is crucial if inferences are to be drawn which apply beyond those firms interviewed. Sample selection took place in several stages. The government statistical office was contacted in each of the countries where the survey was conducted to obtain a breakdown of enterprises by industry sector, number of employees and location. Some judgement was necessary as there was considerable variation in the amount of information available in each country. This prior information was then used to construct a sample frame with quotas placed on the number of enterprises to be sampled in these categories. In addition, quotas were placed on the number of state-owned and private sector firms and the number of firms with foreign ownership. However, no attempt was made to construct a representative sample across these ownership strata and the quotas were designed only to ensure representation. The prior information that would be required to weight the sample in proportion to the universe of firms is unavailable in most of the countries covered by the survey.

The precise parameters of the quotas are as follows:

- *Industry sector:* The number of manufacturing versus service companies was allocated according to their contribution to GDP with a 15% minimum for each.
- *Number of employees:* At least 15% of the firms were required to have under 50 employees and 15% were required to have over 200 employees.
- *Location:* At least 15% of the firms were required to be located in towns of fewer than 50,000 inhabitants or in rural areas.
- *Ownership:* At least 15% of the firms were required to have majority foreign ownership (or where this is prohibited by law, foreign ownership close to the legal maximum).
- *Exporters:* At least 15% of the firms were required to export at least 20% of their output.
- *State Ownership:* 20% of the firms were required to be state-owned.

Firms were sampled randomly from business directories or the Yellow Pages and the initial screener questionnaire conducted by telephone to select firms fulfilling the quota restrictions. After conducting the initial screener interview and securing the co-operation of the firm, the main questionnaire was carried out in a face-to-face interview by local interviewers trained according to a common format. This is the most effective method of implementing such a long questionnaire as postal surveys tend to suffer from a low response rate. This is particularly true in the transition countries since postal surveys tend to be associated with the bureaucracy of the Communist era. Further, telephone interviews do not generate a conducive atmosphere to deal with the sensitive issues covered by the survey. In all countries the survey was conducted by local staff of the international survey firm, A.C. Nielsen, to ensure consistency of training and approach across countries.

Addressing Perception Respondent Bias in Cross-Country Surveys

Despite this methodology, a potential source of bias remains with respect to making cross-country comparisons. A respondent can be said to exhibit *perception bias* if he rates a problem more or less severely than would an objective observer (assuming of course that the survey question corresponds to an objectively measurable concept). Some respondents could be said to have an inherent tendency to *kvetch* (i.e. to "complain, gripe, grunt, or sigh") or to *kvell* (i.e. to "beam with immense pride and pleasure").¹⁰ In general, such individual perception bias would only contribute to the standard error of the survey estimates without causing bias at the aggregate level. However, this conclusion requires that the perception bias be uncorrelated among the group of individuals aggregated in the survey. In cross-country surveys, there is always a concern that the individual biases could be correlated across respondents in any given country thus making the country aggregates correspondingly biased. In other words, some countries could generate a greater tendency for *kvetching* or *kvelling* among the respondents.

There are a variety of factors which could generate such a *country perception bias* including differences in national character and culture, differences in the degree of openness of respondents associated with alternative political systems or nation-wide factors related to the particular time period in which the survey was implemented (such as the recent exposure to a macroeconomic crisis or government corruption scandal). In this paper, an attempt is made to investigate such potential bias by examining the relationship between the respondents' perceptions of certain concrete, measurable problems (such as infrastructure capacity or exchange rate variability) in the economy and objective measures of those same problems external to the survey.¹¹

The external measures chosen were:

- *Exchange rate variability*¹² defined as the standard deviation of the real exchange rate (measured monthly and normalised at the beginning of the period) with the US dollar over the twelve months prior to implementing the survey;
- *Telephone infrastructure*¹³ defined as the number of telephone lines per capita (measured in 1997, the latest available year).

The corresponding survey questions were:

- Rate the overall quality and efficiency of the services delivered by the telephone service (on a scale ranging from 1 - very good to 6 - very bad);
- How problematic is the exchange rate for the operation and growth of your business? (on a scale ranging from 1 - no obstacle to 4 - major obstacle).

Country indices of both infrastructure and exchange rate variability were calculated from the mean response to each question and these indices were compared to the external measures. A significant relationship between the internal and external measures is evidence that there is

¹⁰ These definitions come from Rosten (1968).

¹¹ The problem of perception bias has been recognised before. In particular, see Kaufmann and Wei (1999) and Kaufmann and Zoido-Lobaton (1999b). The first of these papers is concerned with controlling the bias at the level of individual respondents, in the context of regression analysis. In that context, any country-level bias can be controlled using country fixed effects (although it cannot then be disentangled from other country effects) and the only issue remaining is to control for unduly optimistic or pessimistic individuals *relative to the country effect*. This does not require any information external to the survey. What we are concerned with here is precisely the discrimination between country bias and other country effects since the paper is concerned only with cross-country comparisons. For that we require external information. The second paper is concerned with country level bias. The role of the external information that we employ here is filled by the assumption that the foreign firms in any given country provide more objective assessments than their purely domestic counterparts.

¹² Source: EBRD calculations

¹³ Source: *World Development Report 1999* (and originally International Telecommunication Union)

little country bias in that question.¹⁴ In addition, the examination of any outliers points to countries which may be cause for concern.¹⁵

The diagrams in figures 3.1 and 3.2 illustrate the relationship between the internal and external indices together with a regression line, associated R^2 and dotted lines at two standard deviations from the estimated line. For both survey measures, higher numbers reflect greater pessimism. Observations beyond two standard deviations can be considered outliers.¹⁶

Figure 3.1: Telephone infrastructure

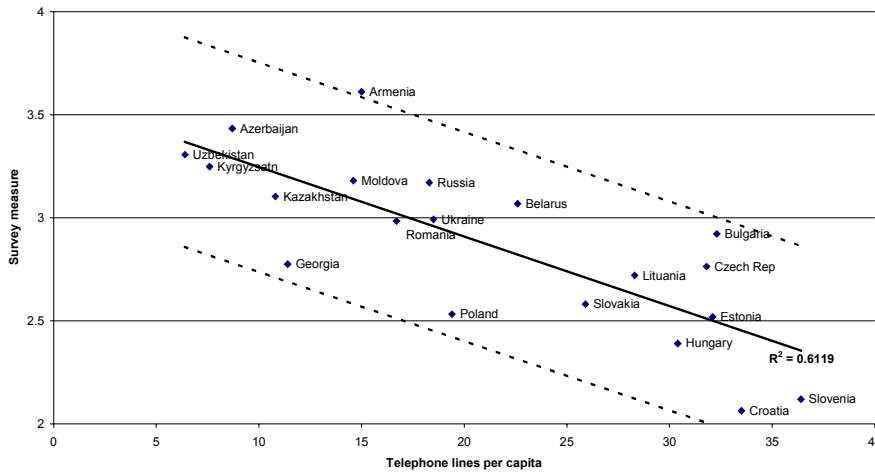
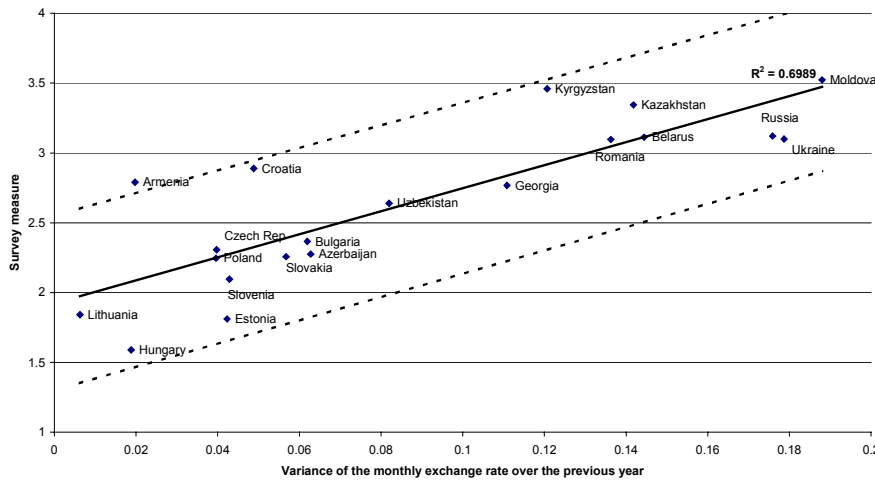


Figure 3.2: Exchange rate variability



¹⁴ In particular, the R^2 indicates the proportion of variation in the survey response which can be attributable to variation in the objective quantity relative to the proportion attributable to country bias.

¹⁵ This simple methodology attributes any cross-country differences in the survey beyond that predicted by the external indicator solely to bias. It should be borne in mind, however, that there will be other factors which are unaccounted for. In addition, the two survey indices do not correspond perfectly to the external measures. Exchange rate variability may be more or less important to firms in different countries depending on their exposure to international transactions. The number of telephone lines per capita may be only weakly related to the actual quality of service. Finally one must be willing to assume that measurement of the bias on these particular questions carries information about the potential bias on the remaining questions which cannot be corroborated. These caveats should be recognised when interpreting the results.

¹⁶ This is intended to be suggestive rather than a precise statistical test.

Given the limitations of the methodology, the diagrams above support the assumption that the BEEPS data do not suffer significantly from country perception bias¹⁷. The residuals show no systematic pattern, with the exception of some doubts raised concerning overly pessimistic responses in Armenia.

4. Characteristics of responding firms

Table 4.1 describes the sample composition across the countries of implementation, according to the origin of the firm (state, privatised or new entrant), foreign ownership and geographical location.

Table 4.1: Composition of the sample

| <i>Country</i> | <i>Total number of firms</i> | <i>New Private</i> | <i>Ex-State</i> | <i>State</i> | <i>Firms with FDI</i> | <i>Capital City</i> | <i>Other large city</i> | <i>Smaller cities, towns and rural</i> |
|----------------|------------------------------|--------------------|-----------------|--------------|-----------------------|---------------------|-------------------------|--|
| Armenia | 125 | 63 | 34 | 25 | 2 | 63 | 0 | 62 |
| Azerbaijan | 137 | 93 | 17 | 25 | 13 | 79 | 0 | 58 |
| Belarus | 132 | 50 | 56 | 25 | 15 | 31 | 22 | 79 |
| Bulgaria | 130 | 77 | 26 | 25 | 17 | 12 | 66 | 52 |
| Croatia | 127 | 34 | 66 | 27 | 17 | 44 | 0 | 83 |
| Czech Republic | 149 | 113 | 10 | 25 | 33 | 51 | 16 | 82 |
| Estonia | 132 | 73 | 26 | 25 | 26 | 55 | 0 | 77 |
| Georgia | 129 | 75 | 29 | 25 | 18 | 55 | 22 | 52 |
| Hungary | 147 | 94 | 24 | 25 | 27 | 51 | 0 | 96 |
| Kazakhstan | 147 | 69 | 47 | 27 | 27 | 15 | 74 | 58 |
| Kyrgyzstan | 132 | 50 | 57 | 25 | 15 | 38 | 0 | 94 |
| Lithuania | 112 | 84 | 26 | 0 | 6 | 24 | 4 | 84 |
| Moldova | 139 | 47 | 57 | 25 | 16 | 57 | 0 | 82 |
| Poland | 246 | 160 | 53 | 25 | 40 | 38 | 83 | 125 |
| Romania | 125 | 85 | 15 | 25 | 20 | 19 | 54 | 52 |
| Russia | 552 | 283 | 230 | 25 | 37 | 87 | 232 | 233 |
| Slovakia | 138 | 84 | 26 | 25 | 15 | 16 | 19 | 103 |
| Slovenia | 125 | 41 | 54 | 25 | 17 | 46 | 23 | 56 |
| Ukraine | 247 | 147 | 73 | 25 | 30 | 37 | 88 | 122 |
| Uzbekistan | 126 | 44 | 52 | 25 | 18 | 35 | 0 | 91 |

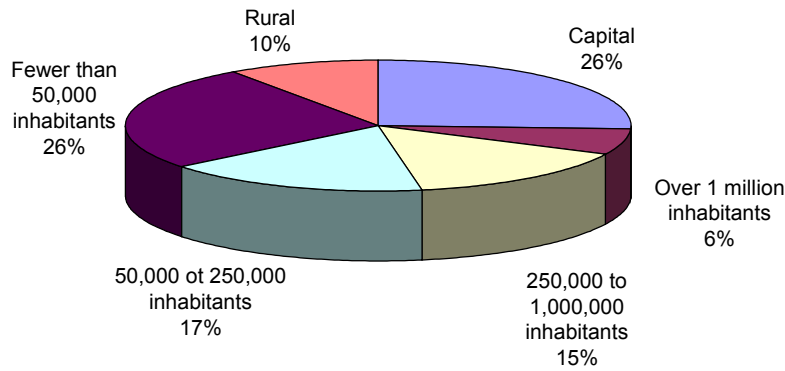
The section below presents the relevant questions from the screener questionnaire and additional questions from the main questionnaire relating to firm characteristics. Since the purpose of this section is simply to illustrate the sample diversity, the results for individual countries are not presented. The survey succeeded in sampling a wide variety of firms within the constraints imposed by the sample quotas, which lends confidence to the results. Firms varied in a number of characteristics including the geographical location of the firm; state or private ownership; area of main activity; number of employees; internationalisation; major trading partners; control of firm decisions; number of majority shareholders; identify of majority shareholder and the origin of the firm.

¹⁷ This is very much a preliminary approach to the issue. A more thorough analysis would examine other external measures and could be carried out at the micro-level to control for differences in firm characteristics affecting the outcomes, which are here attributed to bias. Ultimately one would hope to provide methods to quantify and then control for the bias. Future papers will pursue these issues.

Geographical location of the firm

Firms were sampled in towns of all sizes from the capital to small towns with under 50,000 inhabitants. Figure 4.2 shows the distribution of firms by the size of the town.

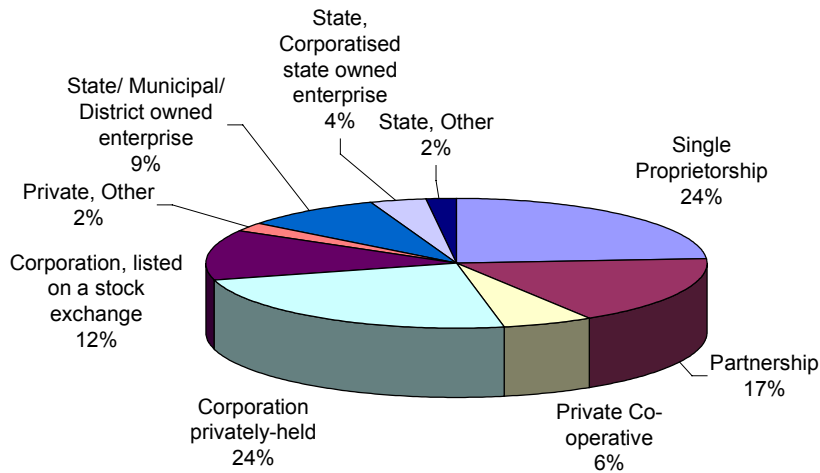
Figure 4.2: Distribution of surveyed firms by size of town



Ownership

Figure 4.3 illustrates the distribution of firms by their type of legal organisation.

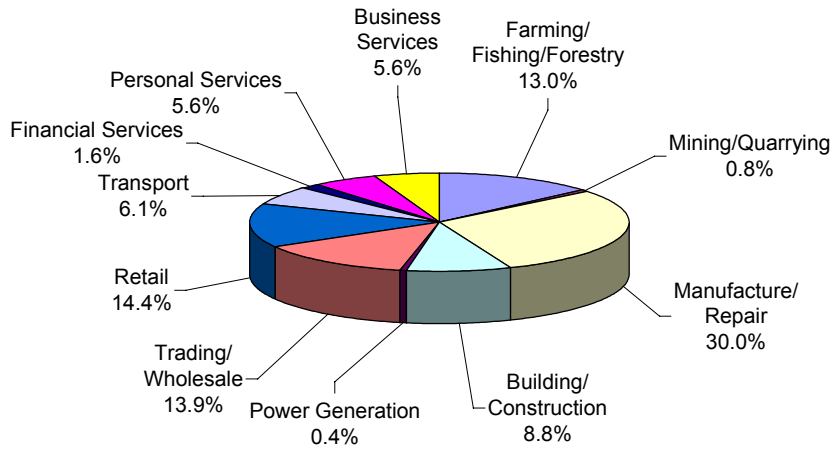
Figure 4.3: What is the legal organisation of this company?



Main area of activity

A quota was placed on the area of activity of the firm to ensure firms were sampled from both the manufacturing industries and the services sector. Figure 4.4 shows the distribution of firms by area of main activity.

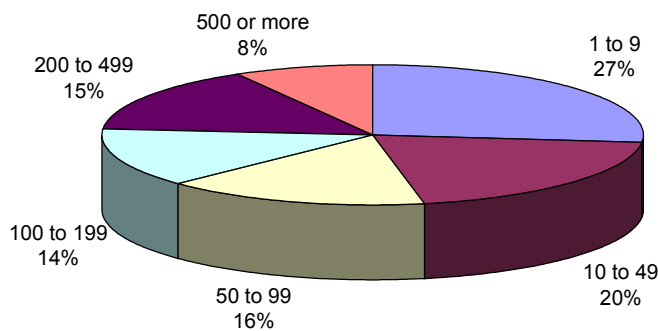
Figure 4.4: How would you best describe your organisation's main area of activity?



Number of employees

Figure 4.5 illustrates the distribution of firms by the number of full-time employees. Firm size was taken as the number of full-time employees. Although firms were asked about full-time and casual staff, 65% of firms stated that they employed no casual staff, and 86% employed fewer than 10 casual staff.

Figure 4.5: How many full-time employees and casual staff in total work for this company?



