Institutions in Transition

Reliability of Rules and Economic Performance in Former Socialist Countries

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Abstract

Building reliable institutions that support a market system is undoubtedly a central precondition for successful economic transition. This paper presents indicators on the predictability of the institutional framework across twenty transition economies and then investigates whether these indicators can explain differences in their economic performance. The results suggest that differences in the degree of predictability of the institutional framework may indeed be an important factor in explaining differences in foreign direct investment as well as differences in economic growth across transitional economies.

Introduction

One of the crucial preconditions for economic transition is to build institutions that support a market system. Such institutions range from bankruptcy laws to regulations on insider trading to rules defining property and contract rights. New laws and regulations should be enacted quickly along with the establishment of enforcement agencies. It is not an easy task to put into place the rules that create a level playing field and a predictable institutional framework for market development. In fact, evidence in this paper suggests that all transition economies still have a long way to go in building such institutions. However, there are substantial differences in the relative success in building institutions in various transition economies. Furthermore we provide some indication that differences in successfully building a reliable institutional framework (as perceived by the private sector of the respective country) may contribute to explain relative economic performance.

The paper is based on new survey data on the institutional framework of 20 transition countries. The data was collected during a global private sector survey project done for the World Bank in preparation of the World Development Report 1997. The most relevant data for transition economies is first presented region by region and in a second step we analyze the relation of various indicators derived from the data set and economic performance.

The premise of the WDR survey was to obtain, to compare, and to quantify private firms' perceptions on the reliability of regulations, policies, and laws. To this end we designed a multiple choice questionnaire to capture cross-country differences of the reliability of the institutional framework.[2] The survey covers a stratified sample of entrepreneurs in Africa, the Americas, Asia, the Commonwealth of Independent States (former Soviet Union), Eastern Europe, Western Europe, and the Middle East. The overall survey results appear in Brunetti, Kisunko and Weder (1997a), and growth and investment regressions for the whole survey sample are discussed in Brunetti, Kisunko and Weder (1997b). Both of these papers are companion pieces to this paper.

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[2] The questionnaire together with region by region results is displayed in the appendix.

This paper represents the first step in the direction toward a more detailed analysis for one specific region. Transition economies were chosen for several reasons. First, the data set is quite comprehensive covering 20 formerly planned economies including most of the „large" countries—all in various stages of transition. Second, the transition process itself produces institutional uncertainties that impede private business development. Measurement of the minimization and/or quick elimination of these institutional uncertainties could potentially provide evidence of a successful recovery. Third, correlating institutional measures to macroeconomic data presents a special challenge in the case of transition countries where there tends to be wide ranges of data reliability—even in the last few years. This proved to be a problem in the econometric analysis for the whole sample where data of very different quality was to be mixed together.[3] This leads to the natural conclusion that the transition economies should be analyzed separately from all the other surveyed regions.

The paper is divided into two parts. Part I presents descriptive statistics for all major questions for each of the six geographical sub-regions of Eastern Europe and the Commonwealth of Independent States. The six geographical sub-regions are considered individually in five major categories of institutional reliability. Part II uses one representative indicator from each of these five categories as well as an overall indicator of credibility introduced in Brunetti, Kisunko and Weder (1997b) and analyzes their relationship to cross-country differences in economic performance. The hypothesis we are testing is that higher institutional reliability, regardless of the specific measure, is good for economic performance. As a measure of economic performance we work with the standard per capita growth rate. In addition we use an indirect indicator of differences in performance—foreign direct investment as a percentage of GDP—which is probably a more reliable measure for cross-country analysis in transition economies.

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[3]   See Brunetti, Kisunko and Weder (1997b).

I.   Descriptive Statistics: Region by Region Results

We inspect five categories of institutional reliability—(i) predictability of rules, (ii) political stability (lack of uncertainty stemming from government changes), (iii) property rights security, (iv) judiciary reliability, and (v) lack of corruption. In the questionnaire respondents were asked to answer questions using a range from 1 (the business environment is completely reliable) to 6 (the environment is completely unreliable). Results are presented as percentages of surveyed businesses who ticked the three worst options. This share is calculated for each country, and then a regional value is calculated by taking the simple average.

The graphs present the responses for six geographical regions:

Baltics :	Estonia, Latvia, Lithuania.
Balkan :	Albania, Bulgaria, FYR Macedonia.
Caucasus	Armenia, Azerbaijan, Georgia.
Central Asia	Kazakstan, Kyrgyz Republic, Uzbekistan.
Slavic and Moldova	Belarus, Moldova, Russia, Ukraine.
Visegrad	Czech Republic, Hungary, Poland, Slovak Republic.

I.   Predictability of rules

The first dimension of the reliability of an institutional framework focuses on the lawmaking process. The questions in this section inquire whether new laws and policies come as a surprise, whether private firms are informed of changes in advance, or if their concerns can be raised during the lawmaking process. The questionnaire was designed to capture this important dimension of institutional reliability by approaching it from different angles.   The closing question in this section asks whether entrepreneurs fear retroactive changes in the government policies.

Given the situation of recently convened, inexperienced legislative bodies in transition countries, this dimension of uncertainty is probably the most unavoidable during the process of transition. After all, such a large structural change is quite unique, mistakes and trial and error are unavoidable. Predictability, therefore, was not expected to be high. But what is interesting is that there are differences in the perceptions of entrepreneurs in different countries. The transition process seems to have been more predictable in some countries than in others.

Percentage of firms that consider this a problem

1. *Policy surprises* *(question 1 in the survey questionnaire).* This question addresses the problem of predictability from the most general perspective asking about problems with unexpected changes in rules, laws and policies.
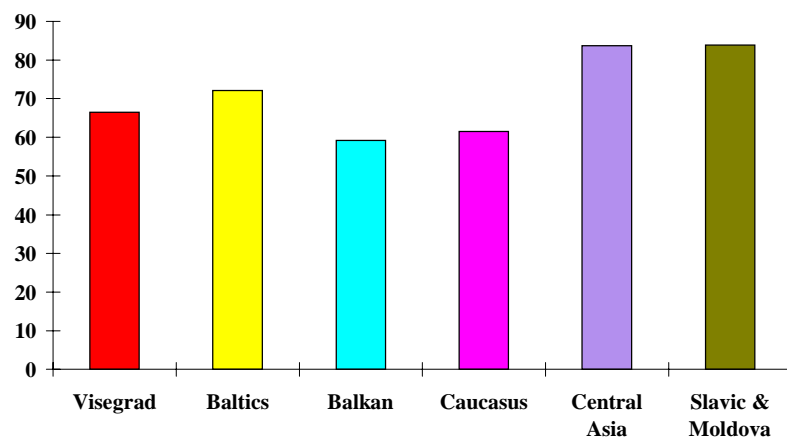
Percentage of firms that consider this a problem

2. *Lack of Credibility of announcements* *(question 2 in the survey questionnaire).* In this question entrepreneurs were asked whether they thought that the government would stick to major announced policies.
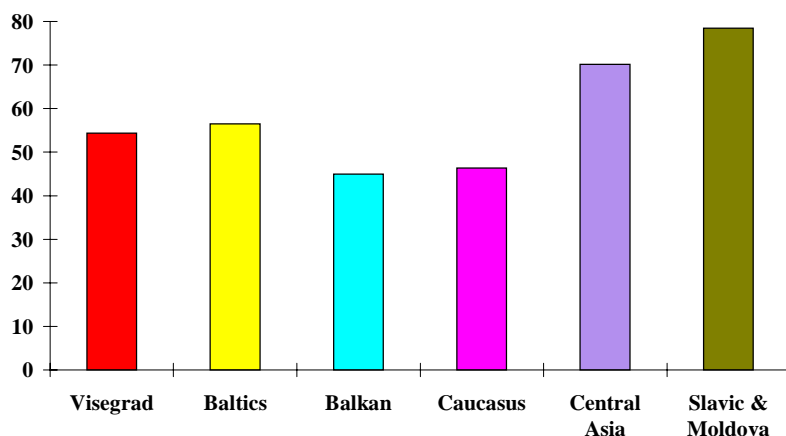
Percentage of firms that consider this a problem

3. *Retroactive changes*
(question 5 in the survey questionnaire). One cause of an unpredictable business environment can be retroactive changes of policies and regulations. This question addresses this issue.
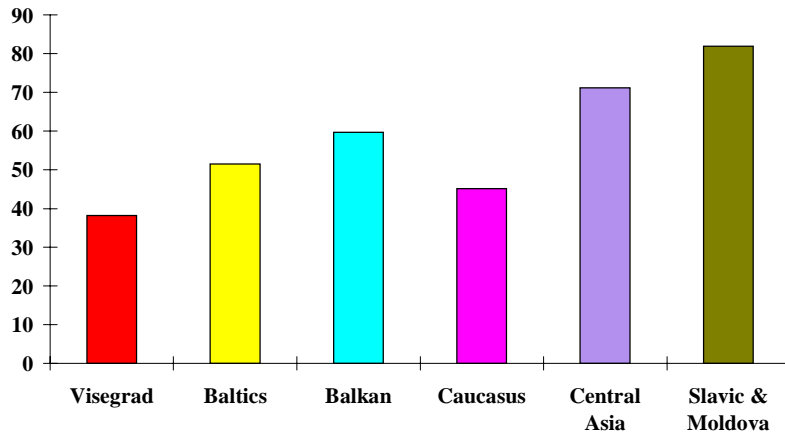
The three charts above show that about 80 percent of entrepreneurs in the Slavic countries and Moldova feel exposed to uncertainty of rules, laws and policies. The entrepreneurs do not believe announcements and do fear retroactive changes might affect their business operations. The situation in the Central Asian region is only slightly better. Policy surprises and changes in the announced policies are considered the least problematic in the Balkan countries and in the Caucasus republics. Entrepreneurs from Visegrad countries have the least fear of retroactive changes.