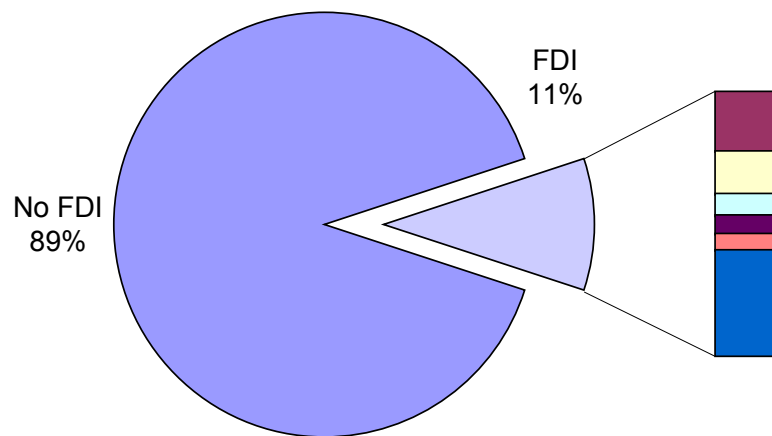
State ownership

Perceptions of the investment climate may depend to some extent on the financial ties that the firm has with the state. Firms were asked if any state organisation or state agency had a financial stake in their organisation and the size of the stake as a proportion of the organisation's capital. The state had a financial stake in 22% of the firms sampled and the average size of the stake was 66%.

Foreign ownership

There are various aspects to the degree of internationalisation of the firm. Below we consider whether any foreign firm holds a financial stake in the firm and the size of the stake. Figure 4.6 shows the percentage of firms with a foreign financial stake and the nationality of the foreign partner.

**Figure 4.6: Does any foreign company have a financial stake in your organisation?
What is the nationality of this foreign company?**

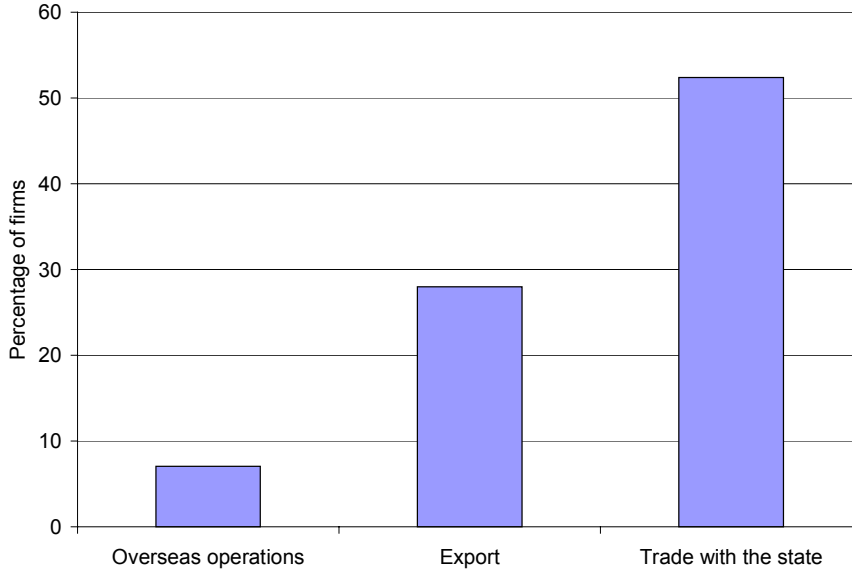


Firms were asked what proportion of their capital was held by foreign owners. Of the 8% of firms with some foreign financial stake, the average size of the stake was 55%.

Main trading partners

The firms' perceptions of the business environment may also be conditional on their main trading partners. In particular, figure 4.7 considers the proportion of firms that have holdings overseas, that export their goods and services and that trade with the state sector.

Figure 4.7: Does your firm have holdings or operations in other countries?
Does your firm sell its products or services to customers outside the country?
Does your company trade with the state sector?



In addition, firms were asked to identify the proportion of their sales represented by exports. Of the 28% of firms exporting, the average percentage of exports in sales was 33.7%. Fifty-two percent of the firms report trade with the state; the average percentage of sales was 31%.

Ownership of firms

In considering issues related to corporate governance, it is useful to know how dispersed is the ownership of the company and who the majority shareholders are, and in particular whether they can be viewed as *insiders* or *outsiders*.

Figure 4.8 illustrates the dispersion of ownership, and Figure 4.9 illustrates the distribution of majority ownership.

Figure 4.8: Is the majority ownership in your company held by one shareholder/owner, two to three shareholders/owners, or more?

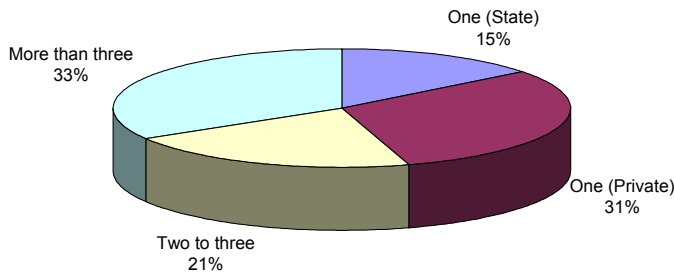
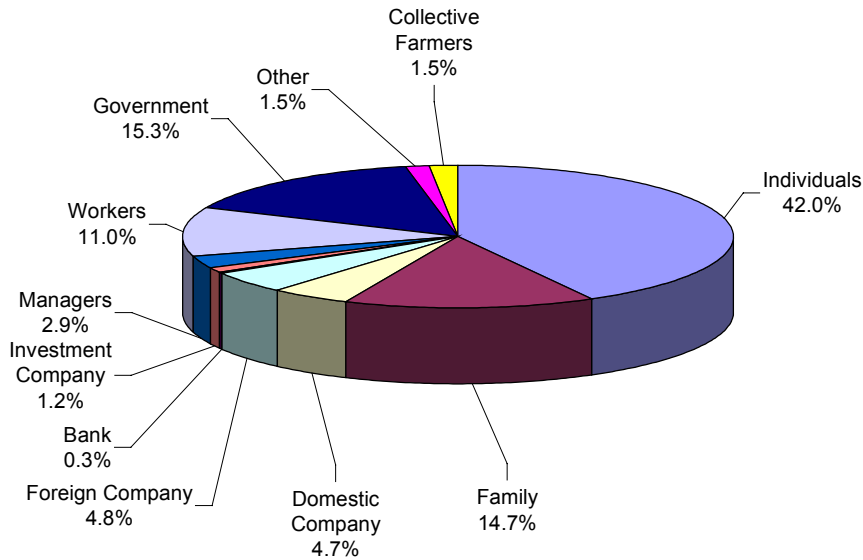


Figure 4.9: Which of the following best describes the type of owner which now has the largest stake in your firm either directly or indirectly?

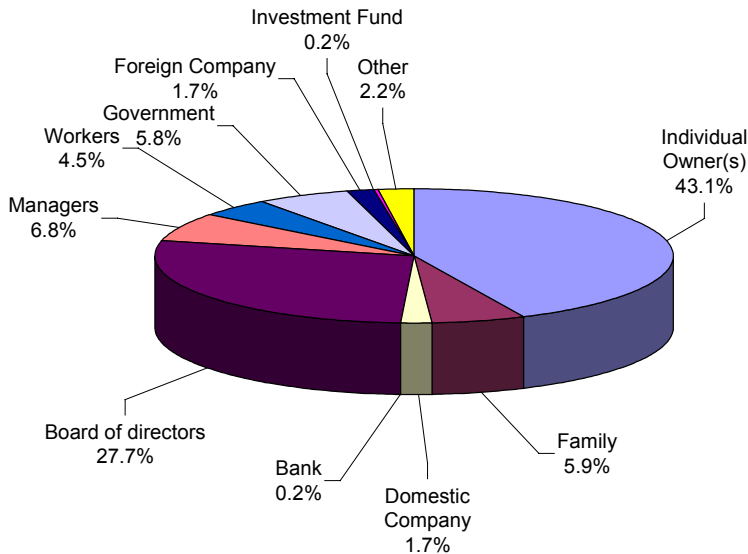


As for the degree of change in ownership, only 15% of the firms which had existed for more than three years had experienced a change in the majority shareholder in the past three years.

Control of firm decisions

The survey investigates various issues related to corporate governance, including control of firm decisions, the nature and degree of dispersion of ownership, and changes of management. Figure 4.10 illustrates the distribution of firms according to control of firm decisions.

Figure 4.10: Which of the following best describes the control of your firm, where control means making major decisions concerning the enterprise's direction today?



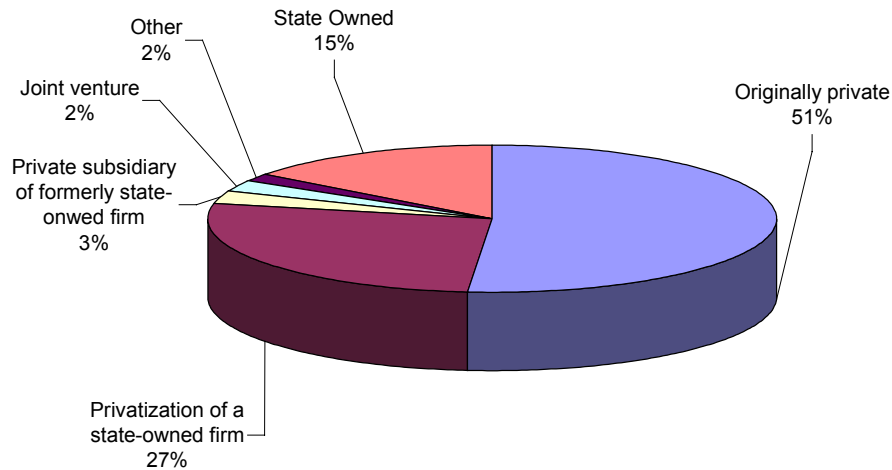
The survey also asked how the control of decisions has changed in the last three years. There was no significant difference in the overall distribution compared to that illustrated above.

Origins of the firm

Figure 4.11 shows the distribution of firm origins. This identifies differences in the origins of private sector firms depending essentially on whether the firm was established privately with no state-owned predecessor, or whether the firm was created as a result of the privatisation of a state-owned firm. The

perceptions of the business environment by these different groups of private firms may differ to the extent that their interactions with the state take different forms.

Figure 4.11: How was your firm established?

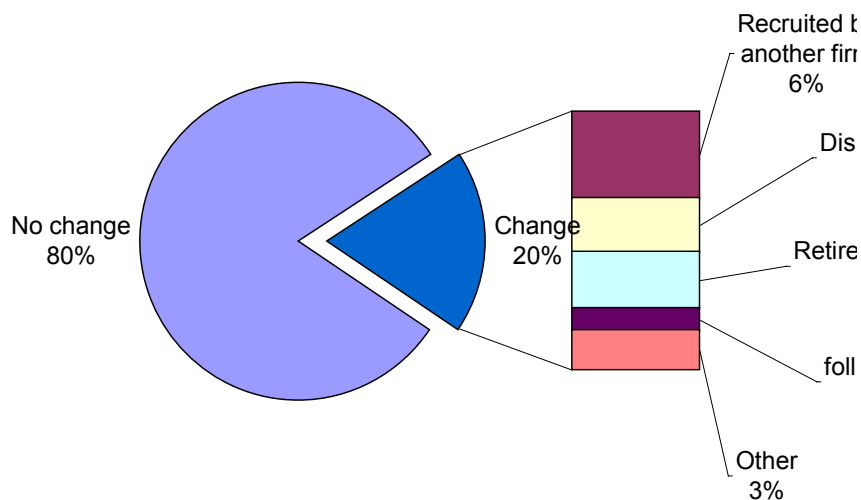


Eighty percent of the firms were founded after 1989, although dates of establishment for the overall sample ranged between 1806 and 1999. The majority of the private firms in the sample were established as such, with no state-owned predecessor.

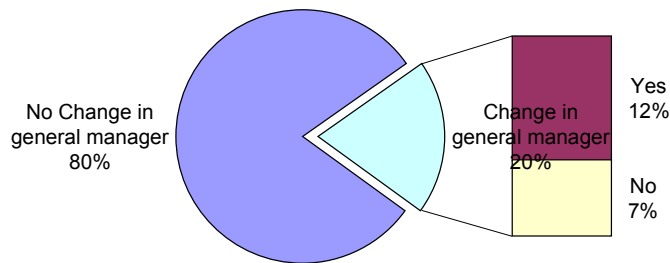
Management turnover

A further dimension of corporate governance is the selection and replacement of management. To portray the mobility of senior staff, Figure 4.12 shows the percentage of firms that have experienced a change of general manager, and what precipitated the change. Figure 4.13 shows whether the replacement was an insider or outsider to the firm.

Figure 4.12: Has there been a change of general manager in the last three years? What happened to the previous general manager?



**Figure 4.13: Has there been a change of general manager in the last three years?
Did the current general manager work in the company prior to being appointed as general manager?**



Respondent's job title

Every effort was made to interview senior staff, well qualified to represent the company. The respondents were most often Owner/Proprietors and Directors, both with approximately 23% of respondents. Other respondents included Finance Officer (17%) and Chief Executive (16%).

5. The investment climate: the micro- and macro- dimensions of governance

Conventions adopted in presenting the results

This section presents the main results of the survey. For most questions the respondents were asked to choose the most appropriate answer from a linear scale list of up to six choices. For these questions the graphs below illustrate by country the percentage of firms with responses in the two or three extreme categories (depending on the number of choices), and (except for the star charts – see box 5.1 below) the proportion of firms in each of those categories is shown in a different colour.

For questions with free-responses the means have been reported. For questions in which the categories represented ranges of numerical values, an imputed free variable has been calculated as the midpoint of the category, or the lower endpoint of an open-ended category, and again the mean presented. On each bar chart, an error bar represents the standard error of the sample estimates.

The convention that has been adopted in reporting the data is as follows:

- if the question concerns a “good” (for example, the quality of public services in figure 5.2 below), then larger numbers represent more desirable outcomes and
- if the question concerns a “bad” (for example, corruption in figure 5.6) then larger numbers represent less desirable outcomes.

The data have not been weighted so the views of small firms carry as much weight as those of their larger counterparts.

Box 5.1 – Interpretation of star charts

Star charts are useful for summarising the responses to a group of related questions. In the diagrams in this paper, each country is represented by a single star and each axis of the star represents one of the component questions. The length of the axis is proportional to the percentage of firms responding in the stated categories, thus in figure 5.2 below the length of each axis is proportional to the number of firms responding in categories 1, 2 or 3. To fix the scale, a final star represents the theoretical extreme of 100% of responses falling in those categories. Such diagrams illustrate two important aspects of the data: Within each country, the shape of the star illustrates the relative importance (measured by the proportion of responding firms) of each of the component issues addressed in the questions. In addition, by comparing the diameters of the stars it is possible to measure the differing importance of the entire group of issues across different countries.

Institutions and policies – macro dimensions of governance

The quality of public institutions

The most direct measurement of the quality of governance is obtained by evaluating the performance of state institutions. Respondents were asked to assess and compare the performance of all the major public institutions. For this type of question comprising a comparison across a group of related sub-questions the results will be presented as a star chart (see Box 5.1). The institutions are divided into central government functions and sectoral functions.

Figure 5.2: Could you please rate the overall quality and efficiency of services delivered by the following public agencies or services – Central government institutions

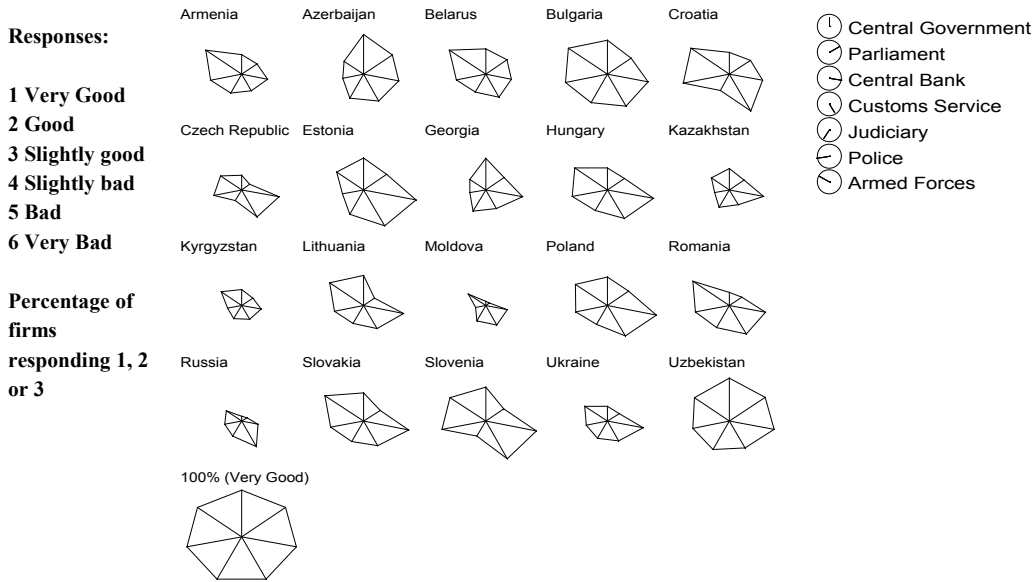
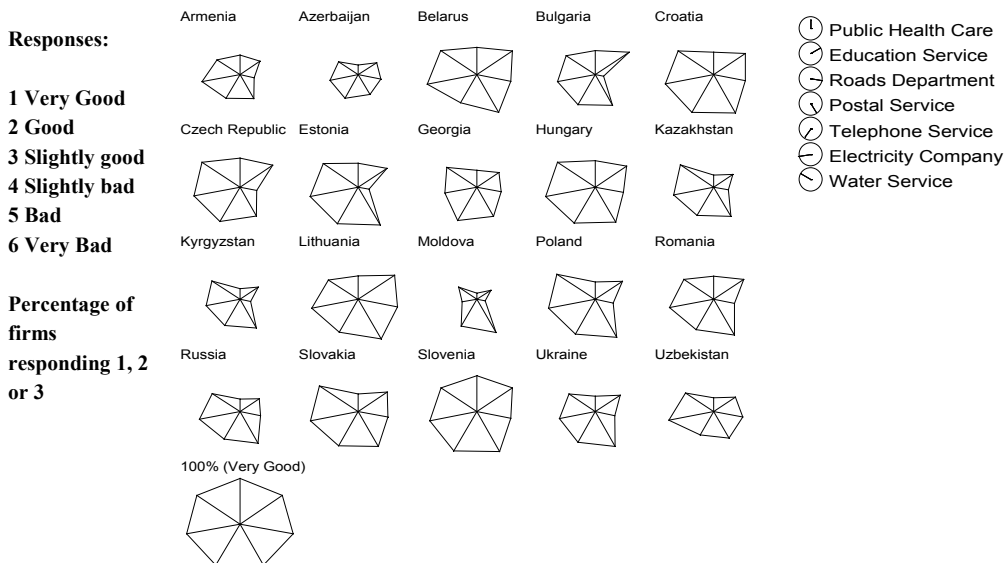


Figure 5.3: Could you please rate the overall quality and efficiency of services delivered by the following public agencies or services – Sectoral institutions



Institutional obstacles to business

The defining characteristic of the investment climate is the extent to which institutional and policy problems place constraints on the performance of firms. Respondents were asked to evaluate the significance of eleven key institutional constraints. Figure 5.4 presents the responses in the star chart form. Figure 5.5 presents indices calculated as the mean response aggregated across several dimensions.