Percentage of firms that consider this a problem

4. *Lack of Information*
(question 3 in the survey questionnaire).
Entrepreneurs were asked whether they were usually informed about rules and policies that can affect their business.
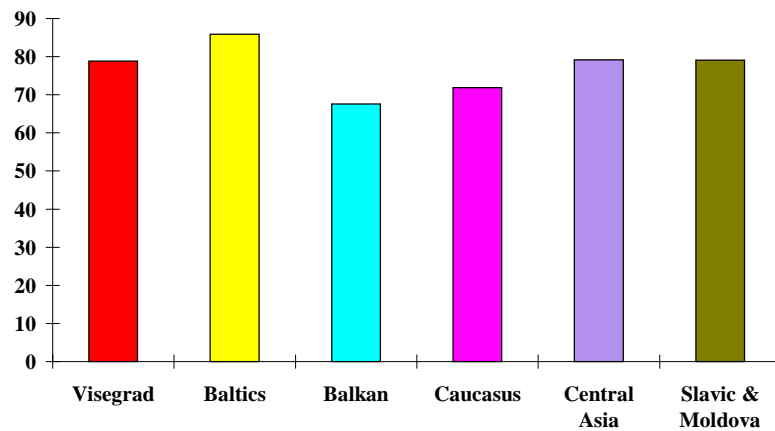
Percentage of firms that consider this a problem

5. *Lack of Participation* *(question 4 in the survey questionnaire).* This question is closely linked to the previous one. Problems with changes in rules and regulations is less likely if the entrepreneurs who might be affected could participate in the process of rule making.
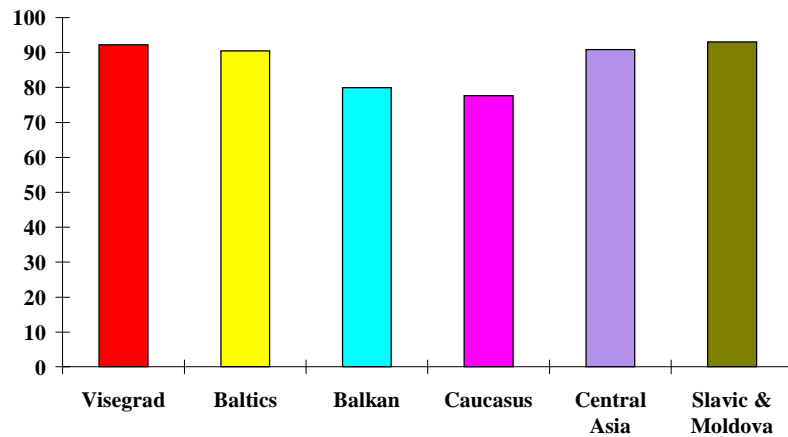
Lack of information during the lawmaking process and lack of participation by entrepreneurs as well as the lack of government consideration of their concerns are large problems in all regions. 70 and 85 percent of entrepreneurs respectively in Balkan and Baltic countries felt unsatisfied. Participation results were even worse. 90 percent of entrepreneurs in four of six regions (Baltics, Central Asia, Moldova, and Visegrad) felt that their concerns were not taken into account during the process changing important laws and policies. An only slightly lower dissatisfaction level was reported in the Caucasus states (78 percent) and in the Balkan countries (80 percent).

Overall, it appears that unpredictable rule changes are an important problem for the entrepreneurs in transition economies. What can also be derived is that businesses want a more significant role in rulemaking. The overall dissatisfaction of transition economy respondents with the possibilities of participation was the highest among all regions surveyed.

On a more positive note predictability results from some more advanced transition economies indicate a better situation. For instance, in the Visegrad countries, the fear of retroactive changes is relatively low—only about 38 percent of respondents reported such a fear. This is comparable to the levels in East and Southeast Asian countries (see Brunetti, Kisunko, Weder, 1997a).

II.   Political Stability

The second dimension of institutional reliability concentrates on government changes. The empirical literature suggests that different measures of government stability can be related to economic performance. The questionnaire goes one step further by directly asking the firms whether it fears that government changes are accompanied by institutional uncertainties. Two questions address this issue and distinguish between regular government changes through elections and irregular government changes, i.e. coups.

Percentage of firms that consider this a problem

1. *Policy surprises due to constitutional changes of government* *(question 7 in the survey questionnaire).* This question asks entrepreneurs whether regular changes in government are usually accompanied by large changes in rules and regulations that impact their business.
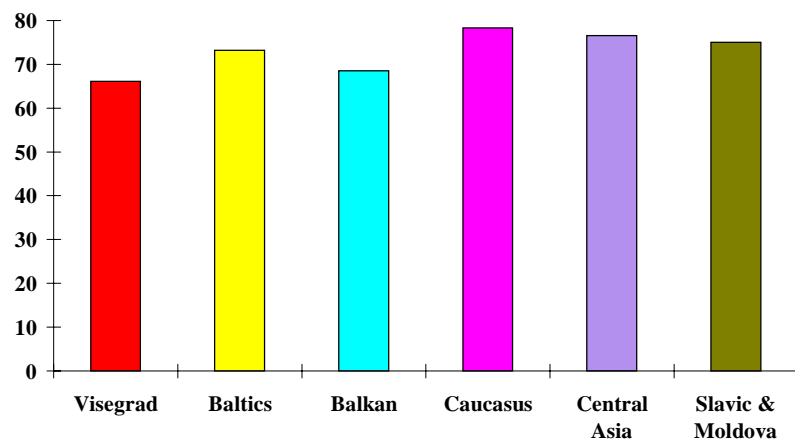
Percentage of firms that consider this a problem

2. *Policy surprises due to irregular government changes* *(question 8 in the survey questionnaire).* The aim of this question is to evaluate the uncertainty entrepreneurs fear due to the possibility of possible irregular (unconstitutional) government changes.

Concerns about the
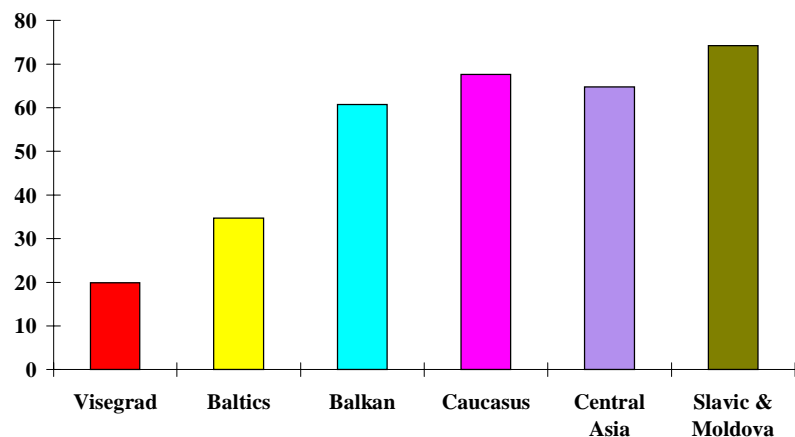
negative impact of constitutional changes in government are high in all regions. The lowest percentage of entrepreneurs who see this as a problem for their business operations is reported in the Visegrad countries (66 percent) followed by Balkan states. 78 percent of entrepreneurs in the Caucasus region feel their business will be impacted by a constitutional change in government.

Fears of unconstitutional changes in government vary greatly across regions: from 20 percent in Visegrad countries to 74 percent in Slavic countries of the FSU and Moldova. In the Balkans, the Central Asian and the Caucasus countries over 60 percent of the entrepreneurs recorded such a fear.

High overall uncertainty about regular changes in government might be explained through the polarized political spectrum in transitional countries. Recorded fears were lowest in the Visegrad countries, where, by the time of the survey, several free democratic elections had produced significant changes in the party structures of governments but had not led to drastic changes in the economic course. Following this logic the poor performance of the Caucasus region and relatively favorable performance of Slavic states and Moldova might be understood. The relatively good performance of the Balkan region and the relatively poor performance of Baltic states defy performance expectations set up by this logic.

It seems that in countries where the state is viewed as more stable and the balance of power between different political groups is established, fears of unconstitutional changes of government are lower. These factors distinguish the Visegrad countries and the Baltics from the rest of the regions .

III.   Property rights security

The third dimension of the reliability in the institutional framework focuses on security of property and contract rights. In contrast to the predictability of rules and political stability, this dimension and the next two concentrate on law enforcement not the lawmaking process. We

inquire whether firms can rely on a clear and predictable enforcement of these rules. Two questions in this section check whether firms perceive criminal action as a major problem, and more directly, whether they rely on state authorities to protect them.

Percentage of firms that consider this a problem

1. *Theft and crime* *(question 9 in the survey questionnaire).* This question deals with how serious the entrepreneurs in the regions view theft and crime as a source of additional cost imposed on their business operations.
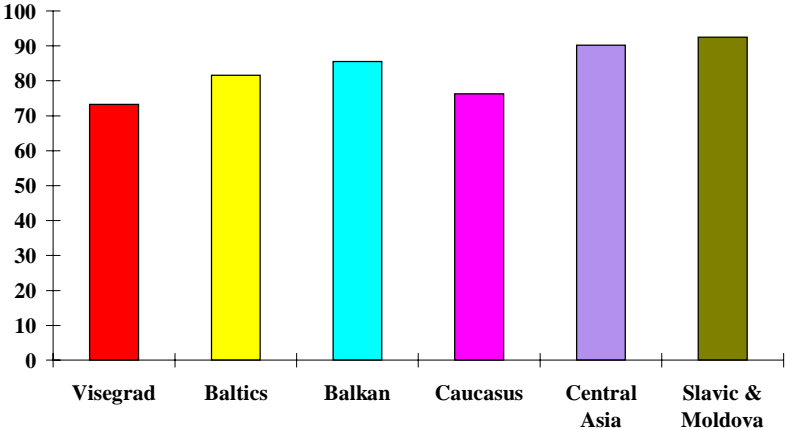
Percentage of firms that consider this a problem

2. *Insecurity of property and lack of personal safety* *(question 10 in the survey questionnaire).* This question asks whether entrepreneurs trust the government to protect their property and person against criminal actions.
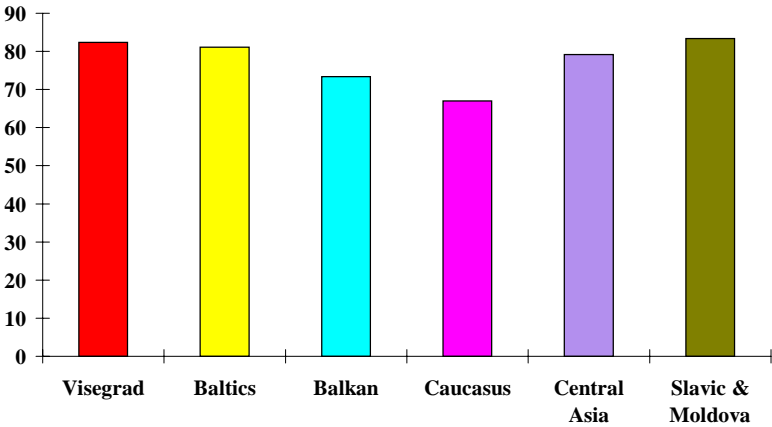
Roughly 70 percent of entrepreneurs in the Visegrad countries reported that crime and theft imposed additional cost. More dramatically 90 percent of respondents in the Slavic countries and Moldova as well as those surveyed in Central Asian countries find that crime and theft substantially increased their cost of doing business. About 80 percent of entrepreneurs in the Baltic states and in the Caucasus voiced this complaint.

Across regions, the confidence of business people about government's ability to provide property and personal protection differs little. Compared to other regions entrepreneurs in the Caucasus feel the "safest"—70 percent report that they are not confident that state authorities will protect them and their property. Overall, the responses for these transition economies show that the state fails to provide this basic public service of protection to the local population.

IV.   Judiciary reliability

This category concerns the predictability of the judiciary and whether lack of such predictability represents a major problem for doing business. Unreliable judiciaries can cause two types of uncertainty—lack of fair recourse against unlawful behavior and incentives to substitute the formal law by private means of conflict settlement. The latter can force citizens and businesses into a vicious cycle of lawlessness.

Percentage of firms that consider this a problem

1. *Unreliability of judiciary (question 11 in the survey questionnaire).* The question asked if unpredictability of the judiciary presented a major problem for entrepreneurs.
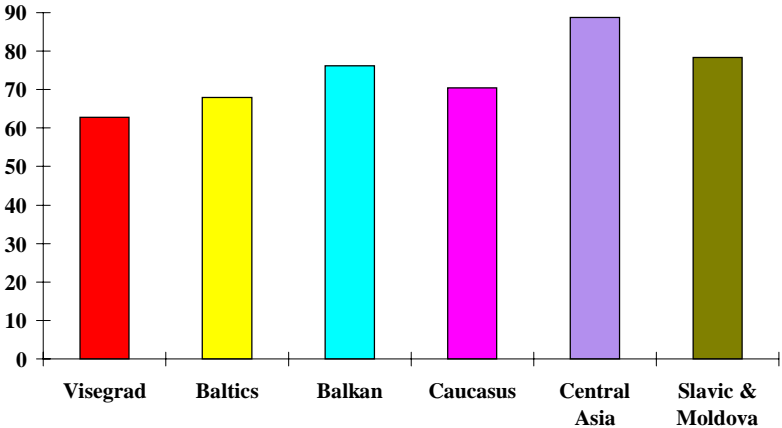
In the countries of Central Asia almost 90 percent of firms felt that an unpredictable judicial system imposed costs on their business. About 80 percent of firms in the Slavic countries of the FSU and Moldova responded similarly. Responses of entrepreneurs in Baltic, the Caucasus, and Visegrad countries on this topic ranged between 60 and 70 percent.

V. Corruption

The extent and the nature of corruption is the fifth dimension of institutional reliability. A high level of corruption is a sign of large bureaucratic discretion and is, therefore, likely to be related to institutional uncertainties. Three questions are asked in this category. The first question focuses on the simple extent of corrupt practices while the other two questions inquire whether the bribe amount is known in advance and whether the bribe guarantees delivery of the service.[4] Corruption would thus be rendered a transaction cost with effects similar to a tax rather than creating genuine uncertainties on the institutional framework.

Percentage of firms that consider this a problem

1. *Frequency of corruption (question 14 in the survey questionnaire).* This question deals with the issue of corruption in the most broad perspective without distinguishing between petite and large scale bribes, its intention and result.

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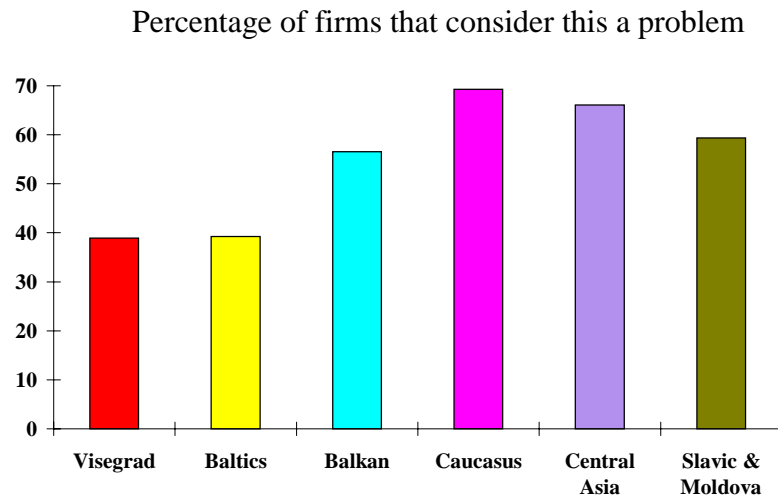
4 We do not present results for question 15 in the questionnaire because answers cannot be interpreted in staigthforward way.

Percentage of firms that consider this a problem

2. *Corruption and blackmailing* (question 16 in the survey questionnaire). This question tried to access the degree to which corruption is organized in a country. It asked whether entrepreneurs felt confident that they would not be blackmailed by other officials if they paid a bribe.
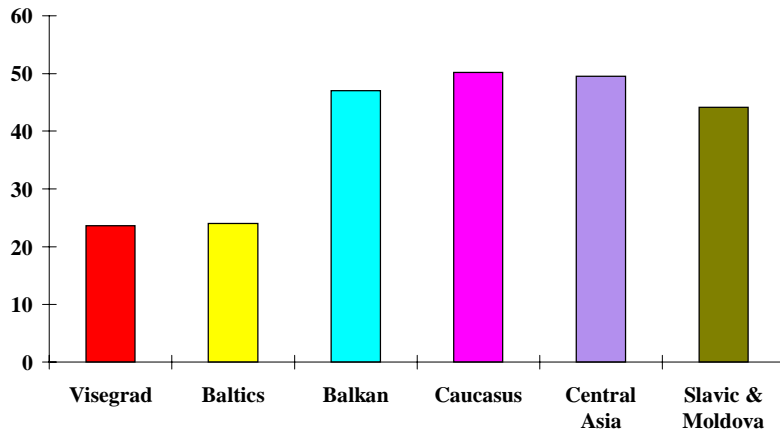
Percentage of firms that consider this a problem

3. *Uncertainty about receiving a service after paying a bribe* (question 17 in the survey questionnaire). This question attempted to determine the uncertainty of the outcome of corruption from a different angle. It asks if paying a bribe guarantees receiving the promised services.
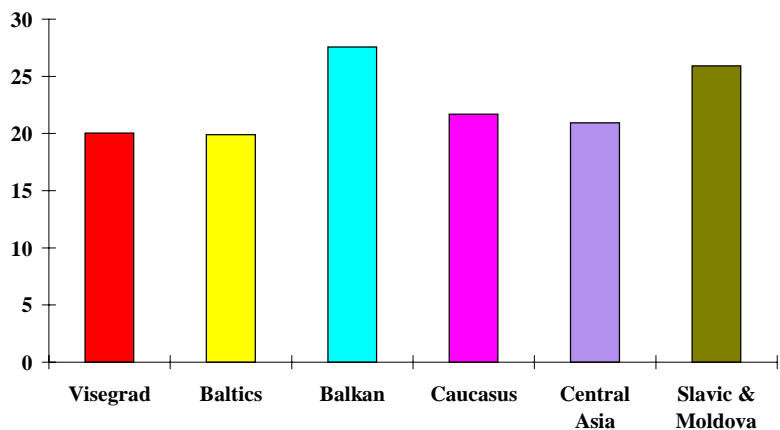
The two regions where entrepreneurs reported the lowest frequency of "additional payments" were Visegrad and the Baltic countries—only about 40 percent of respondents made these additional payments more than "sometimes." This result is about ten percentage points higher than in South and Southeast Asia (see Brunetti, Kisunko, Weder, 1997a). In another comparison this result is much better than that of the Caucasus region where the regional average was 69 percent. Other transition economy results are as follows: the Balkans (57 percent), Central Asia (66 percent), and Slavic republics of the FSU and Moldova (59 percent).

The fear of being forced to pay multiple bribes to different bureaucrats for the same service was lowest in Visegrad and Baltic countries—24 percent on average in each of these

regions. These regions are followed—by a large gap—by the Slavic and Moldova region (44 percent), Balkan countries (47 percent), and Central Asia and Caucasus where about 50 percent of entrepreneurs expressed a fear to be forced to pay more than once.

Finally, entrepreneurs expressed relatively low doubts that service they paid bribes for would not be delivered as agreed. Around 20 percent of surveyed entrepreneurs in the Visegrad and the Baltic states, Central Asia and the Caucasus answered in this sense. The percentage was only slightly higher in the Slavic states and Moldova and in Balkan countries.

II.   Effects on economic performance

The effects of institutional uncertainty on economic performance in transition countries are analyzed using the categories presented in the previous part. After discussing the empirical approach we present results of institutional uncertainty indicators in regressions for foreign direct investment and for growth.

1.   Empirical Strategy

Our aim is to test the effects of institutional uncertainty as it relates to predictability of rules, political stability, property rights security, judiciary reliability and lack of corruption. We choose a single representative question from each category of institutional uncertainty and test it against foreign direct investment and growth. Additionally we test an average indicator that is composed of several questions and can be interpreted as an overall indicator of the credibility of rules.[5] The results of the indicators from the remaining questions presented in the descriptive part are confined to appendix 4.

Indicators of institutional uncertainty are constructed by calculating simple averages of the responses. The questions were all multiple choice with answers ranging from 1 to 6. All

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[5]   In Brunetti, Kisunko and Weder (1997b) we test this overall indicator on growth and investment in a larger sample of countries.

indicators are constructed in such a manner that 6 is the best choice (least uncertainty) and 1 the worst (most uncertainty). Consequently we expect a positive relationship with both FDI and growth. Every section included questions about conditions 5 year ago and these are used to construct earlier values of the indicator. The average of the earlier and the present indicator is used in the regression analysis as an average for the period from 1990 to 1995.

We test the following specific indicators derived from the questionnaire:

Predictability of rules: question no. 1
Political stability :   question no. 8
Property rights security: question no. 9
Reliability of the judiciary: question no. 11
Lack of corruption: question no. 14
Credibility: questions 1, 2, 3, 4, 7, 8, 9, 10, 11, 14[6]

The dependent variables are either FDI inflows as a share of GDP or average growth rate of GDP. We analyze foreign direct investment because this is likely to be among the most reliable data available for transition economies and can also be interpreted as an overall indicator of economic performance. We also conduct standard growth analysis. The period for both endogenous variables is an average of three years, 1993-1995. This time period was selected in order to avoid the most severe initial shocks that the transition process involved.

We use the same specifications in all the foreign direct investment and growth regressions. First we test the indicator alone, then include other economic variables as controls. Because of the small sample size we cannot control simultaneously for many additional factors,

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[6]   The indicator is constructed in the same manner as in Brunetti, Kisunko and Weder (1997b), i.e. taking an average of the questions in the 5 categories.

so that we include the controls one by one.[7] We control for GNP per capita in the initial year (GNP92),[8] the secondary school enrollment rate in the initial year (school), the average degree of openness to international trade (measured as the sum of export and import share in GDP (openness), the average rate of government consumption (gov. cons.), and the average inflation rate (inflation). All data are derived from the *World Economic Indicators* (World Bank 1997).

These control variables are standard in growth regressions[9]: The first two control for differences in initial conditions and the latter three for differences in policies. The rational for including them in FDI regressions is the following: initial income per capita is an indicator of how attractive the market is for the foreign investor; schooling is a measure of human capital, therefore the higher this capital the more productive is as a prospective investment. Openness, inflation, and government consumption can be interpreted as proxies for policy distortions. Market size—a criterion often mentioned by multinational companies as influencing their investment decision—is taken into account indirectly because FDI is considered as a percent of GDP.[10]

Endogeneity might be a problem in the growth regressions, especially because we are studying transition economies.[11] The causality could be running from successful transition--which would express itself in higher economic performance--to better institutions. In an attempt to mitigate this problem we use the average value of the indicator for 1990-1995, rather than the actual value of 1995. Also, we run regressions using the indicator of political rights (Freedom House 1994) as an instrument. The rational for using political rights as an instrument for institutional reliability is that (i) political rights are not correlated with growth (this has been substantiated by a large number of empirical cross country studies on growth[12]) and (ii) political rights, i.e. the quality of the election process and more generally the degree of democratic control

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[7]   The maximum sample size is 18 countries. Macedonia and Albania had to be excluded because in those countries the survey did not ask about the situation 5 years ago. Therefore, we were unable to calculate average values of the indicators for these two countries.