Figure 5.4: How problematic are the following obstacles for the operation and growth of your business?

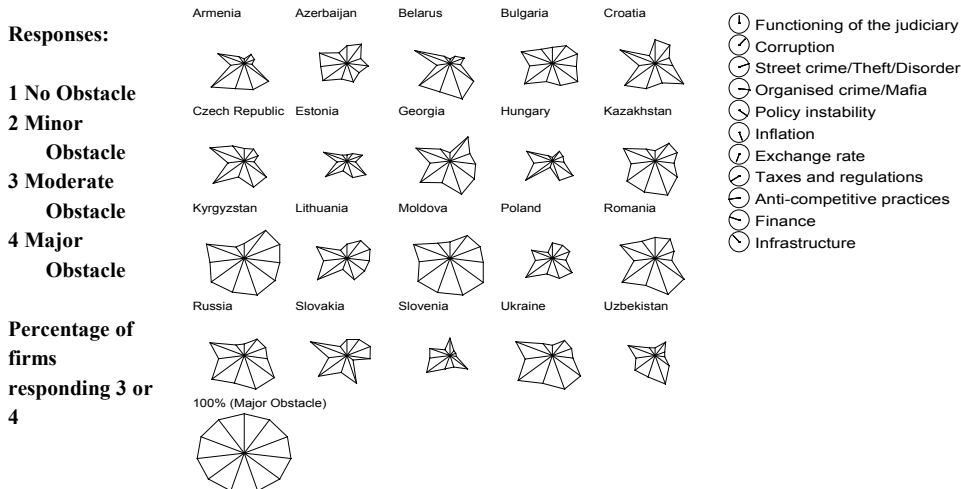
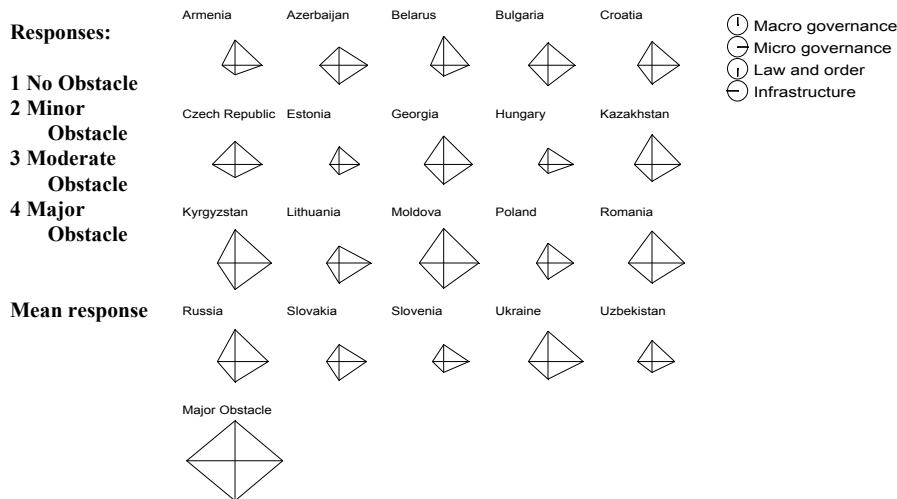


Figure 5.5: How problematic are the following obstacles for the operation and growth of your business?



The components of each of the aggregate indices in figure 5.5 are as follows:

- Microeconomic governance: comprising taxes and regulations
- Macroeconomic governance: comprising policy instability, exchange rate and inflation
- Law and order: comprising functioning of the judiciary, corruption, street crime and organised crime.
- Infrastructure: no sub-components

Corruption

Corruption is often cited as the major institutional constraint on business. Conventionally, corruption is defined as the abuse of public office for private gain. However, this definition encompasses a range of practices which are differentiated here. This section discusses the macro-dimensions of corruption, by which is meant the impact of various forms of corruption at a national level. The micro-dimensions concerning specific characteristics of corrupt transactions are discussed later.

For the first time, the survey measures *grand corruption* which is defined as private payments to public officials to influence the content of the basic rules of the game (i.e. legislation, rules, laws or decrees). As a result of grand corruption, key state institutions can be “captured” by private interests to skew the policy-making process in favour of particular firms and render the operation of government non-transparent. The survey also measures *patronage* and *petty corruption* of the sort that individuals and firms encounter in their direct dealings with the state.

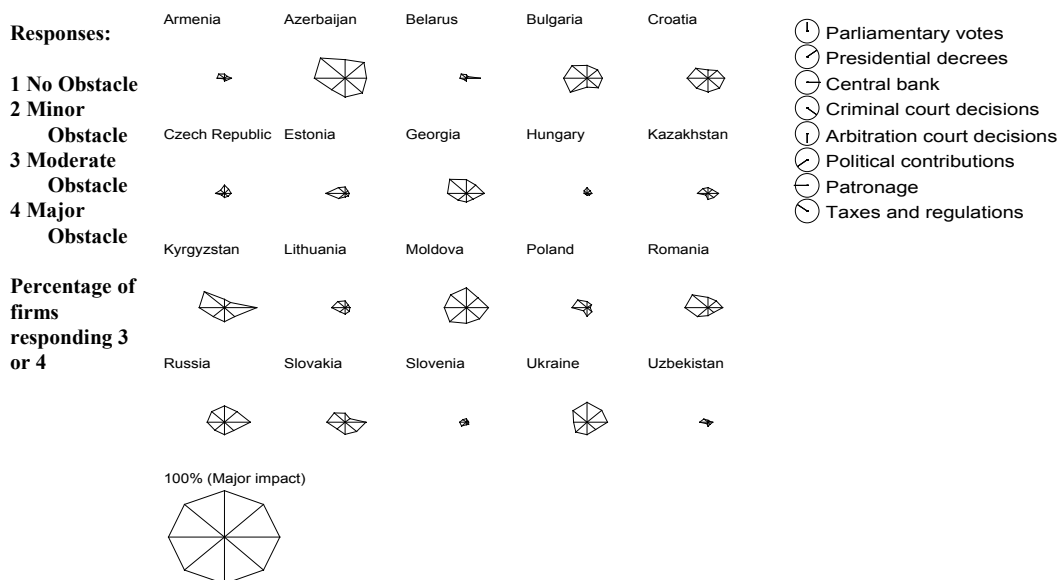
Attempts to compare the amount of corruption between different countries are fraught with difficulties. Bribery is usually illegal and firms must be expected to be reluctant to admit that they pay bribes. In implementing the survey, the problems associated with collecting reliable data were kept constantly in mind, and every effort was made to assure respondents that their answers would be treated confidentially. Questions were phrased indirectly about the corruption faced by “firms in your line of business” and respondents were assured that responses would be aggregated and not attributable to themselves or their firms.

To develop a measure of the impact of corruption and capture on the business environment, firms were asked to what extent the following forms of corruption have had an impact on their business:

- sale of Parliamentary votes on laws to private interests;
- sale of Presidential decrees to private interests;
- Central Bank mishandling of funds;
- sale of court decisions in criminal cases;
- sale of court decisions in arbitration cases;
- contributions paid by private interests to political parties and election campaigns;
- patronage, defined as public officials hiring their friends and relatives to official positions; and
- bribes paid to public officials to avoid taxes and regulations.

Figure 5.6 presents the responses in the star chart form.

Figure 5.6: To what extent have the following forms of corruption have had an impact on your business?



The responses on the different forms of grand corruption can be used to create indices to measure the extent of state capture at different levels of government. The following indices are presented below: legislative capture defined as the sale of Parliamentary votes or Presidential decrees (Figure 5.7); capture of the Central Bank defined as mishandling of funds (Figure 5.8); legal capture defined as sale of arbitration or criminal court decisions (Figure 5.9); non-transparent political party financing defined as contributions by private interests to political parties and election campaigns (Figure 5.10). A composite index of state capture is presented in Figure 5.11, constructed as the average proportion of firms reporting that each of these components of grand corruption is a problem.

The survey also allows the identification of a group of firms willing to admit to purchasing laws and decrees. Further work will investigate the characteristics of firms that actively engage in capturing the state and the affects of such state capture on firm performance.¹⁸

¹⁸ See Hellman, Jones and Kaufmann (forthcoming)

Figure 5.7: Legislative Capture: Sale of Parliamentary votes on laws to private interests, or sale of Presidential decrees to private interests

Responses:

- 1 No Obstacle
- 2 Minor Obstacle
- 3 Moderate Obstacle
- 4 Major Obstacle

Percentage of firms responding 3 or 4 on either question

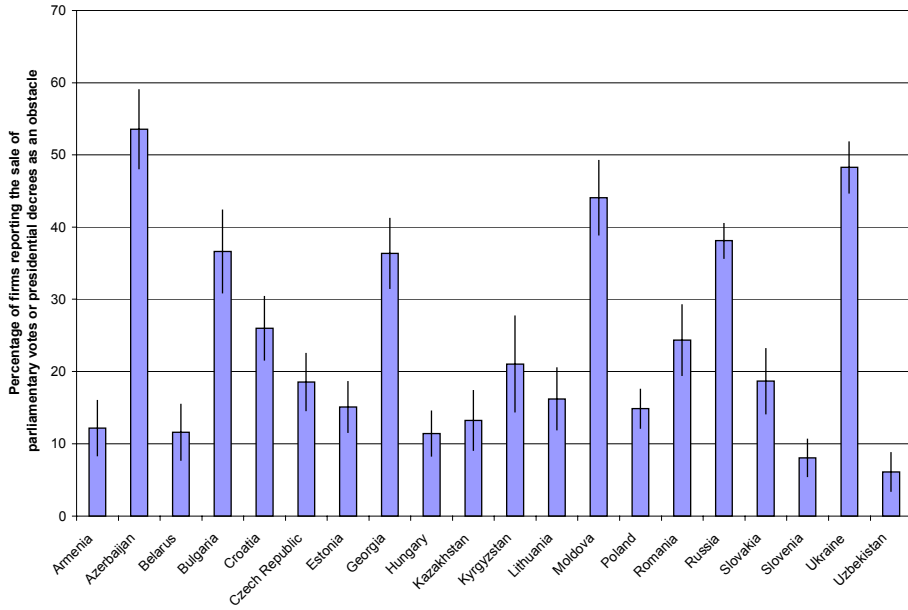


Figure 5.8: Central Bank Capture

Responses:

- 1 No Obstacle
- 2 Minor Obstacle
- 3 Moderate Obstacle
- 4 Major Obstacle

Percentage of firms responding 3 or 4

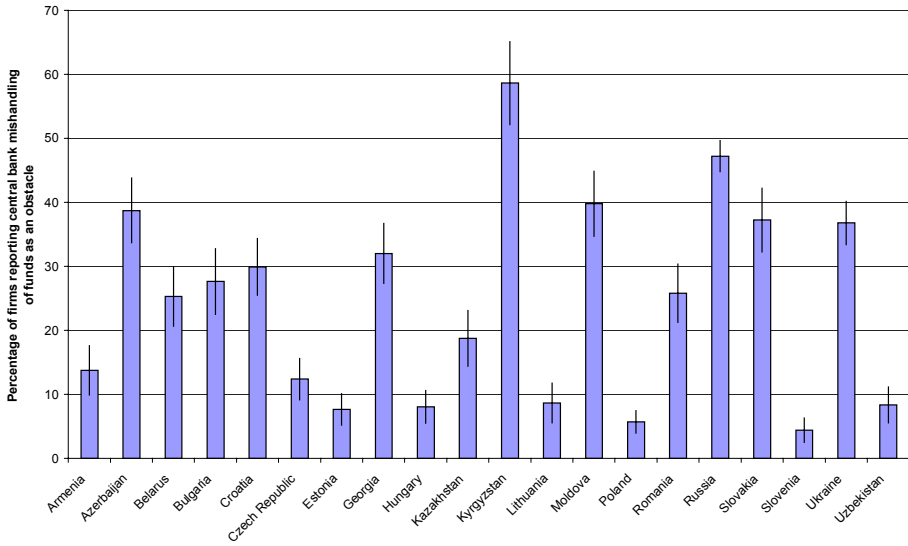


Figure 5.9: Legal Capture: Sale of court decisions in criminal and arbitration court cases

Responses:

- 1 No Obstacle
- 2 Minor Obstacle
- 3 Moderate Obstacle
- 4 Major Obstacle

Percentage of firms responding 3 or 4 on either question

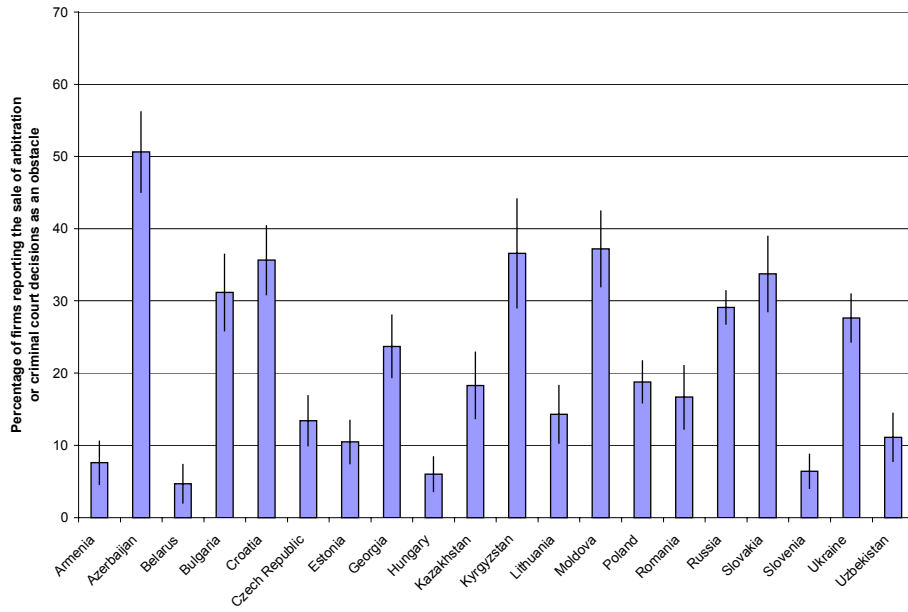


Figure 5.10: Non transparent political party finance: Contributions by private interests to political parties and election campaigns

Responses:

- 1 No Obstacle
- 2 Minor Obstacle
- 3 Moderate Obstacle
- 4 Major Obstacle

Percentage of firms responding 3 or 4

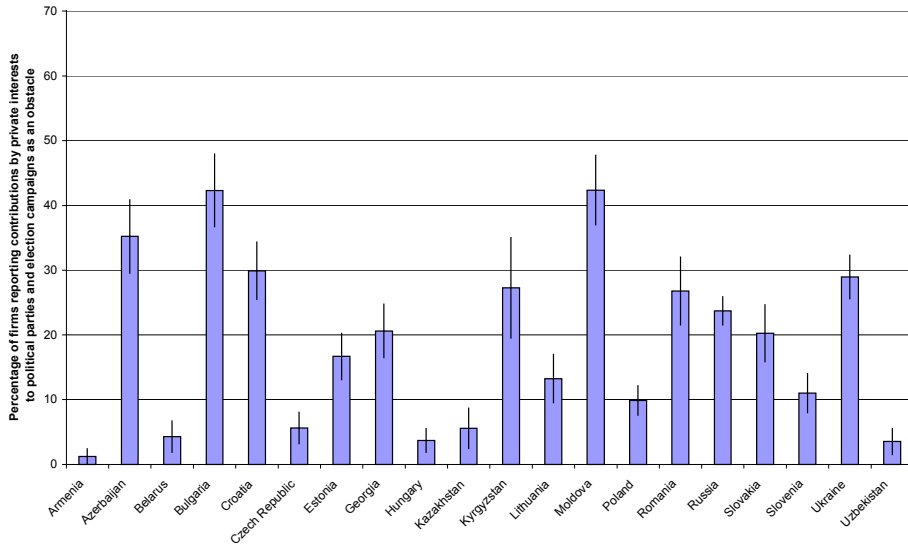
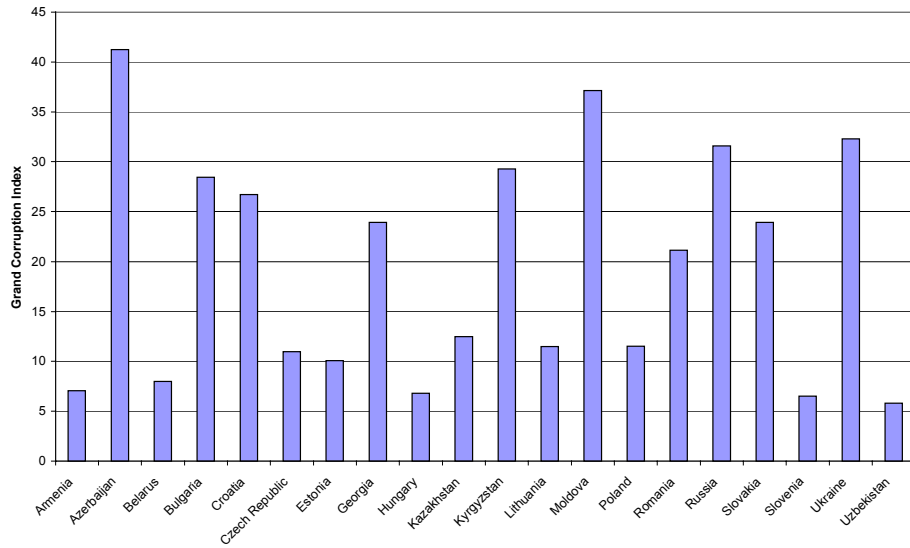


Figure 5.11: Composite index of State Capture

Index constructed as the average proportion of firms responding that each of the above components of grand corruption is an obstacle



Finally, two more dimensions of corruption are presented: patronage defined as public officials hiring their friends and relatives into official positions (Figure 5.12); and petty corruption in the sense of bribes to public officials to avoid taxes and regulations (Figure 5.13).

Figure 5.12: Patronage: Public officials hiring friends and relatives into official positions

Responses:
 1 No Obstacle
 2 Minor Obstacle
 3 Moderate Obstacle
 4 Major Obstacle
 Percentage of firms responding 3 or 4

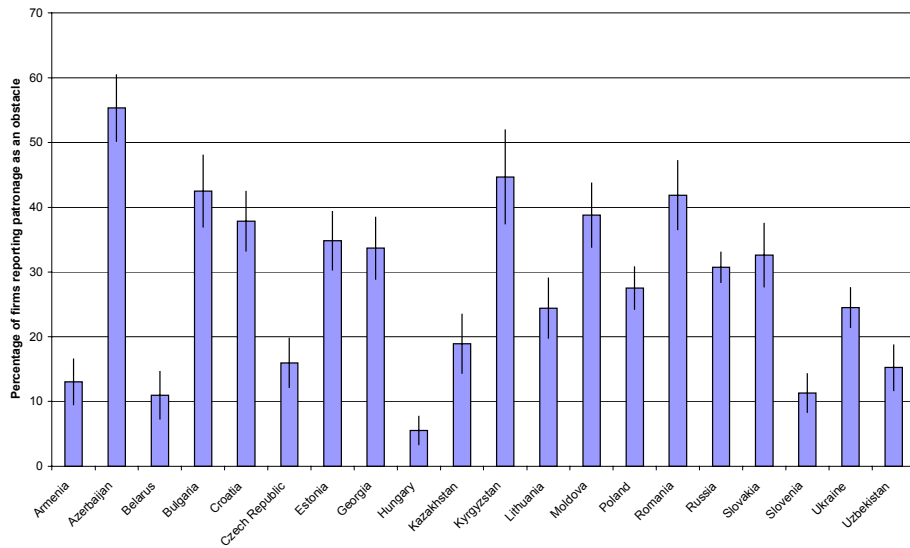
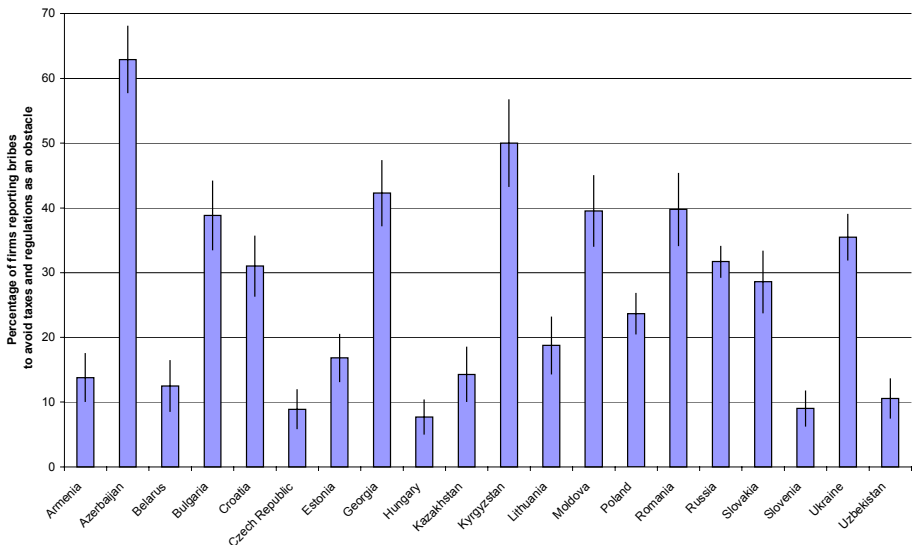


Figure 5.13: Petty Corruption: Bribes to public officials to avoid taxes and regulations

Responses:

- 1 No Obstacle
- 2 Minor Obstacle
- 3 Moderate Obstacle
- 4 Major Obstacle

Percentage of firms responding 3 or 4



Taxation and corruption

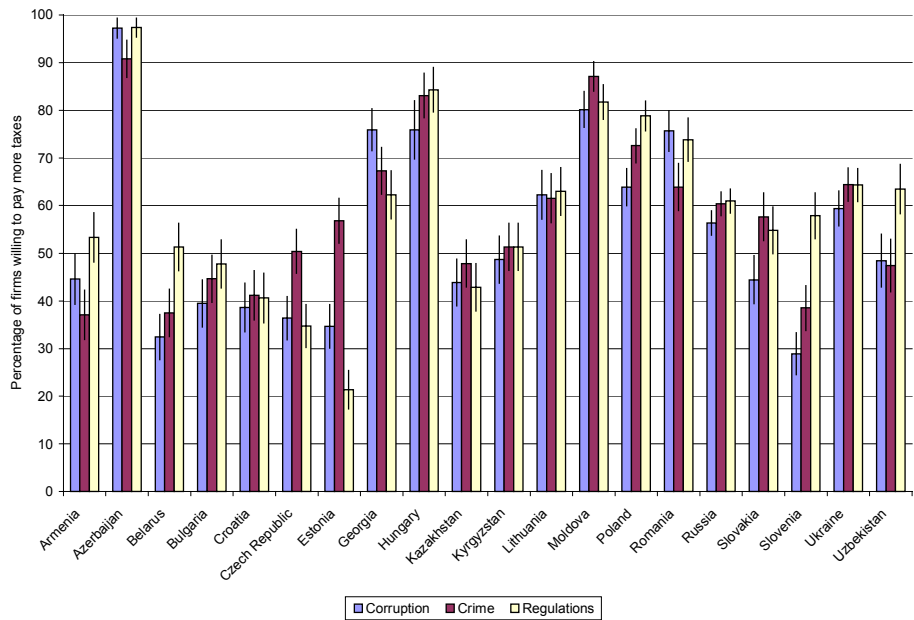
The survey also investigates whether firms would be willing to pay additional taxes to eliminate corruption, crime and bureaucracy. The unwillingness to pay additional taxes to deal with such problems could be interpreted in two ways: these problems are not necessarily imposing substantial costs on firms or the state in question suffers from such low credibility that firms are not willing to agree to any additional taxation regardless of the costs. To the extent that firms are willing to pay additional taxes despite low state credibility, the responses to these questions presented in Figure 5.14 underestimate the true costs imposed on firms by these institutional failures.

Figure 5.14: Would you pay additional taxes to eliminate corruption, crime and excessive regulations?

Responses:

- 1 Yes
- 2 No

Percentage of firms responding 1



Perceptions of the legal system

The legal system is a crucial institution in a market economy. Firms and individuals need to know that contracts will be honoured, their private property respected, and in the event of a disagreement that the courts are capable of deciding the matter in a fair and affordable manner. Firms were asked their

perceptions of the legal system on a number of different dimensions; their responses are presented in star chart form in Figure 5.15. Figure 5.16 presents an index of corruption in the legal system.

Figure 5.15: Thinking about your country's legal system, how often do you associate the following descriptions with the court system in resolving business disputes?

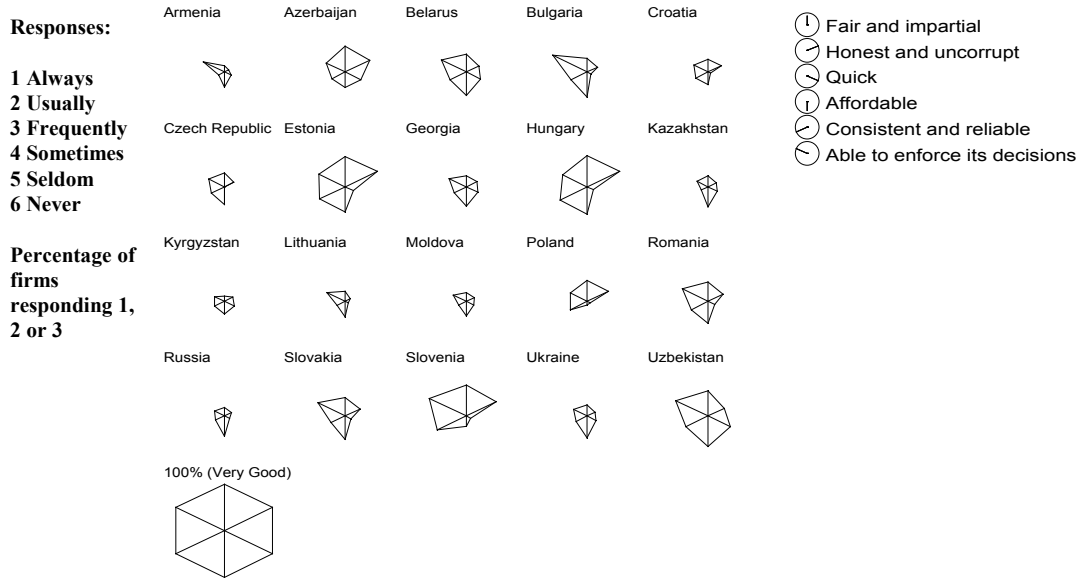
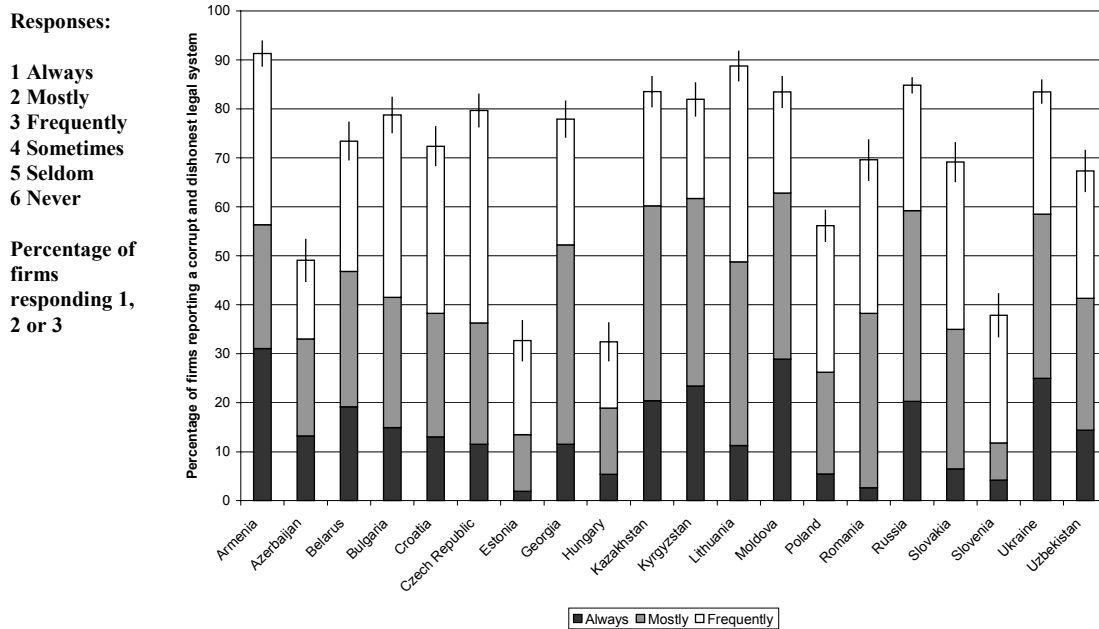


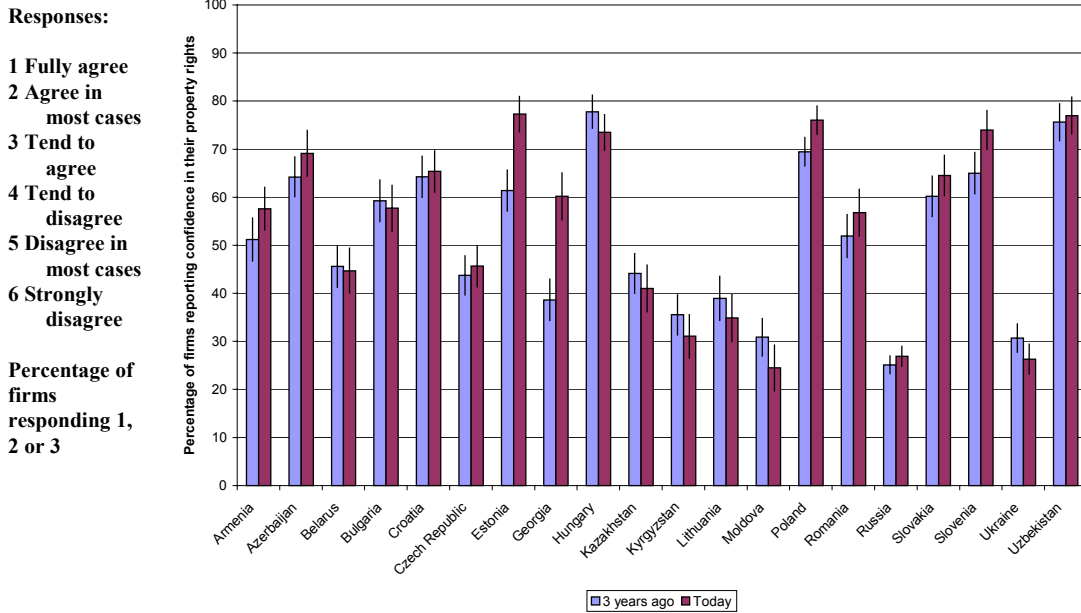
Figure 5.16: How frequently would you describe the legal system as corrupt and dishonest?



Property Rights

Corruption, state capture and weak legal systems undermine property and contract rights with significant consequences for investment and, ultimately, growth. Firms were asked to assess the security of their property and contract rights. The results are presented in Figure 5.17.

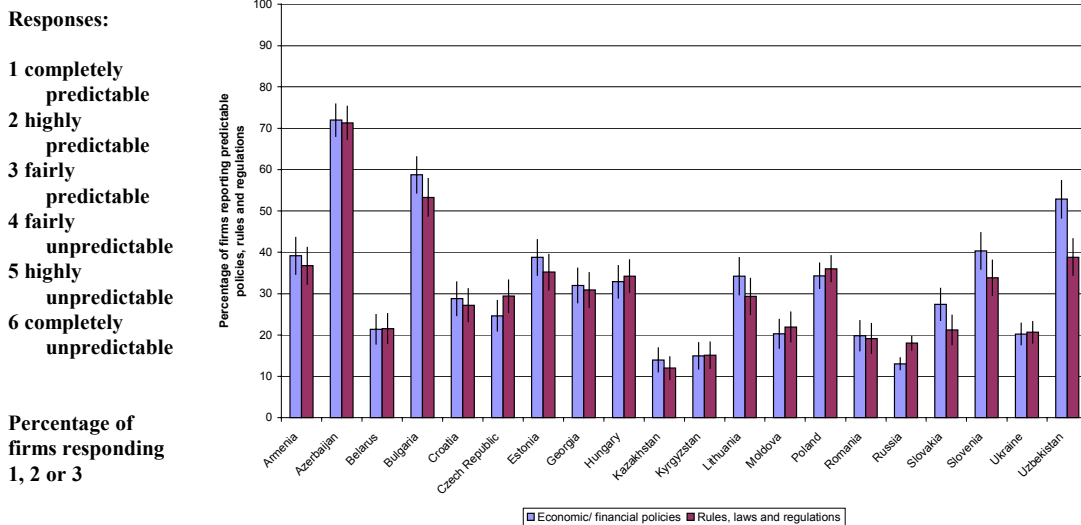
Figure 5.17: To what degree do you agree with this statement? “I am confident that the legal system will uphold my contract and property rights in business disputes.” And to what degree would you have agreed with it 3 years ago?



Predictability

In many respects, the most important public good that the state can provide from the point of view of business is predictability in the institutional and policy environment. Unpredictable changes in government policy or regulations increase risk in the business environment and produce large disincentives for investment. The survey asked firms to assess the predictability of government policies and laws; the results are presented in Figure 5.18.

Figure 5.18: How predictable are changes in the government’s economic and financial policies which materially affect your business? And how predictable are changes in rules, laws or regulations?



Predictability over time

Firms were also asked whether there has been any change in the unpredictability of government actions over the past three years (Figure 5.19).

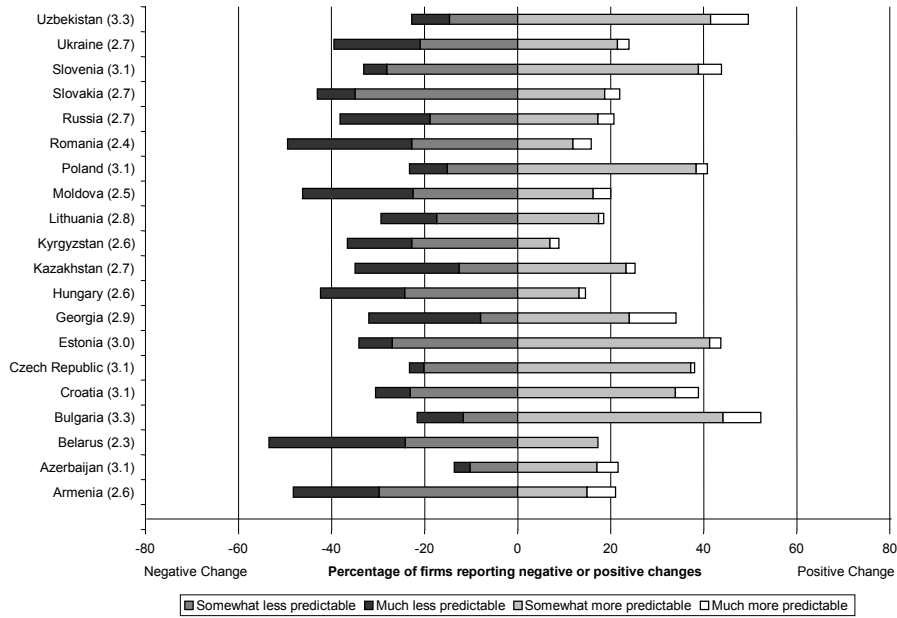
Figure 5.19: Using this scale, can you please tell me, how have the laws, regulations and policies affecting your business changed over the past three years?

Responses:

1 Much less predictable
 2 Somewhat less predictable
 3 Unchanged
 4 Somewhat more predictable
 5 Much more predictable

Negative range: percentage of firms responding 1 or 2;
Positive range: percentage of firms responding 4 or 5.