[8]   Using the World Bank „Atlas" Method to calculate the US $ equivalent

[9]   See e.g. Barro (1991) or Levine and Renelt (1992).

[10]   We also experimented with the population as a proxy for market size but the variable proved to be insignificant.

[11]   The causality between institutions and FDI inflows is not likely to be problematic.

are likely to be related with the reliability of the institutional framework. In general, mature democracies will provide better protection of property rights, more political stability, and more predictability. In the full sample of 69 countries the correlation between the average credibility indicator and political rights is 0.67, in our sample of transition economies it is 0.70.

Of course, given that better causality tests cannot be performed and macro data is sparse (and in the case of growth their quality is also doubtful), the empirical analysis should be viewed as exploratory and the results merely indicative of the importance of institutional variables.

2. Effects of institutional reliability on foreign direct investment

Foreign direct investment is interesting for two reasons. First, foreign investors are likely to be particularly sensitive to institutional problems. These investors are outsiders in the political process. They are not familiar with the local bureaucracy, are more familiar with market economies, and are not always welcomed locally. [13] Second, this data is likely to be among the most reliable data available for transition economies—FDI inflows are unlikely to go unrecorded. We interpret this variable as an overall indicator of economic performance.

Tables 1 to 6 present results for the different indicators of institutional reliability. Table 1 shows the results for the predictability of rules (question 1). In the single regression this indicator is significant only on the 10 percent level, when we include the control variables it becomes insignificant in 3 out of 5 cases. It remains significant at the 10 percent level in one case and is significant at the 5 percent level in another case. The R^2 is between 4 and 15 percent.

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[12]   See for instance Brunetti and Weder (1995) for a survey of studies on demoncracy and growth.
[13]   In a survey of 117 senior managers of Western manufacturing companies Lankes and Venables (1996) find that political stability and perceived risk influence FDI inflows in transition economies.

TABLE 1: OLS regression
Dependent variable: Foreign Direct Investment in percent of GDP

	(1)	(2)	(3)	(4)	(5)	(6)
Constant	-7.98 (-1.65)	-7.36 (-1.66)	-9.52* (-1.76)	-8.96* (-1.75)	-9.85 (-1.16)	-5.74 (-1.00)
GNP92		0.0009* (2.04)				
Openness			0.003 (0.24)			
Gov. Cons.				-0.008 (-0.09)		
School					0.03 (0.41)	
Inflation						-0.0002 (-0.82)
Predictabi-lity of rules	**3.16* (1.96)**	**2.36 (1.55)**	**3.61** (2.14)**	**3.58* (2.12)**	**3.03 (1.59)**	**2.49 (1.33)**
Numb. Obs.	18	18	17	17	16	17
Adjusted R^2	0.14	0.28	0.13	0.14	0.04	0.11

Standard Errors in Parentheses
* Significant at 0.10 level; ** Significant at 0.05 level; *** Significant at 0.01 level

From these results it appears that the predictability of rules is not very closely associated with FDI. This might be inherent to transition: the process of such a major economic restructuring dictates a low expectation of the predictability of rules and policies and will, therefore, not be the main concern of investment decisions.

As evidenced in most regressions displayed in this section, the control variables tend to have the predicted sign, but they are mostly not significant on conventional levels. In Table 1, the level of GNP is positive indicating that a higher income per person as a proxy for a bigger market tends to encourage FDI. The indicator of openness is usually positive as is the schooling variable. A higher level of human capital and more openness seems to be beneficial for FDI although none of the respective coefficients is significant on conventional levels. We unsuccessfully tried to find a better specification by including the size of the population as an additional market size variable. Government consumption and inflation tend to be negative in the FDI-regressions probably meaning that more government involvement and more price

instability represent distortions that may scare away foreign investors. In all cases, however, these propositions are only weakly supported given that the respective variables are mostly insignificant in the FDI-regressions.

Table 2 shows results for the political stability indicator. This indicator fares much better than the previously examined one. It is significant on the 1 percent level in all cases, and the simple specifications tested explain about 66 percent in the FDI variation across our set of countries. Given that the other controls are insignificant most of the explanation comes from the indicator of political stability.

TABLE 2: OLS regression
Dependent variable: Foreign Direct Investment in percent of GDP

	(1)	(2)	(3)	(4)	(5)	(6)
Constant	-4.41*** (-4.29)	-4.55*** (-4.44)	-4.67*** (-3.24)	-3.51** (-2.62)	-6.72* (-1.88)	-5.27*** (-3.80)
GNP92		0.0004 (1.12)				
Openness			0.003 (0.37)			
Gov. Cons.				-0.058 (-1.04)		
School					0.02 (0.61	
Inflation						0.0001 (0.87)
Political stability	**1.64*** (5.92)**	**1.48*** (4.79)**	**1.64*** (5.48)**	**1.70*** (5.74)**	**1.72*** (5.60)**	**1.83*** (5.21)**
Numb. Obs.	18	18	17	17	16	17
Adjusted R^2	0.66	0.67	0.63	0.65	0.66	0.66

Standard Errors in Parentheses
* Significant at 0.10 level; ** Significant at 0.05 level; *** Significant at 0.01 level

It appears that the expectation of policy surprises due to irregular government changes is a major determinant of foreign investor's decisions.

Table 3 presents results for the security of property rights. This indicator is also highly significant in all regressions and explains over half of the variation in FDI. It seems to be the case that the perception of the private sector about the security of their property from theft and crime is another major factor in explaining transition countries' relative success in attracting FDI.

TABLE 3: OLS regression
Dependent variable: Foreign Direct Investment in percent of GDP

	(1)	(2)	(3)	(4)	(5)	(6)
Constant	-3.92*** (-3.23)	-4.19*** (-3.52)	-3.93** (-2.35)	-4.53*** (-2.44)	-8.28* (-1.87)	-350*** (-2.50)
GNP92		0.0005 (1.42)				
Openness			0.0009 (0.09)			
Gov. Cons.				0.036 (0.53)		
School					0.052 (1.09)	
Inflation						-0.0001 (-0.80)
Property rights secur.	**2.29*** (4.59)**	**1.98*** (3.72)**	**2.27*** (4.21)**	**2.29*** (4.27)**	**2.32*** (4.34)**	**2.62*** (3.93)**
Numb. Obs.	18	18	17	17	16	17
Adjusted R^2	0.54	0.56	0.49	0.50	0.53	0.52

Standard Errors in Parentheses
* Significant at 0.10 level; ** Significant at 0.05 level; *** Significant at 0.01 level

Table 4 presents the results for the indicator of the judiciary reliability . Like the previous two indicators it is significant in all regressions on the 1 percent level and explains a large part of the cross country variation in FDI inflows. Based on this result, building a reliable judiciary should be a priority for transition economies wishing to attract foreign capital.

TABLE 4: OLS regression
Dependent variable: Foreign Direct Investment in percent of GDP

	(1)	(2)	(3)	(4)	(5)	(6)
Constant	-5.83*** (-3.62)	-5.91*** (-3.81)	-6.19*** (-3.29)	-7.07*** (-3.47)	-10.91** (-2.30)	-5.31** (-2.86)
GNP92		0.0005 (1.53)				
Openness			0.002 (0.23)			
Gov. Cons.				0.052 (0.85)		
School					0.058 (1.21)	
Inflation						-0.0001 (0.76)
Judiciary reliability	**2.77*** (4.62)**	**2.39*** (3.82)**	**2.87*** (4.80)**	**2.92*** (4.98)**	**2.86*** (4.32)**	**2.62*** (3.93)**
Numb. Obs.	18	18	17	17	16	17
Adjusted R^2	0.54	0.57	0.56	0.58	0.52	0.53

Standard Errors in Parentheses
* Significant at 0.10 level; ** Significant at 0.05 level; *** Significant at 0.01 level

Table 5 shows the results for the indicator that measures the absence of corruption. This indicator is also significant on the 1 percent level in 5 out of 6 cases and significant on the 5 percent level in the regression controlling for inflation. The R^2 is about 50 percent.

TABLE 5: OLS regression
Dependent variable: Foreign Direct Investment in percent of GDP

	(1)	(2)	(3)	(4)	(5)	(6)
Constant	-6.09[***] (-3.55)	-6.23[***] (-3.20)	-5.81[***] (-3.14)	-5.40[***] (-3.06)	-7.58[***] (-1.62)	-5.68[***] (-2.75)
GNP92		-0.0003 (-0.16)				
Openness			-0.005 (-0.552)			
Gov. Cons.				-0.076 (-1.20)		
School					0.019 (0.39)	
Inflation						-0.00007 (-0.42)
Lack of corruption	**2.18[***]** **(4.48)**	**2.26[***]** **(3.13)**	**2.27[***]** **(4.70)**	**2.41[**]** **(4.99)**	**2.15[***]** **(3.89)**	**2.08[***]** **(3.70)**
Numb. Obs.	18	18	17	17	16	17
Adjusted R^2	0.52	0.49	0.55	0.58	0.46	0.49

Standard Errors in Parentheses
* Significant at 0.10 level; ** Significant at 0.05 level; *** Significant at 0.01 level

Finally, we present results for an aggregate indicator composed of all previous indicators plus a number of additional questions. The premise is that some indicators may measure different sides of the same phenomenon (as can be seen in the correlation matrix in the appendix). Therefore, it seems natural to aggregate them into one single indicator of institutional predictability. In Brunetti, Kisunko and Weder (1997b) we have used this indicator in bigger country samples and have called this overall measure "credibility of rules."

Table 6 shows the results for this overall indicator. It is highly significant in all regressions and explains 70 percent in the variation of FDI inflow.

TABLE 6: OLS regression
Dependent variable: Foreign Direct Investment in percent of GDP

	(1)	(2)	(3)	(4)	(5)	(6)
Constant	-10.4***	-10.2***	-10.3***	-10.0***	-13.4***	-10.6***
	(-5.80)	(-5.25)	(-5.27)	(-5.16)	(-5.06)	(-4.08)
GNP92		-0.0006				
		(-0.18)				
Openness			-0.0002			
			(-0.03)			
Gov. Cons.				-0.018		
				(-0.36)		
School					0.033	
					(0.90)	
Inflation						0.00001
						(0.13)
Credibility	**4.06*****	**3.97*****	**4.04*****	**4.06*****	**4.12*****	**4.11*****
	(6.69)	**(5.17)**	**(6.62)**	**(6.66)**	**(6.13)**	**(5.69)**
Numb. Obs.	18	18	17	17	16	17
Adjusted R^2	0.72	0.70	0.72	0.73	0.70	0.70

Standard Errors in Parentheses
* Significant at 0.10 level; ** Significant at 0.05 level; *** Significant at 0.01 level

These results appear to confirm our expectation that foreign investors are highly susceptible to institutional uncertainty.