Mean score in parentheses (no change = 3)



Attitudes of the government towards business

A key component in fostering private enterprise is that the government communicates a positive and encouraging attitude towards business and entrepreneurship. Figure 5.20 gives the firms' assessment of the helpfulness of the central government; Figure 5.21 reports the assessments of the local government.

Figure 5.20: How helpful do you find Central/National Government towards businesses like yours?

Responses:

1 Very unhelpful
 2 Mildly unhelpful
 3 Neutral
 4 Mildly helpful
 5 Very helpful

Negative range: percentage of firms responding 1 or 2;
Positive range: percentage of firms responding 4 or 5

Mean score in parentheses (neutral = 3)

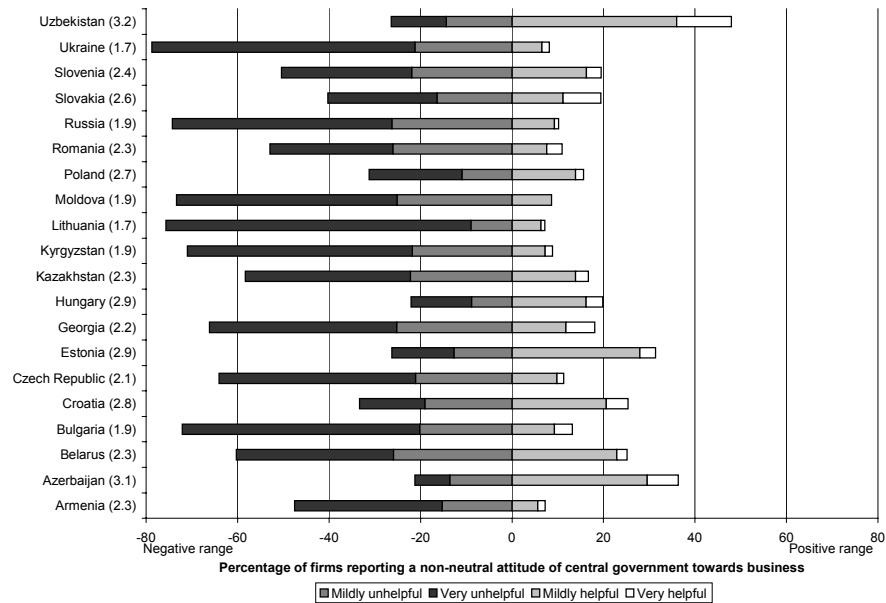


Figure 5.21: How helpful is local/regional government towards businesses like yours?

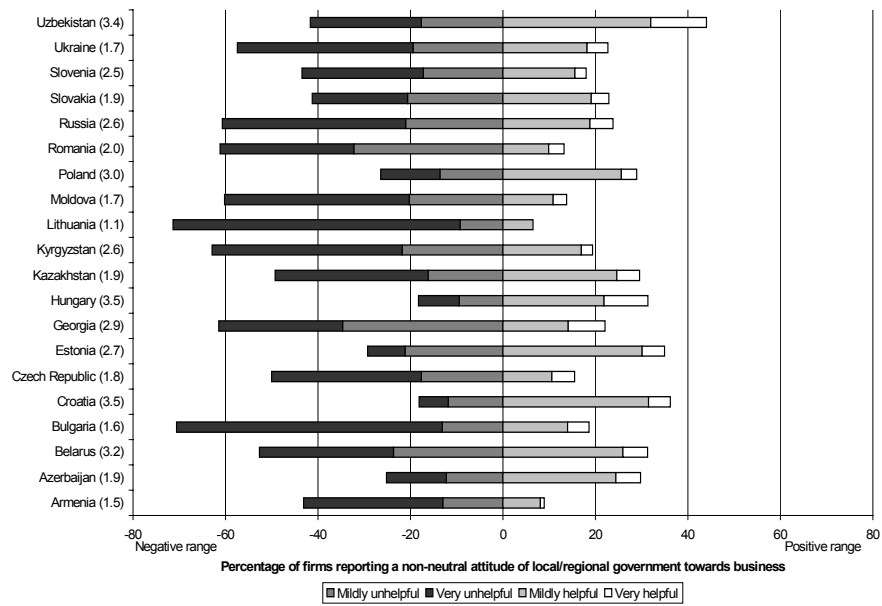
Responses:

- 1 Very unhelpful
- 2 Mildly unhelpful
- 3 Neutral
- 4 Mildly helpful
- 5 Very helpful

Negative range: percentage of firms responding 1 or 2;

Positive range: percentage of firms responding 4 or 5

Mean score in parentheses (neutral = 3)



Overall perceptions of government services

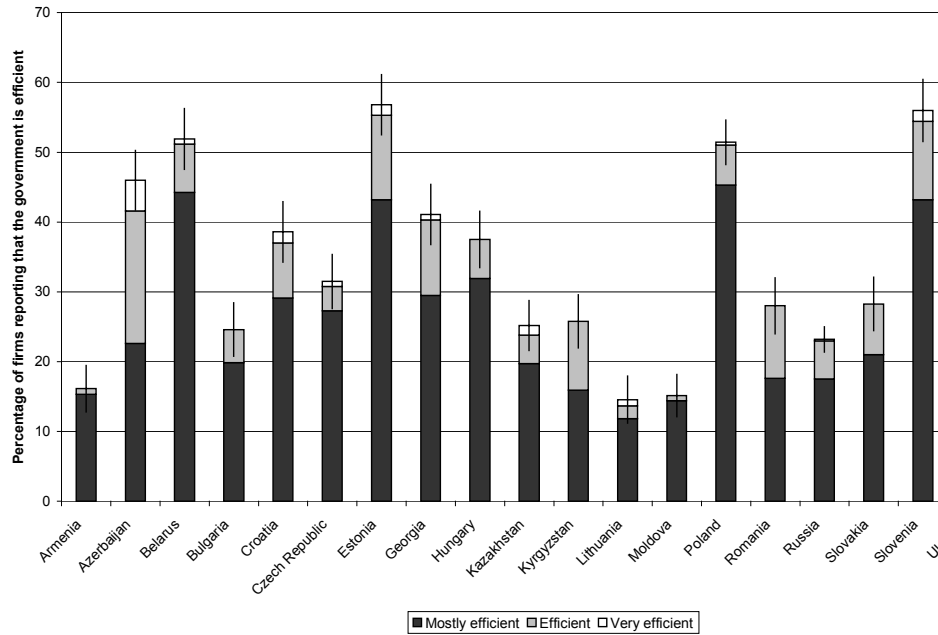
In addition to the previous questions focusing on detailed aspects of governance, it is useful to capture in a single measure a summary of the respondents' perceptions about the efficiency of the government. Although crude, such a measure is likely to be at least as important as consideration of particular institutional problems when firms make major decisions such as investment. Figure 5.22 presents the responses on this issue.

Figure 5.22: How would you rate the efficiency of government in delivering services?

Responses:

- 1 Very Efficient
- 2 Efficient
- 3 Mostly Efficient
- 4 Mostly inefficient
- 5 Inefficient
- 6 Very inefficient

Percentage of firms responding 1 2 or 3



Barter

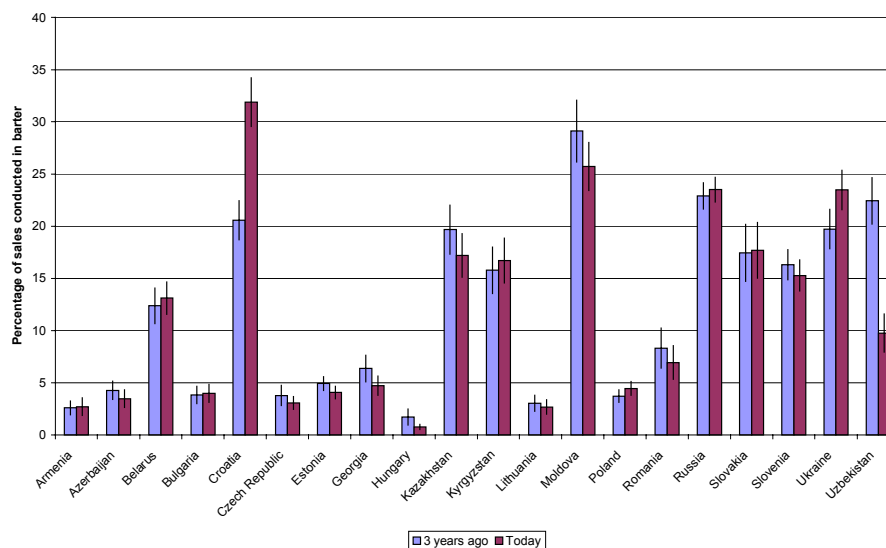
Large economic distortions are associated with the use of barter as the means of payment. Figure 5.23 shows the average percentage of sales which firms conduct in barter.

Figure 5.23: What share of your firm's sales are now conducted in barter, offsets or bills of exchange (money surrogates), today and three years ago?

Responses:

- None
- 1-9%
- 10-25%
- 26-50%
- 51-75%
- 76-100%

Midpoint of each category taken as representative to calculate the mean



Bureaucracy and state intervention in the firm – micro dimensions of governance

The regulatory environment

This group of questions concerns the regulatory environment, by which is meant the direct dealings between firms and officials who have been granted some form of control over the firm. Key issues are again the predictability and transparency with which these control rights are exercised and the resulting costs imposed on firms.

Information on rules and regulations

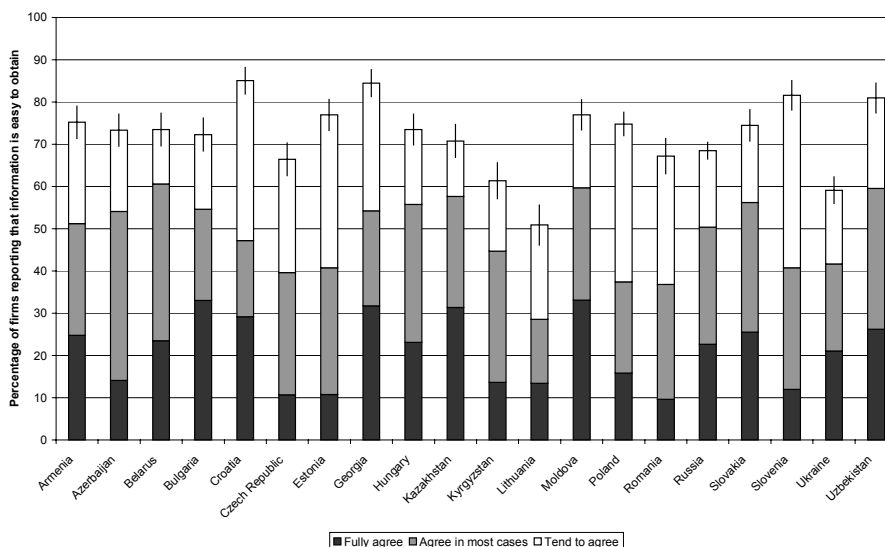
An important component of a transparent and predictable regulatory environment is that information on the rules and regulations by which firms are to be constrained is easily available. Firms were asked how easy it is to obtain such information (Figure 5.24).

Figure 5.24: To what degree do you agree with this statement? “Information on the laws and regulations affecting my firm is easy to obtain”

Responses:

- 1 Fully agree
- 2 Agree in most cases
- 3 Tend to agree
- 4 Tend to disagree
- 5 Disagree in most cases
- 6 Strongly disagree

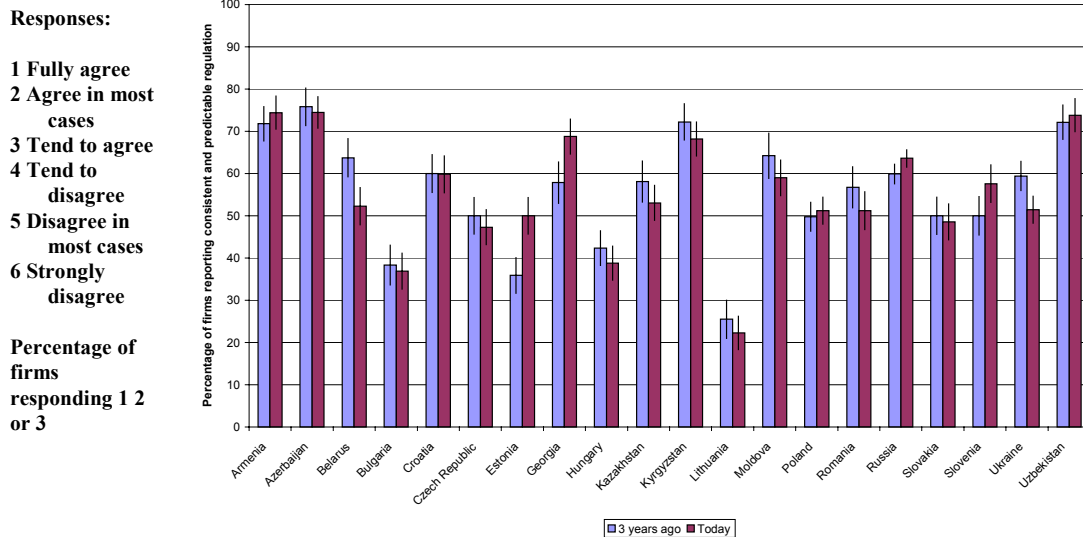
Percentage of firms responding 1 2 or 3



Interpretation of rules and regulations

The implementation of rules and regulations leaves a large degree of discretion to the state's officials. Figure 5.25 presents the firms' responses on the consistency and predictability of regulation.

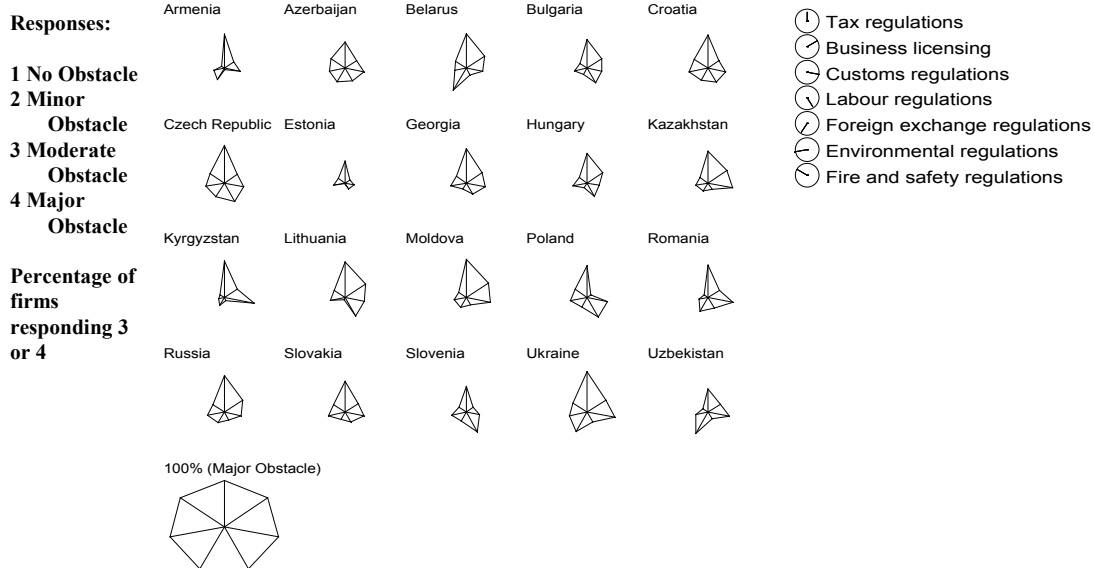
Figure 5.25: To what degree do you agree with the statement, "Interpretations of regulations affecting my firm are consistent and predictable", today and three years ago?



The regulatory burden

The survey investigates firms' perspectives on the extent of the regulatory burden for their business, focusing on a number of different areas of regulation. This highlights specific areas in which the regulatory burden is considered particularly excessive. Figure 5.26 illustrates the responses in the star chart form.

Figure 5.26: How problematic are the following for the operation and growth of your business?



In addition firms were asked which of the above obstacles they regard as the most important for their business. In every country, high taxes and tax regulations constituted the most significant obstacle to business for the overwhelming majority respondents.

State intervention

The most direct form of regulation is intervention by the state in firm decisions. Firms were asked how frequently the state directly intervenes in investment, employment, sales, prices, mergers, dividends and wages. Responses comprised always, mostly, frequently, sometimes, seldom, never. Table 5.27 presents the percentage of firms responding frequently or more together with a composite index calculated as the average across each dimension of intervention.

Table 5.27: The percentage of firms subject to state intervention

| <i>Country</i> | <i>Investment</i> | <i>Employment</i> | <i>Sales</i> | <i>Prices</i> | <i>Mergers</i> | <i>Dividends</i> | <i>Wages</i> | <i>Average</i> |
|----------------|-------------------|-------------------|--------------|---------------|----------------|------------------|--------------|----------------|
| Armenia | 5.8 | 4.4 | 6.3 | 7.9 | 6.5 | 5.5 | 6.5 | 6.1 |
| Azerbaijan | 18.6 | 13.7 | 7.7 | 8.4 | 7.1 | 7.1 | 6.0 | 9.8 |
| Belarus | 21.7 | 10.2 | 50.0 | 77.5 | 20.8 | 8.0 | 44.2 | 33.2 |
| Bulgaria | 8.0 | 3.5 | 11.1 | 17.5 | 9.3 | 9.5 | 12.4 | 10.2 |
| Croatia | 8.8 | 2.4 | 5.6 | 6.4 | 13.5 | 5.1 | 7.9 | 7.1 |
| Czech Republic | 18.5 | 11.9 | 11.4 | 13.4 | 11.1 | 7.8 | 15.3 | 12.8 |
| Estonia | 6.3 | 0.8 | 3.9 | 7.7 | 7.3 | 3.9 | 8.5 | 5.5 |
| Georgia | 13.8 | 7.1 | 11.2 | 13.6 | 7.3 | 8.2 | 11.0 | 10.3 |
| Hungary | 24.5 | 21.6 | 21.1 | 27.6 | 20.8 | 33.0 | 42.1 | 27.3 |
| Kazakhstan | 14.9 | 6.8 | 13.8 | 27.0 | 14.4 | 9.5 | 12.4 | 14.1 |
| Kyrgyzstan | 15.4 | 9.4 | 20.0 | 30.3 | 17.9 | 9.9 | 8.3 | 15.9 |
| Lithuania | 10.0 | 6.5 | 14.8 | 15.0 | 13.2 | 14.9 | 17.7 | 13.2 |
| Moldova | 13.3 | 5.1 | 17.2 | 33.6 | 14.7 | 15.5 | 14.1 | 16.2 |
| Poland | 11.0 | 8.2 | 4.5 | 5.1 | 8.3 | 6.4 | 12.2 | 8.0 |
| Romania | 21.4 | 4.9 | 7.8 | 17.5 | 8.1 | 12.9 | 19.5 | 13.2 |
| Russia | 9.1 | 5.1 | 18.2 | 29.7 | 9.3 | 3.0 | 6.5 | 11.5 |
| Slovakia | 30.3 | 34.1 | 35.2 | 50.0 | 12.5 | 7.4 | 43.1 | 30.4 |
| Slovenia | 15.7 | 20.3 | 13.2 | 12.4 | 13.1 | 11.6 | 26.0 | 16.1 |
| Ukraine | 22.1 | 10.8 | 23.1 | 30.0 | 11.4 | 9.8 | 24.4 | 18.8 |
| Uzbekistan | 22.0 | 7.4 | 24.1 | 32.5 | 12.8 | 12.5 | 29.6 | 20.1 |

Over-employment

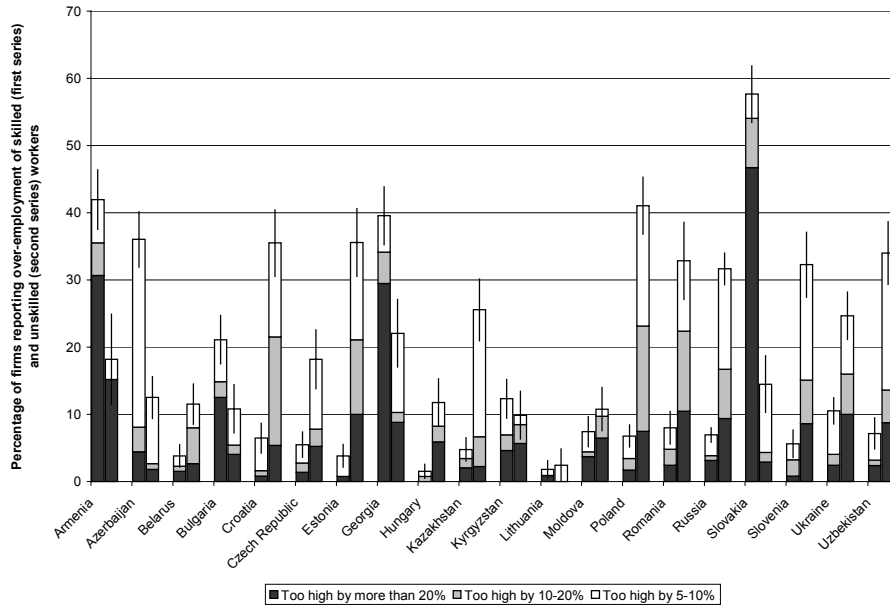
Given the previous commitment under communism to full employment, the state still intervenes indirectly in the employment decisions of firms. Figure 5.28 presents responses on how far current employment levels differ from the desired levels, with skilled and unskilled workers considered separately.

Figure 5.28: Given your firm's current level of output and existing capital stock, how does the current level of skilled and unskilled workers compare with the desired level?

Responses:

- 1 Too high by more than 20%;
- 2 Too high by 10-20%;
- 3 Too high by 5-10%;
- 4 Employment level about right;
- 5 Employment level too low

Percentage of firms responding 1 2 or 3



Time spent with government officials

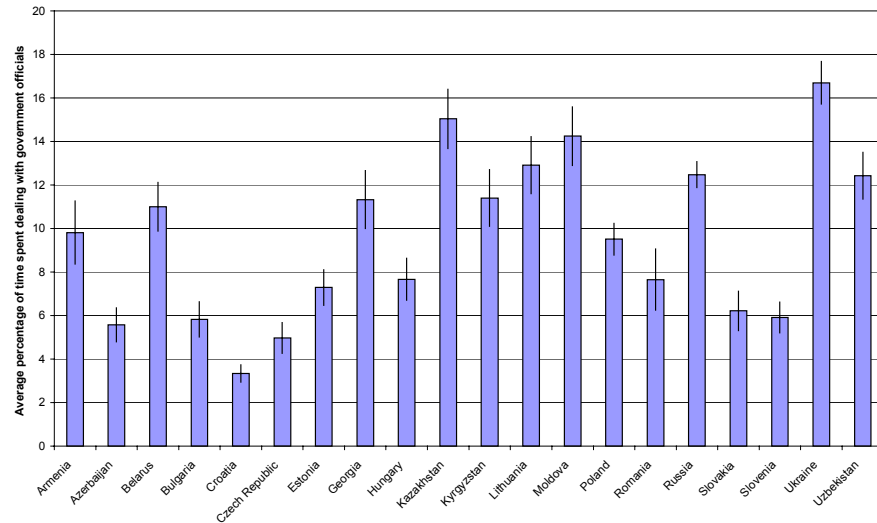
The time that senior managers have to spend dealing with government officials provides a measure of the burden that regulation places on firms, since such time is not directed towards productive activity. Figure 5.29 presents the mean responses on time spent with government officials.

Figure 5.29: What percentage of senior management's time per year is spent in dealing with government officials about the application and interpretation of laws and regulations?

Responses:

- Up to 1%
- 1 to 5%
- 6 to 10%
- 11 to 25%
- 26 to 50%
- More than 50%

Midpoint of each category (except lower point of last category) taken as representative to calculate the mean



Corruption

The macro dimensions of corruption have been dealt with above. This section investigates the micro characteristics of the corruption transaction. The dimensions of interest include the frequency and level of bribery (in the sense of the additional tax burden that corruption imposes on firms), uncertainties associated with corruption, the recipients of bribes, the extent of bribery associated with public procurement and the extent to which there is bureaucratic accountability in the provision of public services.

Frequency of bribery

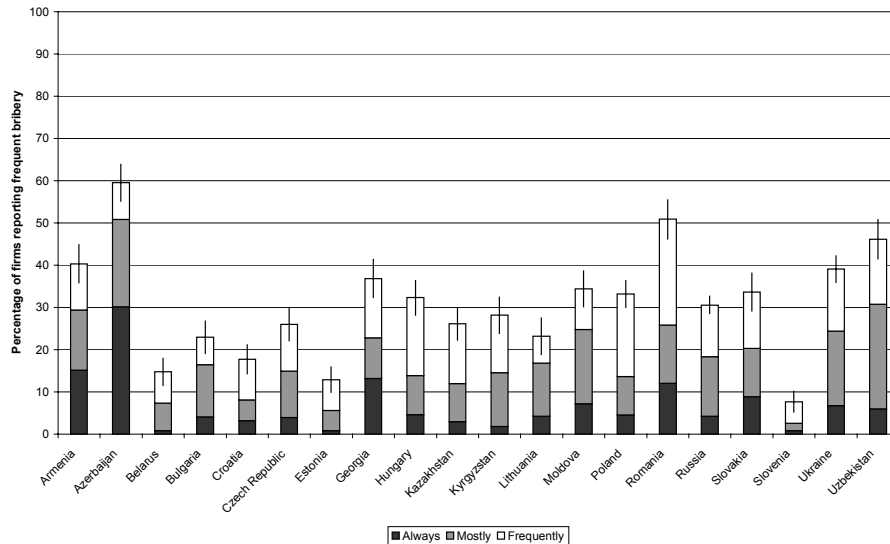
Firms were asked how frequently they face demands for bribes. Since a high frequency of bribery need not be associated with a high level of bribes (or implicit tax rate), this is closer to a measure of how ingrained corrupt practices are within the bureaucracy than a measure of the economic cost imposed by that corruption. Figure 5.30 gives the responses.

Figure 5.30: How often would you say the following statement is true? “It is common for firms in my line of business to have to pay some irregular ‘additional payments’ to get things done”.

Responses:

- 1 Always
- 2 Mostly
- 3 Frequently
- 4 Sometimes
- 5 Seldom
- 6 Never

Percentage of firms responding 1 2 or 3



Bribes paid

Firms were asked to estimate the additional tax burden, as a proportion of revenues, imposed on them by corruption. This presents one of the most direct measures of corruption in the survey. The question was posed in terms of firm revenues rather than profits since estimates of revenues are more reliable; firms in transition economies frequently face significant incentives to misreport profits.

Firms were only asked to answer this question if they replied that they ever paid bribes in response to the previous question. The proportion of such firms in each country is given in Figure 5.31. Such a response may be regarded as genuine non-payment or an unwillingness to discuss the subject. In any case the results presented in Figure 5.32 should be interpreted as the average additional tax imposed by bribery among those firms admitting to paying bribes.

Figure 5.31: Proportion of firms admitting to paying bribes

Responses:

- 1 Always
- 2 Mostly
- 3 Frequently
- 4 Sometimes
- 5 Seldom
- 6 Never

Percentage of firms reporting that they ever pay bribes

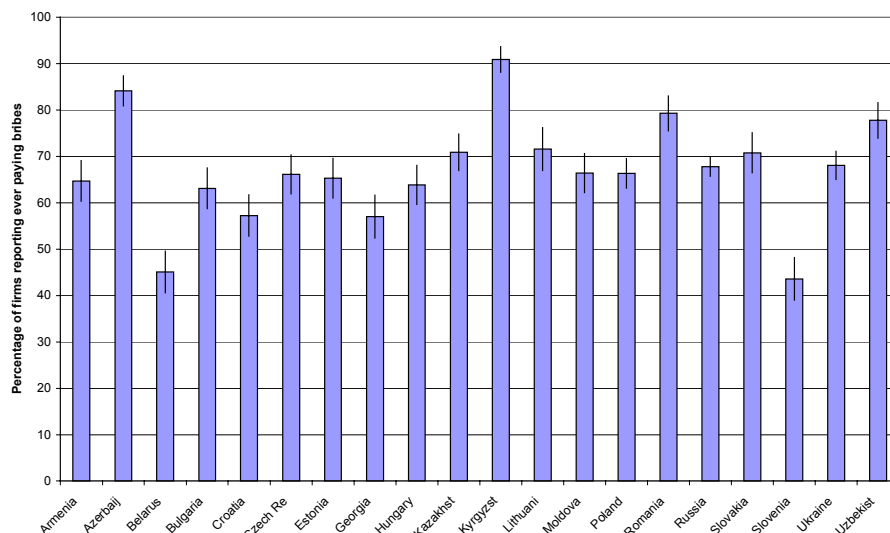
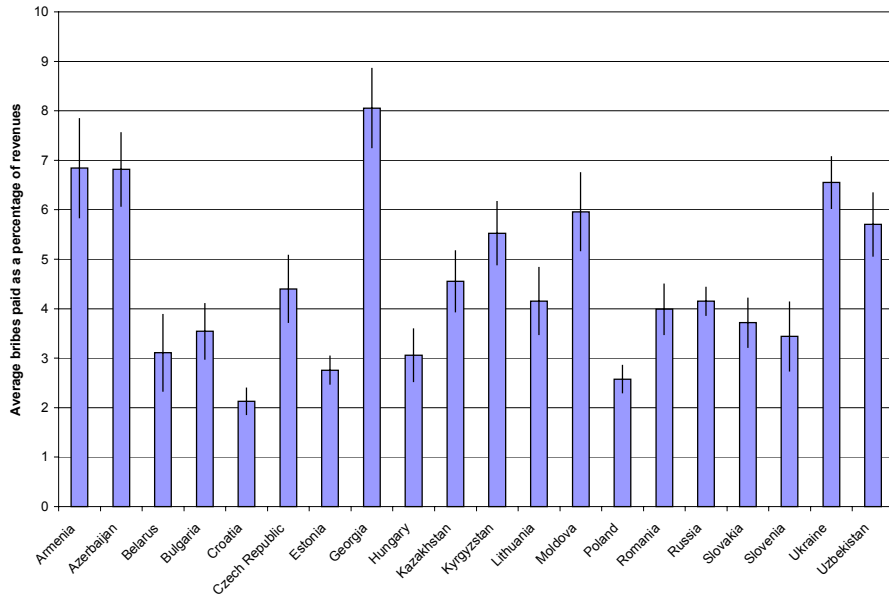


Figure 5.32: On average, what percent of revenues do firms like yours typically pay per annum in unofficial payments to public officials?

Responses:

- 0%
- 1 - 1.99%
- 2 - 9.99%
- 10 - 12%
- 13 - 25%
- Over 25%

Midpoint of each category (except lower point of last category) taken as representative to calculate the mean



Uncertainties associated with bribery

The key difference between corrupt and non-corrupt transactions is that corrupt transactions do not represent a legally enforceable agreement between the official and the firm. As a result, corruption is frequently a source of substantial uncertainty for the firm. The survey asked firms about various forms of uncertainty connected with bribery; the responses are presented in Figures 5.33 to 5.35. Only those firms which stated that they pay bribes frequently or more are included below since such uncertainty is unimportant if the firm only pays bribes infrequently.

Figure 5.33: Firms in my line of business usually know in advance about how much this ‘additional payment’ is.

Responses:

- 1 Always
- 2 Mostly
- 3 Frequently
- 4 Sometimes
- 5 Seldom
- 6 Never

Percentage of firms reporting that they know the bribe rate in advance

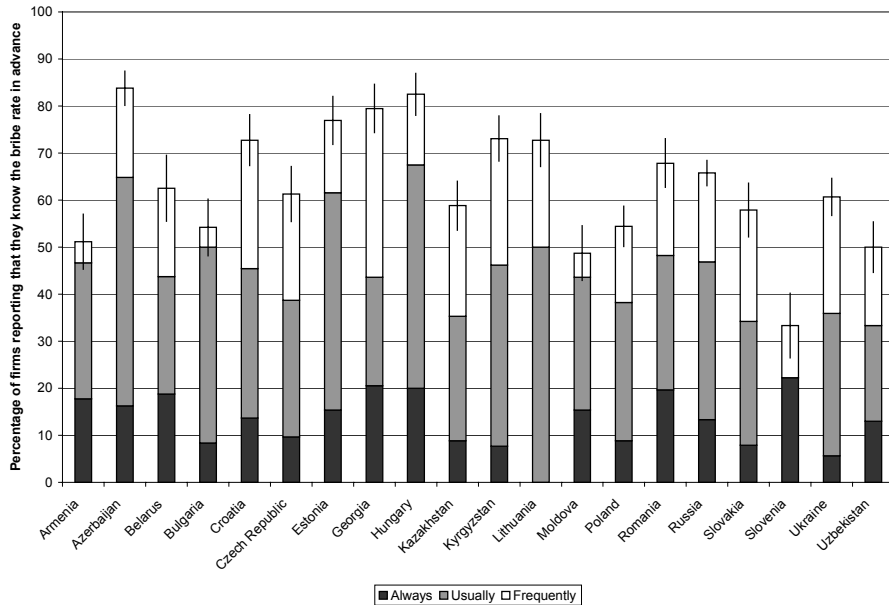


Figure 5.34: If a firm pays the required additional payment to a particular government official, another government official will subsequently require an additional payment for the same service.

Responses:

- 1 Always
- 2 Mostly
- 3 Frequently
- 4 Sometimes
- 5 Seldom
- 6 Never

Percentage of firms responding 4 5 or 6 (restricted sample)

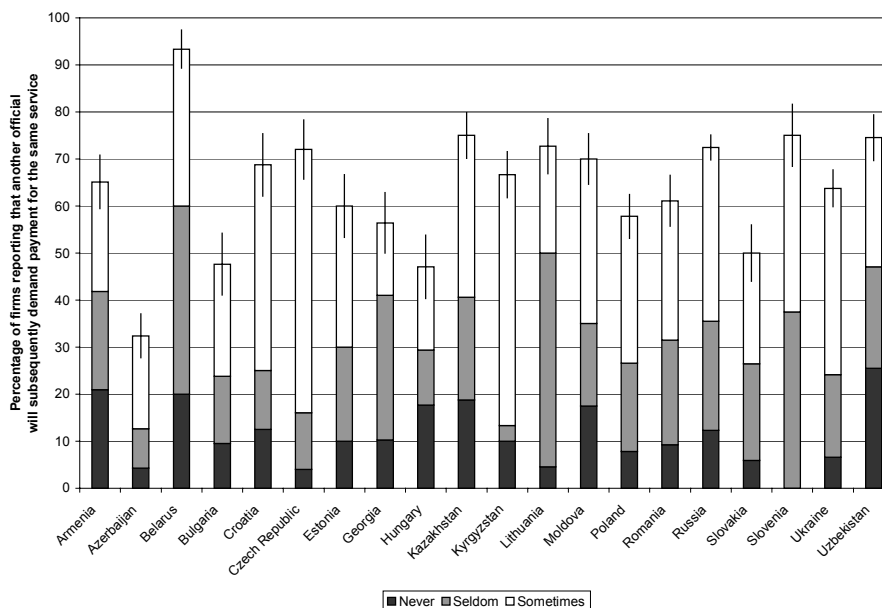
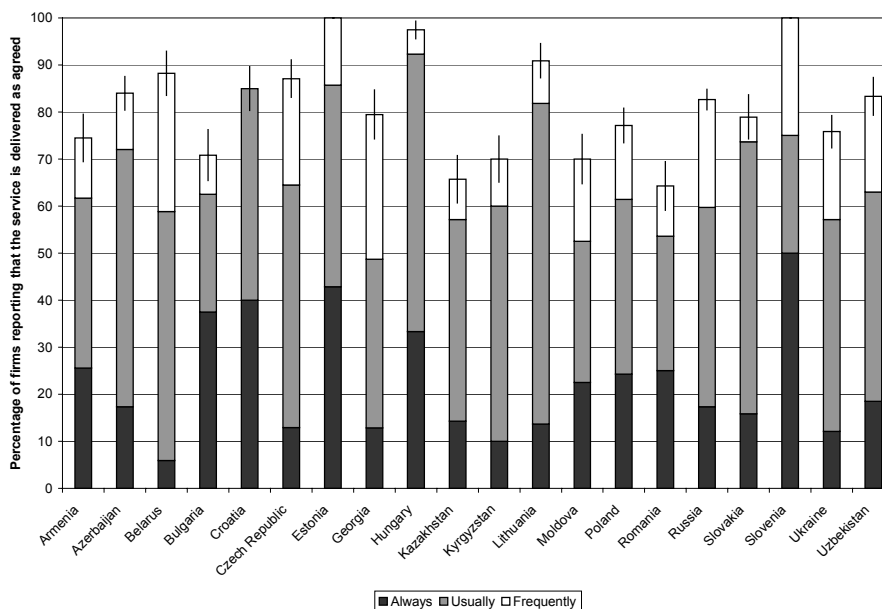


Figure 5.35: If a firm pays the required 'additional payments' the service is usually also delivered as agreed.