The same regression analysis with gross domestic investment as the dependent variable was also examined. The results were generally not significant. It is not obvious why results for FDI and total investment should differ so much. Major data problems in the total investment figures for transition economies could be the culprit. In many cases this data is mainly reflecting the traditional sector's activity—the problems of capturing the activity of the emerging private sector are notorious. Another explanation could be that the share of investment is not really a good indicator of performance in transition because the countries that lag in the transition process

are still investing larger amounts into unproductive ventures. In any case it is strange that the excellent results that we obtain with FDI do not show in total investment. Because of the data problems mentioned above, we tend to have more confidence in the FDI results.

3.   Effects of institutional predictability on per capita growth

Usual cross-country analysis of the reasons for differences in economic performance focus on per capita growth rates as the variable to be explained. As was discussed earlier, growth data for transition economies has suffered from inaccuracy and lack of comparability. The results of this section should, therefore, be viewed with more caution than the previous one and merely indicative of the effects of institutional predictability on growth in transition economies. To reduce data problems we focus on the most recent period where data is available—from 1993 to 1995. Tables 7 to 12 estimate exactly the same specifications we used for FDI-regressions with per capita growth as the endogenous variable.The drawback is that it might be problematic to estimate growth regressions with averages of such a short time period.

Table 7 shows the results for the measure of predictability of rules. The variable has the expected positive sign in all specifications and tends to be significant. It is significant on the 1 percent-level in the regression controlling for openness and on the 5 percent-level in the single regression. In the specification controlling for government consumption, it is significant on the 10 percent-level as well as in the specification controlling for GNP. Only in the remaining two specifications it is insignificant. This replicates the results for the FDI regressions: the predictability of rules variable is the least robust in growth regressions—probably for the same reasons.

TABLE 7: OLS regression
Dependent variable: Per Capita Growth 1993-1995

	(1)	(2)	(3)	(4)	(5)	(6)
Constant	-47.82** (-2.48)	-47.18** (-2.38)	-62.38*** (-3.35)	-60.78*** (-3.61)	-36.47 (-1.16)	-30.34 (-1.44)
GNP92		0.0009 (0.47)				
Openness			0.048 (1.07)			
Gov. Cons.				0.488 (1.67)		
School					0.007 (0.03)	
Inflation						-0.001* (-1.78)
Predictability of rules	**13.87** (2.16)**	**13.06* (1.92)**	**17.41*** (2.98)**	**15.50** (2.79)**	**10.22 (1.45)**	**8.58 (1.25)**
Numb. Obs.	18	18	17	17	16	17
Adjusted R^2	0.18	0.24	0.31	0.38	0.01	0.27

Standard Errors in Parentheses
* Significant at 0.10 level; ** Significant at 0.05 level; *** Significant at 0.01 level

Again the other control variables are insignificant in most of the regressions displayed in this table and in all other tables in this section. The level of initial per capita GNP is always insignificant, and its sign switches depending on the institutional variables tested. In traditional growth analysis this variable would be expected to be negative due to the convergence effect predicted by neoclassical growth theory. However for the very short time period estimated here this convergence effect is unlikely to show up. Openness has the expected positive sign in all specifications, however, it is insignificant in all cases. Government consumption, interestingly and in contrast to most other growth studies, is positive in all specifications. In some government consumption is even significantly so. The proxy for human capital is positive in all but one case but remains completely insignificant. Finally inflation has the expected negative sign but is only occasionally significant at conventional levels. All in all the specifications are not very convincing. We had difficulty unearthing any significant variables with the exception of our indicators of institutional uncertainty in growth-regressions for this sample of transition countries.

Table 8 shows that political stability is positive and highly significant in all specifications estimated. The variable alone explains 50 percent of the variation of growth rates in our sample.

TABLE 8: OLS regression
Dependent variable: Per Capita Growth 1993-1995

	(1)	(2)	(3)	(4)	(5)	(6)
Constant	-27.34*** (-5.35)	-26.88*** (-5.14)	-30.63*** (-4.72)	-30.98*** (-5.08)	-23.90 (-1.41)	-23.53*** (-3.38)
GNP92		-0.001 (-0.71)				
Openness			0.04 (1.15)			
Gov. Cons.				0.36 (1.40)		
School					-0.007 (-0.04)	
Inflation						-0.0001 (-0.91)
Political stability	**5.86*** (4.25)**	**6.37*** (4.04)**	**5.70*** (4.24)**	**5.16*** (3.83)**	**5.30*** (3.63)**	**5.00** (2.85)**
Numb. Obs.	18	18	17	17	16	17
Adjusted R^2	0.50	0.48	0.51	0.53	0.43	0.49

Standard Errors in Parentheses
* Significant at 0.10 level; ** Significant at 0.05 level; *** Significant at 0.01 level

Table 9 demonstrates the importance of property rights security for economic growth in the countries under consideration. The variable is always positive and alone explains about one third of the variation in growth rates. It is significant at the 1 percent level in the single regression as well as in the regression controlling for government consumption. In all other specifications the indicator of property rights security is significant on the 5 percent-confidence level.

TABLE 9: OLS regression
Dependent variable: Per Capita Growth 1993-1995

	(1)	(2)	(3)	(4)	(5)	(6)
Constant	-23.87*** (-3.99)	-23.73*** (-3.79)	-25.92*** (-3.37)	-35.16*** (-4.78)	-27.16 (-1.36)	-18.78*** (-2.99)
GNP92		-0.0002 (-0.14)				
Openness			0.035 (0.77)			
Gov. Cons.				0.65** (0.27)		
School					0.07 (0.34)	
Inflation						-0.001** (-2.00)
Property rights secur.	**7.46*** (3.03)**	**7.62** (2.73)**	**7.03** (2.84)**	**7.37*** (3.48)**	**6.71** (2.78)**	**5.94** (2.41)**
Numb. Obs.	18	18	17	17	16	17
Adjusted R^2	0.32	0.28	0.29	0.48	0.28	0.43

Standard Errors in Parentheses
* Significant at 0.10 level; ** Significant at 0.05 level; *** Significant at 0.01 level

Table 10 estimates the indicator of the reliability of the judiciary in growth regressions. The indicator has the expected positive sign and is significant on the 5 percent-level in the single regression explaining about 20 percent of the variation in growth rates. The indicator keeps its positive sign in all specifications; in the regression controlling for government consumption it is significant on the 1 percent-level; in the one controlling for openness on the 5 percent-level and in the one controlling for GNP on the 10 percent-level. In the remaining two specifications, the indicator is insignificant.

TABLE 10: OLS regression
Dependent variable: Per Capita Growth 1993-1995

	(1)	(2)	(3)	(4)	(5)	(6)
Constant	-25.32**	-25.36**	-30.30***	-41.03***	-25.15	-18.10*
	(-2.89)	(-2.81)	(-3.13)	(-4.53)	(-1.03)	(9.08)
GNP92		0.0003				
		(0.16)				
Openness			0.04			
			(0.81)			
Gov. Cons.				0.70**		
				(2.55)		
School					0.054	
					(0.25)	
Inflation						-0.002*
						(-1.99)
Judiciary Reliability	**7.22****	**6.98***	**7.94****	**8.62*****	**5.81**	**5.12**
	(2.21)	**(1.90)**	**(2.58)**	**(3.30)**	**(1.70)**	**(1.57)**
Numb. Obs.	18	18	17	17	16	17
Adjusted R^2	0.19	0.13	0.34	0.46	0.06	0.31

Standard Errors in Parentheses
* Significant at 0.10 level; ** Significant at 0.05 level; *** Significant at 0.01 level

Table 11 shows growth regressions for the indicator of corruption. In the single regression the coefficient of this variable has the expected positive sign and is significant on the 10 percent-level. The variable alone explains 16 percent of the variation in growth rates. In the other specifications the corruption-measure always keeps its positive sign but is not consistently significant. In the specification controlling for openness it is significant on the 5 percent-level, in the specifications controlling for GNP and government consumption respectively it is significant on the 10 percent-level and in the other specifications it is insignificant.

TABLE 11: OLS regression
Dependent variable: Per Capita Growth 1993-1995

	(1)	(2)	(3)	(4)	(5)	(6)
Constant	-25.10** (-2.69)	-27.95** (-2.68)	-27.44** (-2.81)	-30.20*** (9.29)	-17.36 (-0.75)	-16.21 (-1.60)
GNP92		-0.002 (-0.66)				
Openness			0.02 (0.39)			
Gov. Cons.				0.40 (1.20)		
School					-0.02 (-0.10)	
Inflation						-0.001* (-1.85)
Lack of corruption	**5.41*** **(2.05)**	**7.27*** **(1.87)**	**5.73**** **(2.24)**	**4.98*** **(1.96)**	**4.09** **(1.49)**	**3.35** **(1.21)**
Numb. Obs.	18	18	17	17	16	17
Adjusted R^2	0.16	0.13	0.18	0.24	0.02	0.27

Standard Errors in Parentheses
* Significant at 0.10 level; ** Significant at 0.05 level; *** Significant at 0.01 level

Finally, table 12 reports the results for the overall indicator of credibility of rules that consists of the average of questions in each of the categories mentioned above. This summary measure of the reliability of the institutional framework alone explains 27 percent of the cross-country variations in growth rates of the transition economies. It has the expected positive sign in all specifications and in almost all cases (the exception being the specification controlling for the inflation rate) is significant on the 5 percent-level.

TABLE 12: OLS regression
Dependent variable: Per Capita Growth 1993-1995

	(1)	(2)	(3)	(4)	(5)	(6)
Constant	-39.64*** (-3.49)	-42.59*** (-3.49)	-42.37*** (-3.62)	-46.4*** (-4.33)	-33.72 (-1.45)	-29.55** (-2.28)
GNP92		-0.002 (-0.74)				
Openness			0.03 (0.75)			
Gov. Cons.				0.50 (1.81)		
School					0.01 (0.04)	
Inflation						-0.001 (-1.58)
Credibility	**11.40*** (2.96)**	**13.46** (2.80)**	**11.42*** (3.12)**	**10.80*** (3.20)**	**9.44** (2.32)**	**8.42* (1.98)**
Numb. Obs.	18	18	17	17	16	17
Adjusted R^2	0.31	0.29	0.34	0.44	0.18	0.37

Standard Errors in Parentheses
* Significant at 0.10 level; ** Significant at 0.05 level; *** Significant at 0.01 level

As mentioned above, the direction of causality might be a problem for the growth regressions. For this reason Table 13 estimates instrumental variable regressions for all measures of institutional uncertainty using an indicator of political rights as instrument for the various institutional variables. The results suggest that reverse causality may not be a major problem. All indicators are significant on the 1 percent-level.