Responses:

- 1 Always
- 2 Mostly
- 3 Frequently
- 4 Sometimes
- 5 Seldom
- 6 Never

Percentage of firms responding 1 2 or 3 (restricted sample)



The recipients of bribes

The bribes paid by firms can be dis-aggregated according to different "services". The survey asked about the proportion of bribes paid each year for the following purposes: to get connected to and maintain public services; to get licenses and permits; to deal with taxes and tax collection; to gain government contracts; to deal with customs/imports; to deal with courts; to deal with health/fire inspectors; and to influence the content of new legislation, rules or decrees.

Table 5.36 presents the average proportion of bribes spent on each service. The results have not been weighted so firms paying a small amount of bribes carry as much weight as those paying a lot.

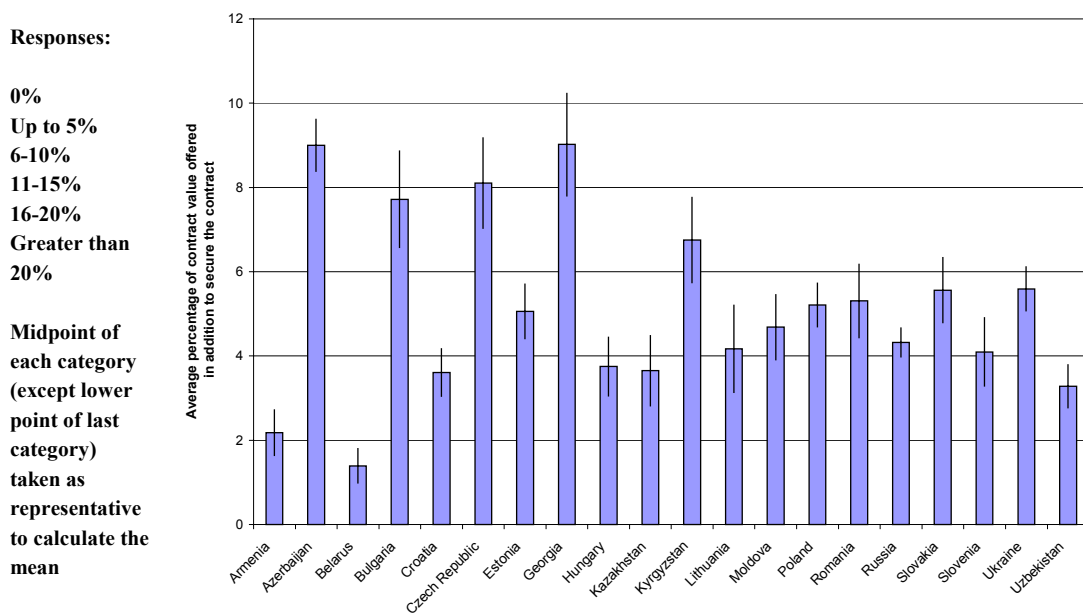
Table 5.36: The average proportion of bribes spent on each "service"

| Country | Connection to public services | Licenses | Taxes | Government contracts | Customs | Courts | Health/Fire inspectors | Influence legislation | Other | Total |
|----------------|-------------------------------|----------|-------|----------------------|---------|--------|------------------------|-----------------------|-------|-------|
| Armenia | 10.9 | 9.8 | 30.6 | 5.8 | 14.0 | 4.7 | 2.9 | 3.2 | 18.0 | 100.0 |
| Azerbaijan | 9.2 | 20.2 | 31.6 | 17.4 | 8.6 | 6.0 | 4.3 | 2.4 | 0.1 | 100.0 |
| Belarus | 9.6 | 30.4 | 28.2 | 7.3 | 7.1 | 3.6 | 13.6 | 0.2 | 0.0 | 100.0 |
| Bulgaria | 17.7 | 22.6 | 14.1 | 6.6 | 11.9 | 13.6 | 8.2 | 2.8 | 2.6 | 100.0 |
| Croatia | 9.1 | 6.7 | 7.3 | 44.7 | 10.7 | 8.8 | 4.1 | 4.0 | 4.5 | 100.0 |
| Czech Republic | 8.3 | 16.3 | 7.2 | 43.0 | 6.4 | 6.5 | 9.2 | 1.6 | 1.6 | 100.0 |
| Estonia | 2.0 | 26.5 | 6.4 | 34.5 | 15.2 | 2.5 | 4.2 | 5.9 | 2.8 | 100.0 |
| Georgia | 11.0 | 18.3 | 29.3 | 3.6 | 9.6 | 11.3 | 10.4 | 6.6 | 0.0 | 100.0 |
| Hungary | 7.3 | 43.6 | 10.9 | 11.1 | 14.2 | 3.1 | 3.3 | 1.4 | 4.9 | 100.0 |
| Kazakhstan | 10.7 | 23.2 | 20.3 | 5.3 | 14.4 | 12.7 | 9.5 | 1.3 | 2.8 | 100.0 |
| Kyrgyzstan | 5.0 | 15.2 | 53.5 | 6.5 | 6.8 | 4.5 | 7.4 | 1.1 | 0.0 | 100.0 |
| Lithuania | 14.0 | 8.5 | 16.3 | 5.0 | 15.1 | 8.7 | 17.6 | 4.3 | 10.6 | 100.0 |
| Moldova | 14.9 | 29.7 | 21.4 | 3.9 | 10.4 | 9.0 | 7.0 | 1.6 | 2.2 | 100.0 |
| Poland | 7.4 | 26.1 | 8.8 | 17.7 | 15.8 | 9.9 | 5.7 | 4.3 | 4.3 | 100.0 |
| Romania | 16.1 | 39.8 | 6.3 | 7.8 | 15.2 | 5.2 | 5.7 | 3.4 | 0.6 | 100.0 |
| Russia | 11.7 | 20.4 | 18.5 | 11.3 | 8.8 | 11.1 | 11.6 | 2.8 | 3.7 | 100.0 |
| Slovakia | 5.7 | 33.2 | 10.1 | 18.3 | 11.8 | 12.9 | 4.3 | 1.3 | 2.5 | 100.0 |
| Slovenia | 6.5 | 24.9 | 4.3 | 36.3 | 8.7 | 5.3 | 5.8 | 8.2 | 0.0 | 100.0 |
| Ukraine | 10.3 | 21.3 | 25.8 | 10.4 | 12.2 | 6.8 | 9.7 | 2.5 | 1.1 | 100.0 |
| Uzbekistan | 8.5 | 18.0 | 27.9 | 15.4 | 10.9 | 5.2 | 12.0 | 0.9 | 1.2 | 100.0 |
| Overall | 10.6 | 22.0 | 19.4 | 14.6 | 12.2 | 7.9 | 7.8 | 2.6 | 2.9 | 100.0 |

Bribery connected with public procurement

Corruption may be connected with public procurement as politicians and officials demand bribes in return for awarding contracts. Firms were asked what proportion of the contract value is typically offered in bribery when doing business with the government; the responses are reported in Figure 5.37.

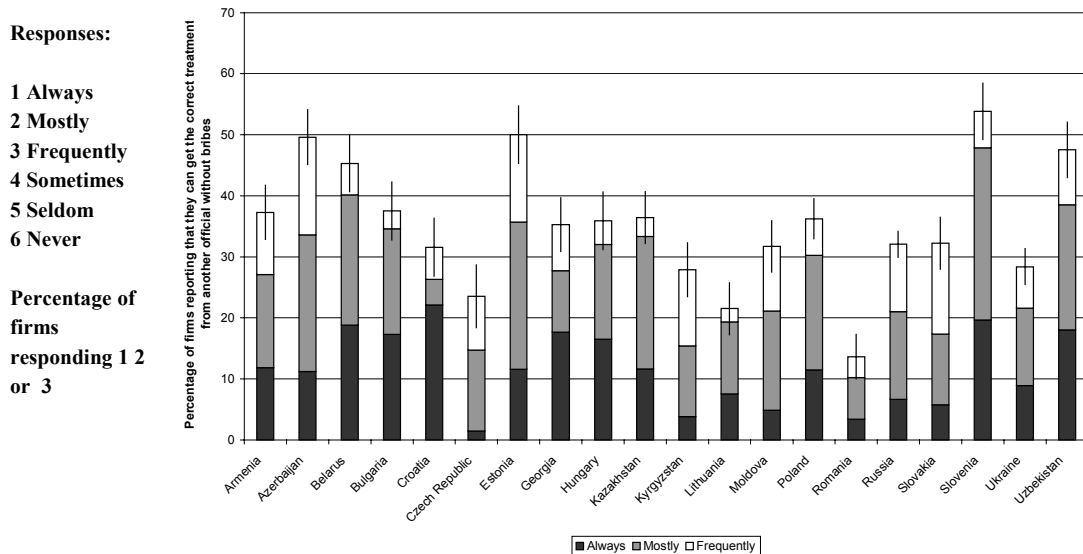
Figure 5.37: When firms in your industry do business with the government, how much of the contract value would they typically offer in additional or unofficial payments to secure the contract?



Bureaucratic accountability

The opportunity for officials to engage in corruption depends in part on the discretionary power they hold and the degree of accountability they face within the state apparatus. The survey investigates to what degree the behaviour of officials is constrained by other non-corrupt officials, as reported in Figure 5.38.

Figure 5.38: How often is the following statement true? “If a government agent acts against the rules I can usually go to another official or to his superior and get the correct treatment without recourse to unofficial payments.”



Lobbying

Firms may try to mitigate the uncertainties caused by state policy making by becoming more involved in the process. Figures 5.39 and 5.40 present the responses to questions on firm membership in trade associations and the degree to which such associations are the preferred channel for exercising influence.

Figure 5.39: Are you a member of a trade association or lobby group?

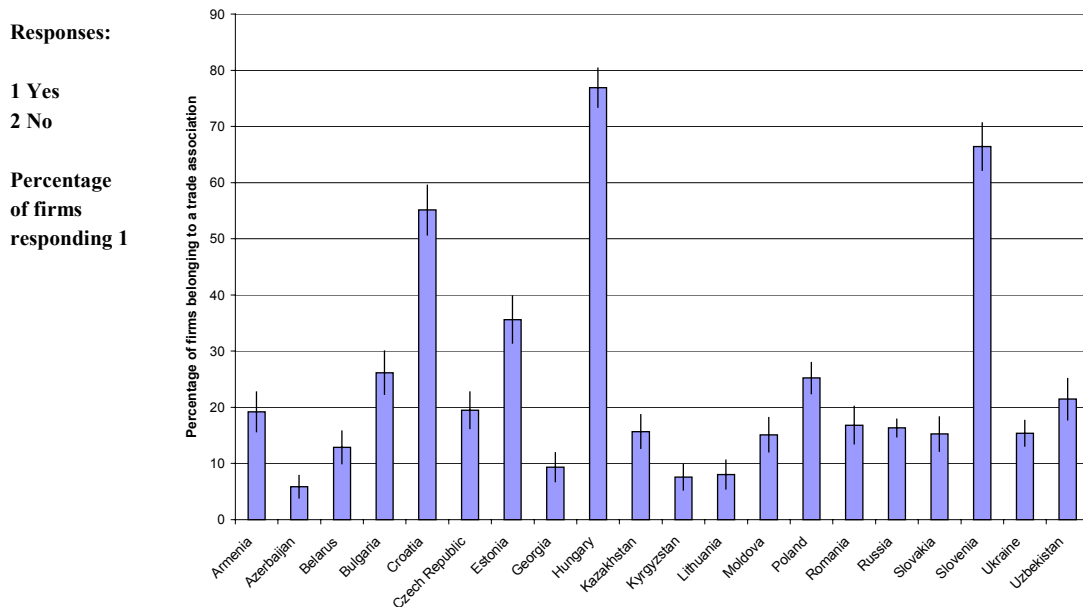
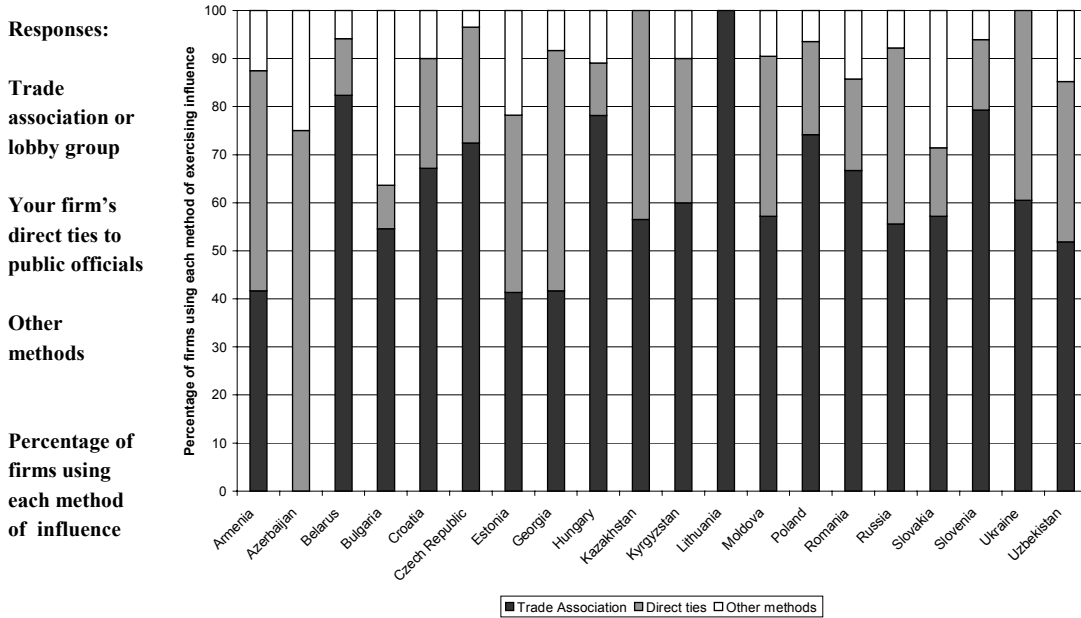


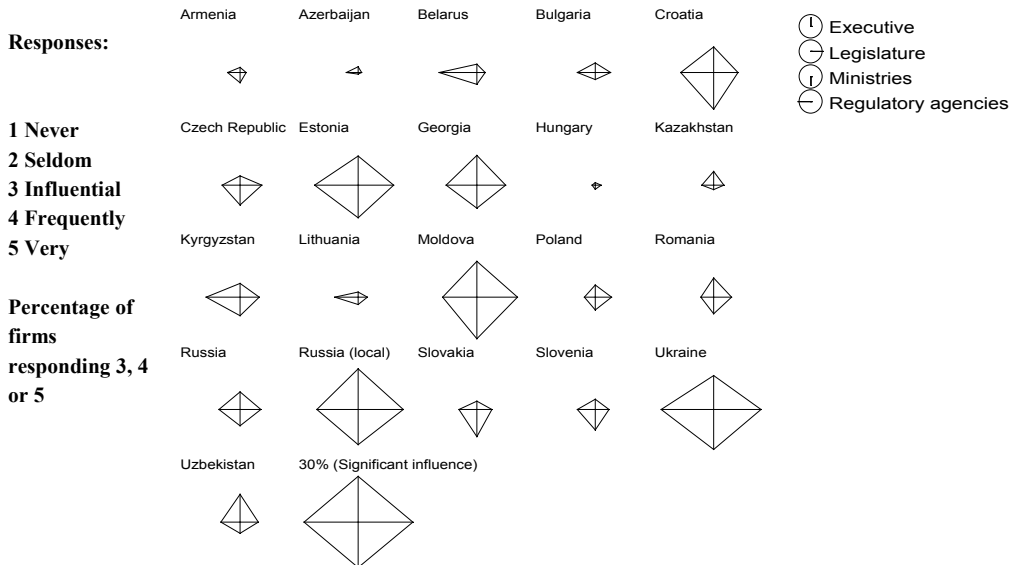
Figure 5.40: If so, when a new law, rule, regulation, or decree is proposed that would have a substantial impact on your firm, which channel would you typically rely on to try to affect the outcome?



Degree of influence over the state

Firms engage in lobbying to exercise influence. Figure 5.41 presents the firms' assessment of the degree of influence that they wield at different levels of government - the executive, legislature, ministries and regulatory agencies. In addition, firms in Russia were asked the same questions about their local government. Note that the star charts are scaled relative to a maximum of 30% of firms reporting being influential.

Figure 5.41: When a new law, rule, regulation, or decree is being discussed that could have a substantial impact on your business, how much influence does your firm typically have at the national level of government to try to influence the content of that law, rule, regulation or decree?



Arrears

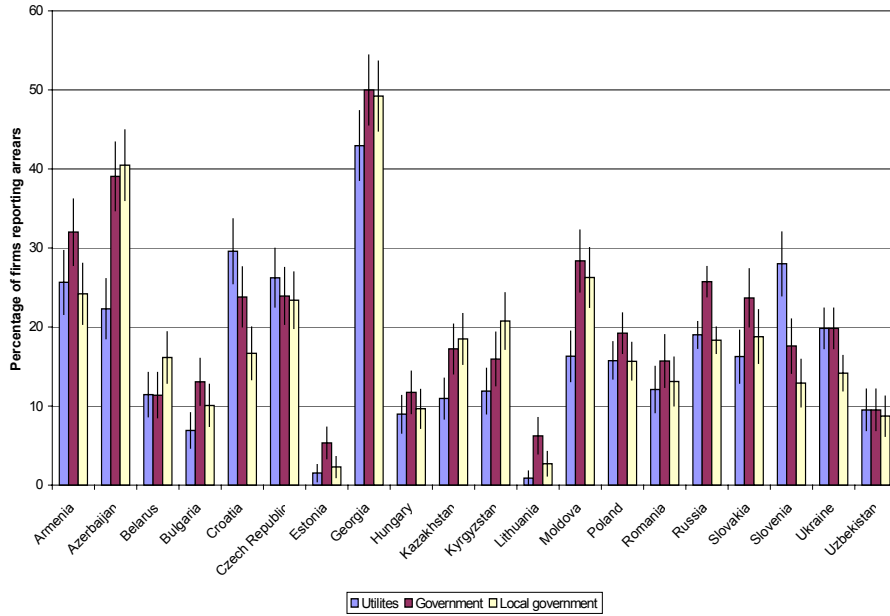
The state may indirectly subsidise firms by condoning arrears. Figure 5.42 shows the proportion of firms with such arrears.