TABLE 13: Instrumental variable regressions
Dependent variable: Per Capita Growth
Political rights (1993/1994) as instrument for institutional variables

	(1)	(2)	(3)	(4)	(5)	(6)
Constant	-117.68*** (-3.82)	-36.24*** (-4.32)	-35.70*** (-4.32)	-47.00*** (-4.15)	-48.13*** (-4.08)	-59.84*** (-3.99)
Predictabi-lity of rules	37.21*** (3.62)					
Political stability		8.34*** (3.62)				
Property rights secur.			12.48*** (3.60)			
Judiciary reliability				15.45*** (3.62)		
Lack of corruption					12.03*** (3.57)	
Credibility						18.31*** (3.58)
Numb. Obs.	18	18	18	18	18	18
Adjusted R^2	0.42	0.42	0.41	0.42	0.41	0.41

Standard Errors in Parentheses
* Significant at 0.10 level; ** Significant at 0.05 level; *** Significant at 0.01 level

Summary and Conclusions

We have presented and analyzed a new data set based on firm-level surveys in transition economies. The survey aimed at measuring the degree of private entrepreneurial confidence in the institutional framework. We distinguish different dimensions of this institutional reliability namely the predictability of rules, political stability, property rights security, judiciary reliability and lack of corruption. We first presented survey results for the transition countries on a region by region basis. In a second step we studied the relationship of these different institutional indicators with cross-country differences in inflows of foreign direct investment and in per capita growth.

The regression results indicate that property rights security, political stability, judiciary reliability and lack of corruption are all very important factors affecting the inflow of foreign direct investment. The coefficients of these variables were highly significant in all specifications tested. Less clear is the importance of the predictability of rules which has always a positive sign in FDI-regressions, but it is not significant in all specifications. The growth regressions must be treated with caution as they were derived from inferior data and were examined over a very short time period. Nevertheless, they indicate that property rights security and political stability are particularly important for economic growth. The respective coefficients are always highly significant. The other institutional indicators—predictability of rules, judiciary reliability and lack of corruption—are less clearly related to cross-country differences in growth. The coefficients of these variables always have the expected sign but they are not significant in all specifications. The different indicators of institutional reliability intend to measure different phenomena but, of course, many of them overlap. They tend to be rather highly correlated. For this reason we did not estimate them in the same regressions but we constructed an indicator of credibility that is a simple average of the different dimensions. This indicator proves to be highly significant in both FDI- and growth-regressions. Overall, the results of this analysis suggest that the guarantee of a reliable institutional framework may be an important precondition for the successful transition and improved economic performance of former planned economies.

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Appendix 1: List of surveyed transition economies:

Albania *
Armenia
Azerbaijan
Belarus
Bulgaria
Czech
Estonia
Georgia
Hungary
Kazakstan
Kyrgyz Rep.
Latvia
Lithuania
Macedonia, FYR *
Moldova
Poland
Russia
Slovakia
Ukraine
Uzbekistan

Regional Grouping of the surveyed transitional economies:

Balkan region:	**Baltic region:**
Albania *	Estonia
Bulgaria	Latvia
Macedonia, FYR*	Lithuania

Caucasus region:	**Central Asia region:**
Armenia	Kazakstan
Azerbaijan	Kyrgyz republic
Georgia	Uzbekistan

Slavic countries of the FSU and Moldova:	**Visegrad countries:**
Belarus	Czech Republic
Moldova	Hungary
Russia	Poland
Ukraine	Slovak Republic.

Countries marked with a * were not used in the econometric analysis.

Appendix 2: Survey questionnaire and

regional averages for individual questions (in percentage)

	CIS	CEE including Baltic States	Visegrad countries	Baltic countries	Balkan countries	Caucasus countries	Central Asia countries	Slavic countries of the FSU and Moldova
Questionnaires returned	650	713	280	199	234	225	202	223
Questionnaires sent	1,134	2,070	1,150	548	372	287	301	546
Company Size:								
less than 50 employees	61	43	34.1	35.6	62.3	60.3	70.9	55.1
> 50 and < 200 employees	23	29	27.8	35.6	24.9	26.6	19.5	23.2
more than 200 employees	15	27	37.2	28.7	12.3	12.0	8.5	21.7
Industry:								
Manufacturing	35	45	47.8	36.2	50.4	39.0	34.8	32.5
Services	57	43	44.8	49.5	34.3	54.3	58.9	57.6
Agriculture	7	11	5.9	13.2	14.9	5.2	5.9	9.9
Location of management:								
Capital city	61	39	23.2	58.0	40.9	69.6	81.2	39.9
Large city	21	31	39.2	21.0	30.3	20.0	6.7	31.3
Small city or countryside	18	29	37.3	20.5	27.9	9.6	12.1	28.0
	38	61	76.4	41.6	58.2	29.6	18.8	59.3
Foreign participation:								
yes	25	25	25.5	29.3	17.3	29.6	29.7	18.0
no	73	74	73.9	68.9	81.6	64.4	69.9	80.6
Exports:								
yes	28	47	52.2	52.0	31.3	26.8	25.3	30.3
no	72	53	47.8	48.0	68.7	73.2	74.7	69.7

I. PREDICTABILITY OF LAWS AND POLICIES

1. Do you regularly have to cope with unexpected changes in rules, laws or policies which materially affect your business?
Changes in laws and policies are

	CIS	CEE	Visegrad	Baltic	Balkan	Caucasus	Central	Slavic
-1 completely predictable	2	2	0.5	0.7	4.9	4.1	2.1	1.4
-2 highly predictable	4	6	1.4	4.6	13.7	9.8	2.2	0.9
-3 fairly predictable	16	26	31.8	23.3	21.6	24.6	10.9	13.9
-4 fairly unpredictable	37	41	46.1	44.7	29.7	31.3	43.6	35.4
-5 highly unpredictable	27	17	12.9	20.2	19.2	22.2	28.1	28.9
-6 completely unpredictable	14	8	7.3	6.4	10.3	8.0	12.1	19.6

2. Do you expect the government to stick to announced major policies?

	CIS	CEE	Visegrad	Baltic	Balkan	Caucasus	Central	Slavic
-1 always	2	4	1.2	0.8	12.1	6.8	0.0	0.4
-2 mostly	20	21	19.9	20.9	22.9	30.8	18.5	13.2
-3 frequently	11	22	24.3	22.4	18.1	16.0	10.6	7.9
-4 sometimes	35	29	32.4	34.2	18.4	23.2	43.6	38.5
-5 seldom	23	16	14.6	16.6	16.0	17.9	20.2	29.6
-6 never	8	8	7.6	5.1	10.7	5.2	6.5	10.4

	CIS	CEE	Visegrad	Baltic	Balkan	Caucasus	Central	Slavic

		including Baltic States	countries	countries	countries	countries	Asia countries	countries of the FSU and Moldova

3. "The process of developing new rules or policies is usually such that affected businesses are informed."
This is true

-1 always	3	2	0.8	0.7	6.1	3.7	3.9	2.3
-2 mostly	13	8	7.2	3.5	14.6	13.9	12.0	12.0
-3 frequently	7	11	12.6	10.0	11.1	10.5	4.6	6.2
-4 sometimes	32	26	27.4	27.9	20.9	27.8	29.0	38.1
-5 seldom	28	34	32.8	41.7	29.1	27.0	31.1	25.3
-6 never	17	18	18.8	16.1	17.5	17.1	19.0	15.7

4. "In case of important changes in laws or policies affecting my business operation the government takes into account concerns voiced either by me or by my business association."
This is true

-1 always	1	1	0.5	0.7	3.0	2.2	1.2	0.4
-2 mostly	5	4	1.6	1.4	10.9	10.1	3.3	3.4
-3 frequently	5	5	3.0	5.9	5.2	9.2	3.8	2.2
-4 sometimes	18	24	29.0	25.3	17.0	24.5	18.9	12.9
-5 seldom	31	33	32.2	44.7	22.3	23.2	33.4	35.8
-6 never	38	31	31.0	20.4	40.7	30.0	38.6	44.5

5. Do you fear retroactive changes of regulations that are important for your business operations?

-1 always	20	14	7.6	16.3	19.9	12.9	15.8	29.6
-2 mostly	24	15	8.0	14.1	25.3	14.2	30.0	26.1
-3 frequently	24	20	22.8	21.7	14.5	18.0	25.4	26.3
-4 sometimes	22	29	35.8	28.9	18.5	35.7	24.0	11.2
-5 seldom	7	14	18.3	12.8	8.9	13.1	2.0	5.4
-6 never	3	6	3.5	5.4	11.6	6.1	1.9	1.4

6. In the last ten yrs predictability of laws and policies has

increased	20	30	21.5	36.2	35.5	40.9	12.4	9.0
remained about the same	36	31	39.2	32.3	17.9	31.0	38.2	36.9
decreased	33	28	30.8	21.1	32.3	16.0	33.1	46.3
don't know	11	10	8.1	10.0	13.4	11.4	14.8	7.4

II. POLITICAL INSTABILITY AND SECURITY OF PROPERTY

7. "Constitutional changes of government (as a result of elections) are usually accompanied by large changes in rules and regulations that have an impact on my business."
To what degree do you agree with this statement?

-1 fully agree	19	17	16.8	12.4	20.3	18.1	17.3	21.9
-2 agree in most cases	23	20	17.6	20.8	23.6	27.9	19.9	20.5
-3 tend to agree	32	30	29.6	39.0	22.0	29.4	35.3	31.3
-4 tend to disagree	15	14	14.1	16.1	10.5	14.5	12.7	16.1
-5 disagree in most cases	8	11	13.7	8.9	8.9	5.4	9.1	7.9
-6 strongly disagree	1	6	4.6	1.6	10.8	1.0	0.4	0.5
does not apply	3	3	3.7	1.2	2.7	3.6	4.9	1.3

	CIS	CEE including Baltic States	Visegrad countries	Baltic countries	Balkan countries	Caucasus countries	Central Asia countries	Slavic countries of the FSU and Moldova

8. "I constantly fear unconstitutional government changes (i.e. coups) that are accompanied by far-reaching policy surprises with significant impact on my business."
To what degree do you agree with this statement?

	CIS	CEE	Visegrad	Baltic	Balkan	Caucasus	Central Asia	Slavic FSU/Moldova
-1 fully agree	28	17	5.5	9.1	39.4	34.6	15.0	32.3
-2 agree in most cases	17	7	3.2	10.4	9.9	14.8	14.3	20.8
-3 tend to agree	21	11	10.6	13.6	9.5	14.1	29.3	19.5
-4 tend to disagree	17	16	9.9	21.1	20.2	14.6	20.6	15.0
-5 disagree in most cases	8	17	21.4	23.6	4.4	10.2	8.6	6.3
-6 strongly disagree	4	26	42.3	18.9	12.6	5.7	3.7	3.9

does not apply

9. "Theft and crime are serious problems that can substantially increase the costs of doing business."
To what degree do you agree with this statement?

	CIS	CEE	Visegrad	Baltic	Balkan	Caucasus	Central Asia	Slavic FSU/Moldova
-1 fully agree	53	41	32.8	32.4	60.8	40.2	54.6	61.9
-2 agree in most cases	19	20	15.1	34.6	11.6	20.5	23.3	13.9
-3 tend to agree	15	18	25.2	14.8	13.1	15.7	12.3	16.7
-4 tend to disagree	7	8	8.3	9.5	4.5	10.8	7.5	4.4
-5 disagree in most cases	2	9	13.3	7.8	3.6	5.6	0.0	1.8
-6 strongly disagree	2	4	5.4	0.8	5.1	3.3	1.2	0.9

	CIS	CEE	Visegrad	Baltic	Balkan	Caucasus	Central Asia	Slavic FSU/Moldova
-1 fully agree	44	19	18.3	29.6	10.0	66.3	32.9	36.1
-2 agree in most cases	19	12	10.2	20.9	4.6	12.4	23.4	21.7
-3 tend to agree	16	18	23.1	24.0	6.2	5.7	22.3	20.2
-4 tend to disagree	7	11	13.2	13.0	5.2	3.6	6.9	10.4
-5 disagree in most cases	4	12	20.2	6.6	7.1	5.2	2.8	4.8
-6 strongly disagree	2	10	12.3	2.7	12.9	2.0	1.6	2.6

10. "I am not confident that the state authorities protect my person and my property from criminal actions"
To what degree do you agree with this statement?

	CIS	CEE	Visegrad	Baltic	Balkan	Caucasus	Central Asia	Slavic FSU/Moldova
-1 fully agree	49	36	36.8	34.5	37.4	25.5	54.2	62.9
-2 agree in most cases	15	23	24.8	23.6	19.6	21.6	11.1	13.2
-3 tend to agree	13	20	20.6	23.5	16.4	19.9	14.1	7.2
-4 tend to disagree	7	10	7.7	10.6	11.9	10.3	6.5	5.4
-5 disagree in most cases	9	8	8.5	7.4	6.7	13.3	9.1	5.3
-6 strongly disagree	5	3	1.5	0.5	6.4	6.2	2.9	4.7

	CIS	CEE	Visegrad	Baltic	Balkan	Caucasus	Central Asia	Slavic FSU/Moldova
-1 fully agree	40	22	24.4	33.4	8.8	45.0	35.4	40.8
-2 agree in most cases	18	13	14.6	18.6	4.8	13.4	20.0	19.6
-3 tend to agree	13	18	23.6	23.3	6.8	10.4	16.6	12.8
-4 tend to disagree	11	12	16.2	10.3	7.6	9.1	13.0	11.8
-5 disagree in most cases	7	11	13.3	9.2	8.3	9.1	6.6	5.3
-6 strongly disagree	6	6	5.3	1.9	9.9	7.7	2.0	6.5

	CIS	CEE including Baltic States	Visegrad countries	Baltic countries	Balkan countries	Caucasus countries	Central Asia countries	Slavic countries of the FSU and Moldova
11. "Unpredictability of the judiciary presents a major problem for my business operations." To what degree do you agree with this statement?								
-1 fully agree	34	26	26.1	19.4	33.6	20.6	44.5	36.1
-2 agree in most cases	24	16	14.3	16.9	19.0	24.1	27.4	22.3
-3 tend to agree	21	25	22.2	31.7	23.6	25.8	17.3	19.9
-4 tend to disagree	13	14	13.6	22.5	7.3	17.9	5.9	15.8
-5 disagree in most cases	3	10	15.6	6.3	6.0	6.2	3.1	1.8
-6 strongly disagree	1	5	7.1	2.8	5.8	2.0	1.6	1.0
-1 fully agree	32	15	17.8	19.8	6.1	42.2	32.0	23.4
-2 agree in most cases	22	14	12.2	25.5	5.6	15.9	28.7	20.9
-3 tend to agree	20	18	19.7	27.2	7.5	15.9	15.7	25.8
-4 tend to disagree	13	14	18.5	17.6	5.4	11.5	8.9	16.8
-5 disagree in most cases	4	10	16.7	4.6	7.1	4.8	4.7	3.5
-6 strongly disagree	3	7	9.8	1.3	9.0	3.7	4.1	1.9

III. OVERALL GOVERNMENT - BUSINESS INTERFACE

12. Please judge on a six point scale how problematic these different policy areas are for doing business

	CIS	CEE including Baltic States	Visegrad countries	Baltic countries	Balkan countries	Caucasus countries	Central Asia countries	Slavic countries of the FSU and Moldova
a. Regulations for starting business/new operations								
1 No obstacles	19	16	17.9	14.7	13.1	23.0	21.1	15.4
2	11	18	15.9	23.7	13.9	12.4	11.9	10.4
3	26	25	19.5	29.1	27.8	28.3	32.5	20.5
4	21	17	18.0	17.2	16.9	12.3	22.3	26.7
5	12	9	5.8	6.0	16.3	12.5	8.5	13.3
6 Very strong obstacles	6	5	3.8	3.3	8.9	3.8	1.8	10.5
b. Price controls								
1 No obstacles	21	29	28.9	35.0	23.3	24.8	20.4	17.5
2	14	21	18.8	24.4	20.9	15.0	12.4	15.4
3	20	17	13.9	20.6	18.8	17.8	18.6	21.9
4	21	11	7.1	11.2	15.8	13.8	26.0	22.0
5	12	8	7.6	2.3	13.3	14.1	13.3	10.2
6 Very strong obstacles	7	3	2.6	1.6	5.0	6.3	4.8	9.4
c. Regulations on foreign trade (exports, imports)								
1 No obstacles	9	12	14.9	8.8	11.4	15.4	6.4	5.7
2	6	15	12.4	21.1	13.1	8.4	4.1	5.6
3	16	22	17.6	25.4	24.6	17.1	18.3	13.6
4	26	19	16.9	24.8	17.4	18.5	30.2	27.4
5	22	12	7.9	9.3	18.7	17.0	20.8	26.8
6 Very strong obstacles	14	7	7.9	5.7	8.6	10.8	15.4	14.5

	CIS	CEE including Baltic States	Visegrad countries	Baltic countries	Balkan countries	Caucasus countries	Central Asia countries	Slavic countries of the FSU and Moldova
d. Financing								
1 No obstacles	7	7	5.4	6.5	10.2	13.0	3.5	4.4
2	7	6	7.3	4.9	5.1	6.8	8.6	5.8
3	14	11	12.9	8.4	11.6	15.1	14.6	13.1
4	22	18	18.7	22.5	13.3	18.3	27.0	21.2
5	24	26	23.6	30.1	23.9	17.0	27.2	26.3
6 Very strong obstacles	19	25	22.2	23.8	31.3	16.9	13.8	25.6
e. Labor regulations								
1 No obstacles	24	12	8.8	10.7	18.6	25.0	18.5	26.9
2	17	19	13.0	29.3	18.3	14.4	18.7	16.9
3	25	25	20.5	33.5	21.0	22.8	28.8	23.2
4	19	16	18.0	11.1	18.8	15.9	23.5	17.7
5	7	10	12.8	7.6	10.1	8.4	4.5	8.0
6 Very strong obstacles	2	7	7.8	4.1	7.5	1.8	2.5	2.9
f. Foreign currency regulations								
1 No obstacles	13	21	17.8	31.5	13.5	16.9	12.3	10.9
2	10	19	17.1	26.4	13.9	12.2	8.1	9.3
3	17	17	15.1	20.3	17.1	17.6	17.5	15.0
4	21	14	14.3	9.1	17.5	22.4	21.6	20.3
5	17	11	8.7	4.6	18.8	9.3	19.6	21.9
6 Very strong obstacles	15	6	3.9	1.1	15.3	11.2	17.5	16.9
g. Tax regulations and/or high taxes								
1 No obstacles	2	2	0.9	2.3	4.1	3.7	1.6	1.3
2	2	2	1.8	3.2	2.4	4.5	0.4	2.1
3	4	9	6.2	10.3	10.5	7.5	3.4	3.0
4	9	13	11.3	14.9	12.3	11.8	7.2	7.7
5	26	29	31.7	28.2	27.4	27.4	32.9	19.9
6 Very strong obstacles	54	42	44.2	39.6	41.5	41.9	53.1	64.3
h. Inadequate supply of infrastructure								
1 No obstacles	4	4	3.2	3.9	4.5	5.1	3.1	3.9
2	7	8	7.9	14.1	3.4	10.2	3.4	7.3
3	24	18	17.1	26.6	11.1	20.6	29.7	22.2
4	27	23	21.7	27.2	22.0	21.9	26.9	29.8
5	20	21	20.4	15.2	26.2	18.4	20.6	20.8
6 Very strong obstacles	10	14	9.6	6.7	28.5	12.2	10.5	7.2
i. Policy instability								
1 No obstacles	3	6	3.2	4.3	12.7	7.0	0.4	1.7
2	5	13	12.8	12.1	13.9	8.0	2.3	4.7
3	16	17	15.2	19.3	18.7	20.2	18.7	10.2
4	19	20	17.8	28.5	14.2	18.1	21.6	18.9
5	29	22	19.3	23.4	23.9	21.2	34.4	29.7
6 Very strong obstacles	23	13	15.9	9.7	13.6	17.6	18.8	30.6

	CIS	CEE including Baltic States	Visegrad countries	Baltic countries	Balkan countries	Caucasus countries	Central Asia countries	Slavic countries of the FSU and Moldova
j. Safety or environmental regulations								
1 No obstacles	26	11	6.3	11.8	15.3	29.2	22.2	25.7
2	21	22	18.2	26.0	23.2	22.2	23.0	19.3
3	22	25	21.3	31.7	21.6	14.4	28.3	24.0
4	12	16	16.6	14.3	17.4	12.0	14.8	10.3
5	8	11	11.8	9.5	13.1	8.4	6.8	9.6
6 Very strong obstacles	4	4	4.3	1.3	4.7	5.7	1.1	4.6
k. Inflation								
1 No obstacles	8	7	1.7	7.1	14.8	14.6	1.9	8.5
2	12	13	11.7	11.3	18.0	16.1	9.3	10.9
3	17	16	12.4	23.5	12.9	12.4	19.1	17.9
4	20	20	18.0	33.0	9.9	22.6	18.4	18.8
5	21	19	24.0	17.3	13.6	14.6	23.8	22.9
6 Very strong obstacles	18	19	22.4	5.6	27.3	12.4	25.1	15.8
l. General uncertainty on costs of regulations								
1 No obstacles	2	5	4.2	4.1	5.4	3.1	1.1	0.9
2	5	12	10.4	13.8	13.3	7.9	3.5	4.9
3	18	19	15.6	19.3	24.9	25.3	14.6	14.2
4	25	19	19.5	21.9	14.3	24.6	22.7	26.4
5	32	24	21.7	22.4	27.4	21.3	39.4	33.7
6 Very strong obstacles	12	11	10.7	9.8	11.6	5.4	12.4	15.4
m.Crime and theft								
1 No obstacles	5	3	4.1	1.4	4.5	8.6	4.4	2.9
2	6	9	11.3	8.1	7.6	9.6	5.4	4.6
3	15	18	18.3	22.3	11.8	18.6	13.1	13.5
4	20	21	16.8	25.9	21.7	21.8	20.6	18.9
5	28	24	17.1	26.3	29.4	22.8	32.3	28.7
6 Very strong obstacles	20	16	14.3	14.3	21.5	12.5	19.0	27.4
n. Corruption								
1 No obstacles	6	5	5.6	2.5	6.0	8.3	3.8	6.8
2	5	5	5.1	7.8	2.4	6.5	4.1	5.2
3	11	14	13.9	16.7	10.3	9.9	7.3	13.8
4	19	19	15.9	20.1	21.7	20.0	17.2	19.8
5	29	29	20.6	34.4	35.1	24.0	31.1	31.5
6 Very strong obstacles	25	21	24.5	16.9	21.5	27.3	31.0	19.4
o. Terrorism								
1 No obstacles	31	34	34.4	38.5	27.7	30.7	33.0	28.6
2	17	19	15.8	30.4	12.2	13.1	19.8	18.3
3	15	12	13.1	8.6	13.2	10.6	16.4	16.0
4	9	9	6.8	6.7	14.5	12.2	5.8	9.3
5	10	8	3.9	6.9	15.8	10.9	7.9	10.5
6 Very strong obstacles	7	5	1.5	3.5	10.2	9.6	2.9	7.2