Figure 5.42: Is the amount of payments overdue (by more than 90 days) by your company to each of the following substantial, manageable, modest or non-existent?

Responses:

- 1 substantial
- 2 manageable
- 3 modest
- 4 non-existent

Percentage of firms responding 1 or 2



Subsidies

More directly, subsidies form one component of the nexus of transactions that tie together firms and the state. Figure 5.43 and 5.44 illustrate the current proportion of firms receiving subsidies and the change in the level of subsidies over the last three years.

Figure 5.43: Does your enterprise receive subsidies (including tolerance of tax arrears) from local or national government, today and three years ago?

Responses:

- 1 Yes
- 2 No

Percentage of firms responding 1

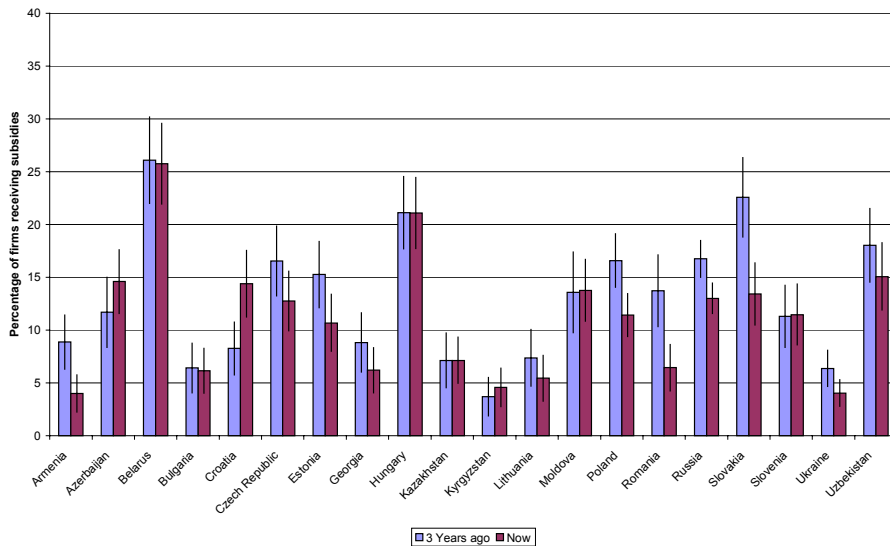


Figure 5.44:

Relative to support three years ago, the subsidies now received by your company is:

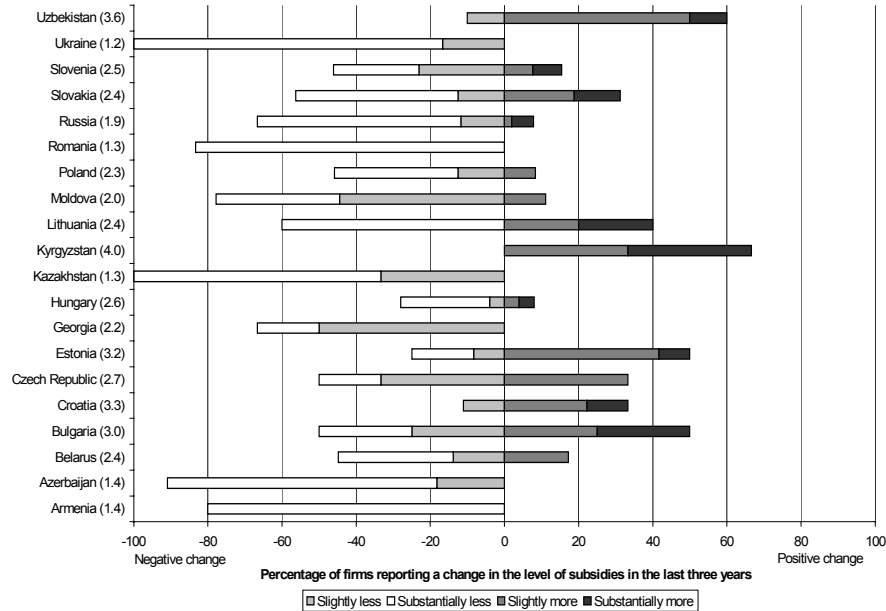
Responses:

- 1 substantially less;
- 2 slightly less;
- 3 about the same;
- 4 slightly more;
- 5 substantially more

Negative range:
percentage of firms
responding 1 or 2;

Positive range:
percentage of firms
responding 4 or 5

Mean score in
parentheses (no
change = 3)



6. Selected results by firm characteristics

The firms in the sample differ according to the many characteristics highlighted in section 4. It is thus possible to investigate systematic differences in perceptions along these other dimensions of variation. This section presents a few selected results on the discriminatory consequences of state actions according to the origins of the responding firm. The firms are divided into the following categories:

- New Private: comprising all private firms with no state-owned predecessor
- Privatised: comprising all private firms which were formerly state owned
- State Owned: comprising all those firms still in state ownership

In addition we partition the firms into:

- Small: comprising all firms with fewer than 50 employees
- Medium: comprising all firms with between 50 and 500 employees
- Large: comprising all firms with more than 500 employees

Bribes Paid

There are significant differences in both the frequency and the level of bribes paid by firms in different categories. Across the whole sample bribery is a particularly serious disadvantage for new private firms and constitutes a regressive tax with respect to firm size. See Figure 5.32 and Figure 5.30 for the corresponding charts by country. Recall that the average level of bribery is calculated from the sub-sample of firms that admit to paying bribes at all.

Figure 6.1: Average bribes paid and frequency of payment by origin of the firm

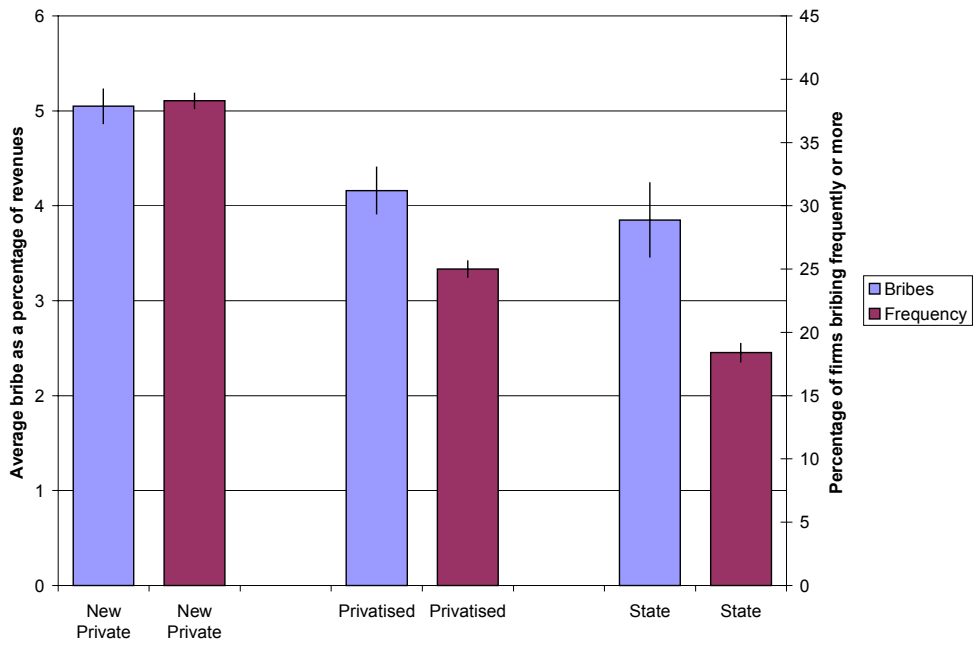
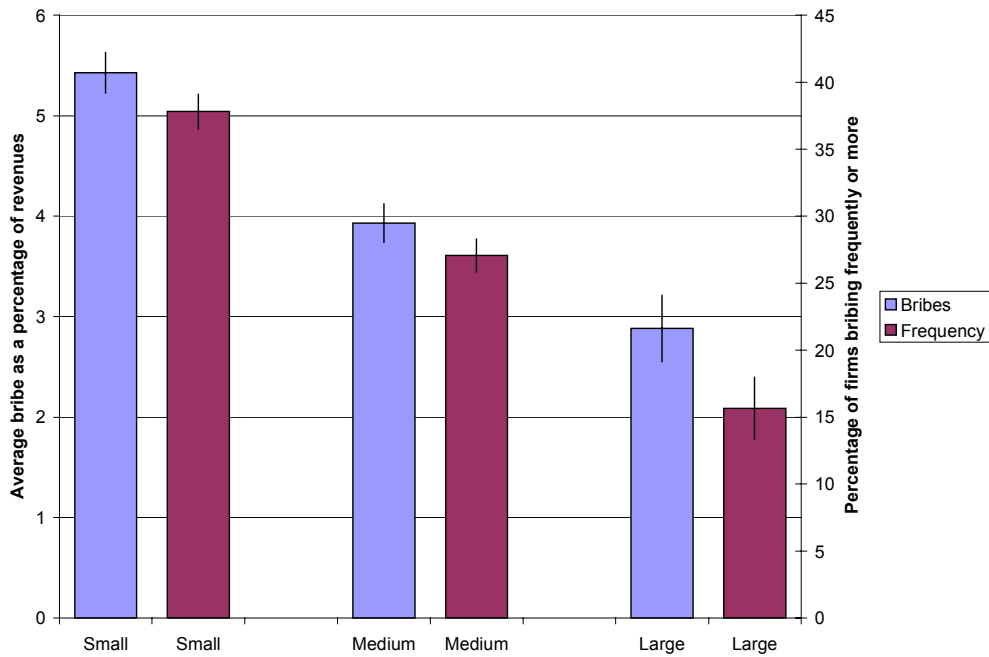


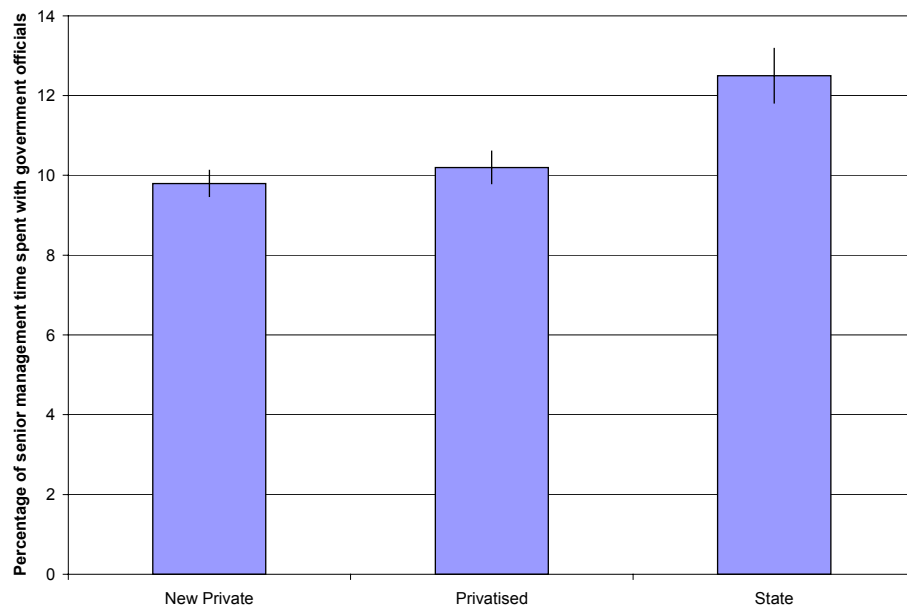
Figure 6.2: Average bribes paid and frequency of payment by size of the firm



Time spent with government officials

There is also evidence that firms in different categories spend differing amounts of time dealing with government officials. See Figure 5.29 for the corresponding chart by country.

Figure 6.3: Time spent with government officials by origin of the firm



7. References

- Aslund, Anders. 1999. *Russia's collapse*. Foreign Affairs. Vol. 78 (5); 64-77
- Boycko, Maxim, Andrei Shleifer and Robert Vishny. 1995. *Privatizing Russia*. MIT Press
- Brunetti, Aldo, Gregory Kisunko and Beatrice Weder. 1997. *Institutional Obstacles to Doing Business*. World Bank Policy Research Working Paper No. 1759. World Bank: Washington D.C.
- European Bank for Reconstruction and Development. 1999. *Transition Report: Ten Years of Transition*. London, UK.
- Hellman, Joel S. 1998. *Winners Take All: The Politics of Partial Reform in Postcommunist Nations*. World Politics Vol. 50 No. 2; 203-234.
- Hellman Joel S., Geraint Jones and Daniel Kaufmann. (forthcoming). *Seize the State, Seize the Day: Governance and State Capture in Transition Economies*.
- Kaufmann, Daniel, Sanjay Pradhan and Randi S. Ryterman. 1998. *New Frontiers in Diagnosing and Combating Corruption*. World Bank PREM Note No. 7: Washington, DC.
- Kaufmann, Daniel, Aart Kraay and Pablo Zoido-Lobaton. 1999a,b. *Aggregating Governance Indicators, and, Governance Matters*. World Bank Policy Research Working Papers Nos. 2195 & 2196: Washington D.C. (www.worldbank.org/wbi/gac).
- Kaufmann, Daniel and Shang-Jin Wei. 1999. *Does "Grease money" speed up the wheels of commerce?*. NBER Working Paper 7093: Harvard University, Boston, MA.
- Kaufmann, Daniel and Pablo Zoido-Lobaton. 1999. *Corruption, Unpredictability and Performance*. World Bank: Washington D.C.
- Mauro, Paulo. 1995. *Corruption and Growth*. Quarterly Journal of Economics, 110(3); 681-713.
- Rose-Ackerman, Susan. 1978. *Corruption: A study in political economy*. Academic Press: New York.
- Rosten, Leo. 1968. *The Joys of Yiddish*. New York: McGraw Hill
- Shleifer, Andrei and Robert Vishny. 1994. *Politicians and Firms*. Quarterly Journal of Economics 995-1025 (collected in *The Grabbing Hand*. Harvard University Press, 1998)
- Shleifer, Andrei and Robert Vishny. 1993. *Corruption*. Quarterly Journal of Economics, 108; 599-617 (collected in *The Grabbing Hand*. Harvard University Press. 1998)
- Shleifer, Andrei and Robert Vishny. 1999. *The Grabbing Hand*. Harvard University Press.
- Wei, Shang-Jin. 1999. *Corruption in Economic Development: Beneficial Grease, Minor Annoyance, or Major Obstacle?* World Bank Working Paper. World Bank: Washington D.C.
- World Bank. 1996. *World Development Report: From Plan to Market*. New York: Oxford University, Press: New York.
- World Bank. 1997. *World Development Report: The State in the Changing World*. Oxford University, Press: New York.

[For details on bibliographical references, visit www.worldbank.org/wbi/gac]

Further readings

- Ades, Alberto, and Rafael Di Tella. 1996. *The Causes and Consequences of Corruption: A Review of Recent Empirical Contributions*. IDS Bulletin 27 (2).
- Aslund, Anders. 1999. *Why Russia's Economic Transformation Been So Arduous?* Annual World Bank Conference on Development Economics Paper: Paris, France.
- Bardhan, Pranab. 1997. *Corruption and Development: A Review of Issues*. Journal of Economic Literature; 35:1320-46.
- Bardhan, Pranab and Dilip Mukherjee. 1999. *Capture and Governance at Local and National Levels*. Processed, Berkeley and Boston Univ.
- Burki, Shahid Javed and Guillermo Perry. *Beyond the Washington Consensus: Institutions Matter*. World Bank Latin American and Caribbean Studies: Washington, DC.
- Eatwell, John, Michael Ellman, Mats Karlsson, D. Mario Nuti and Judith Shapiro. 1995. *Transformation and Integration: Shaping the Future of Central and Eastern Europe*. Institute for Public Policy Research.
- Johnson, Simon, Daniel Kaufmann and Andrei Shleifer. 1997. *The Unofficial Economy in Transition*. Brookings Papers on Economic Activity (2): 159-239.
- Kaufmann, Daniel and Paul Siegelbaum. 1997. *Privatization and Corruption in Transition Economies*. Journal of International Affairs, 50 (2), pp. 419-458: Washington, DC.
- Klitgaard, Robert. 1988. *Controlling Corruption*. University of California Press: Berkeley, CA.
- Marin, Dalia, Bogdan Gorochowskij and Daniel Kaufmann. (forthcoming) *Barter in Transition Economies: Competing Explanations Confront Ukrainian Data*. World Bank Policy Research Paper.
- Pfeffermann, Guy, Gregory Kisunko and Mariusz Sumlinski. 1999. *Trends in Private Investment in Developing Countries and Perceived Obstacles to Doing Business: Statistics for 1970-1997*. World Bank IFC Discussion Paper # 37. Washington
- Rose-Ackerman, Susan. 1999. *Corruption and Government: Causes, Consequences, and Reform*. Cambridge University Press: Cambridge, UK.
- Sachs, Jeffrey. 1996. *The Transition at Mid-Decade*. American Economic Review, Papers and Proceedings vol. 86, No. 2: pp 128-33.
- Selowsky, Marcelo and Ricardo Martin. 1997. *Policy Performance and Output Growth in the Transition Economies*. American Economic Review Papers and Proceedings vol. 87, No. 2; pp. 350-353.
- Stiglitz, Joseph. 1999. *Quis Custodiet Ipsos Custodes? Corporate Governance Failures in the Transition*. World Bank Annual Conference on Development Economics – Europe Paper: Paris, France.
- Stiglitz, Joseph. 1999. *Whither Reform? Ten Years of the Transition*. World Bank Annual Conference on Development Economics Paper: Washington, DC.
- Stone, Andrew. 1992. *How to Use Firm-level Surveys to Assess Constraints on Private Sector Development*: World Bank Policy Research Working #923.
- Tanzi, Vito, and Hamid Davoodi 1997. *Corruption, Public Investment and Growth*. IMF Working Paper 97/139.
- Thomas, Vinod, et al. 2000. *The Quality of Growth*. The World Bank Millenium Report Series: Washington, DC (forthcoming).