	CIS	CEE including Baltic States	Visegrad countries	Baltic countries	Balkan countries	Caucasus countries	Central Asia countries	Slavic countries of the FSU and Moldova
p. Other								
1 No obstacles	2	2	0.9	0.9	6.1	3.1	3.4	1.0
2	2	1	0.0	0.0	5.0	3.2	0.4	1.4
3	2	6	0.5	1.0	17.0	3.5	3.4	0.9
4	2	3	0.5	0.5	7.9	1.5	1.9	1.6
5	4	3	1.8	3.2	4.8	5.0	1.7	4.2
6 Very strong obstacles	3	3	4.3	3.4	0.8	4.1	3.0	1.3

13. Please rate your overall perception of the relation between government and/or bureaucracy and private firms on the following scale.
"All in all, for doing business I perceive the state as":

	CIS	CEE including Baltic States	Visegrad countries	Baltic countries	Balkan countries	Caucasus countries	Central Asia countries	Slavic countries of the FSU and Moldova
1 Helping Hand	5	3	1.5	0.7	6.6	10.4	5.0	0.8
2	8	10	12.1	5.2	11.5	13.2	8.8	4.4
3	27	25	27.9	29.3	17.5	32.2	21.0	27.2
4	26	28	27.5	30.5	25.5	22.4	31.7	23.5
5	24	19	20.1	22.7	13.3	10.5	24.3	34.0
6 Opponent	9	14	8.9	10.6	22.9	8.4	8.0	9.1
1 Helping Hand	8	3	2.4	1.4	5.5	11.4	6.3	5.9
2	11	12	14.8	13.9	7.9	6.4	12.4	14.3
3	25	18	20.9	28.6	5.1	24.4	17.4	31.4
4	21	16	18.2	22.6	6.6	11.5	28.1	23.0
5	20	17	17.5	20.3	13.3	23.5	21.2	15.9
6 Opponent	10	21	21.9	9.4	30.6	15.7	8.2	6.5

IV. BUREAUCRATIC RED TAPE

14. "It is common for firms in my line of business to have to pay some irregular "additional payments" to get things done."
This is true

	CIS	CEE including Baltic States	Visegrad countries	Baltic countries	Balkan countries	Caucasus countries	Central Asia countries	Slavic countries of the FSU and Moldova
-1 always	19	8	4.1	4.3	17.3	22.8	19.4	15.3
-2 mostly	26	18	15.8	15.1	23.8	26.4	25.4	26.2
-3 frequently	20	18	18.5	20.3	15.4	20.1	21.6	17.8
-4 sometimes	20	22	24.7	23.4	16.1	17.0	21.7	21.0
-5 seldom	8	20	23.3	21.5	14.7	6.7	5.6	10.5
-6 never	6	13	12.6	14.7	10.8	6.7	2.7	9.2

15. "Firms in my line of business usually know in advance about how much this "additional payment" is."
This is true

	CIS	CEE including Baltic States	Visegrad countries	Baltic countries	Balkan countries	Caucasus countries	Central Asia countries	Slavic countries of the FSU and Moldova
-1 always	12	6	2.0	6.6	10.9	17.0	9.8	9.4
-2 mostly	33	18	17.2	18.1	18.1	29.5	33.4	34.3
-3 frequently	16	17	16.7	16.0	17.4	13.6	20.1	15.6
-4 sometimes	20	19	21.2	18.0	18.4	22.5	20.1	18.2
-5 seldom	10	22	25.6	20.3	17.6	9.2	8.2	11.2
-6 never	8	15	15.3	16.2	14.2	7.4	4.7	10.9

	CIS	CEE including Baltic States	Visegrad countries	Baltic countries	Balkan countries	Caucasus countries	Central Asia countries	Slavic countries of the FSU and Moldova

16. "Even if a firm has to make an "additional payment" it always has to fear that it will be asked for more, e.g. by another official."
This is true

	CIS	CEE	Visegrad	Baltic	Balkan	Caucasus	Central Asia	Slavic FSU
-1 always	10	6	2.7	2.7	14.3	12.6	14.6	5.3
-2 mostly	17	10	9.0	7.9	11.9	16.1	14.9	20.4
-3 frequently	20	15	11.2	13.8	20.9	21.4	20.2	18.4
-4 sometimes	28	23	23.1	25.1	20.3	26.2	29.2	27.5
-5 seldom	14	25	30.7	24.9	16.4	13.8	12.5	16.4
-6 never	8	18	20.4	20.4	11.8	8.7	4.6	9.5

17. "If a firm pays the required "additional payment" the service is usually also delivered as agreed."
This is true

	CIS	CEE	Visegrad	Baltic	Balkan	Caucasus	Central Asia	Slavic FSU
-1 always	11	13	8.7	12.9	17.3	14.6	8.4	10.9
-2 mostly	44	36	42.1	32.6	32.6	45.7	42.9	42.5
-3 frequently	19	19	18.0	23.7	15.9	16.4	21.8	17.6
-4 sometimes	12	10	9.1	7.6	15.1	12.6	12.6	10.8
-5 seldom	5	6	4.8	6.1	6.4	5.6	5.4	5.4
-6 never	6	6	6.3	5.9	6.1	3.5	3.1	9.7

18. "If a government agent acts against the rules I can usually go to another official or to his superior and get the correct treatment."
This is true

	CIS	CEE	Visegrad	Baltic	Balkan	Caucasus	Central Asia	Slavic FSU
-1 always	4	7	6.1	6.0	7.8	7.4	2.7	3.5
-2 mostly	10	16	11.8	25.7	12.0	11.1	10.3	9.2
-3 frequently	11	10	10.3	11.9	8.0	15.2	10.5	8.3
-4 sometimes	25	25	29.5	24.4	20.8	20.7	28.2	24.6
-5 seldom	34	27	26.9	24.1	28.4	31.7	35.8	33.8
-6 never	14	12	10.9	5.9	20.2	13.0	8.8	17.8

19. In the last ten yrs, difficulties in dealing with government officials have

	CIS	CEE	Visegrad	Baltic	Balkan	Caucasus	Central Asia	Slavic FSU
increased	40	38	32.5	37.8	44.2	26.8	47.6	45.2
remained about the same	35	33	44.7	30.9	20.1	36.6	33.3	34.8
decreased	13	20	15.3	23.7	22.2	29.1	4.0	8.2
don't know	10	8	6.2	6.0	12.1	7.4	12.6	10.5

20. Have you ever decided not to make a major investment because of problems relating to complying with government regulations?

	CIS	CEE	Visegrad	Baltic	Balkan	Caucasus	Central Asia	Slavic FSU
yes	49	39	37.6	33.5	45.2	39.9	51.8	53.4
no	51	61	62.4	66.5	54.8	60.1	48.2	46.6

If your answer was "yes", could you please specify which of the following two options better describes the nature of these problems:

	CIS	CEE	Visegrad	Baltic	Balkan	Caucasus	Central Asia	Slavic FSU
Costs of compliance are too high, but clearly known	11	19	15.3	21.6	21.7	14.8	9.8	8.9
Costs of compliance are too uncertain for investment planning	74	67	70.7	69.8	60.2	72.6	80.8	69.4
Other	15	14	14.0	8.6	18.2	12.6	9.3	21.6

	CIS	CEE including Baltic States	Visegrad countries	Baltic countries	Balkan countries	Caucasus countries	Central Asia countries	Slavic countries of the FSU and Moldova
21. What percentage of senior management's time is spent on negotiation with officials about changes and interpretations of laws and regulations?								
(1) less than 5%	20	33	33.4	36.1	30.0	17.7	15.4	24.0
(2) 5% - 15%	22	32	37.4	28.4	29.0	19.0	20.7	24.0
(3) 15% - 25%	24	20	18.3	26.3	17.4	27.8	23.0	22.8
(4) 25% - 50%	15	8	7.1	5.6	11.3	20.1	13.1	13.1
(5) 50% - 75%	9	2	1.3	0.7	3.5	9.0	11.2	8.0
(6) more than 75%	3	1	0.8	0.0	3.5	2.8	3.7	2.7

V. EFFICIENCY OF GOVERNMENT IN PROVIDING SERVICES

22. Please rate your overall perception of:

	CIS	CEE including Baltic States	Visegrad countries	Baltic countries	Balkan countries	Caucasus countries	Central Asia countries	Slavic countries of the FSU and Moldova
a. The efficiency of customs								
1 Very good	1	2	3.7	0.0	2.5	1.4	1.5	1.2
2	3	14	25.3	3.8	9.0	1.8	1.3	4.7
3	15	20	22.1	18.4	18.6	15.5	13.5	16.3
4	25	23	17.7	22.2	31.3	22.5	27.1	24.7
5	27	24	16.7	34.6	23.2	26.2	29.2	26.7
6 Very poor	25	12	6.2	19.1	11.2	29.9	25.2	21.5
b. The general condition of roads you use								
1 Very good	1	1	0.8	0.7	3.3	1.5	0.4	0.4
2	3	15	24.2	7.9	9.6	1.2	3.2	5.4
3	8	22	19.2	28.4	18.6	10.1	4.8	9.9
4	16	20	21.1	25.6	13.8	14.6	14.1	19.6
5	27	20	21.0	25.5	14.6	26.0	32.3	23.3
6 Very poor	41	18	9.3	7.8	39.5	44.0	43.5	35.8
c. The efficiency of mail delivery								
1 Very good	3	9	16.0	4.0	4.2	5.1	1.5	1.7
2	8	20	22.6	22.7	14.9	7.3	6.3	10.4
3	18	34	29.4	47.7	25.7	13.0	16.1	23.9
4	24	17	14.8	16.5	20.9	19.3	25.1	26.8
5	24	12	10.0	7.4	18.2	23.1	31.9	17.7
6 Very poor	21	5	1.3	0.9	12.9	31.0	17.2	16.5
d. The quality of public health care provision								
1 Very good	1	1	1.2	0.0	2.4	1.0	1.1	2.2
2	3	16	29.3	4.4	8.4	3.4	0.8	4.1
3	9	20	23.2	17.3	19.8	9.4	8.3	9.9
4	17	23	16.5	31.2	24.7	24.5	7.7	18.6
5	29	21	13.6	31.6	21.0	20.5	35.6	30.9
6 Very poor	38	15	11.3	15.1	20.9	39.6	44.9	32.2

	CIS	CEE including Baltic States	Visegrad countries	Baltic countries	Balkan countries	Caucasus countries	Central Asia countries	Slavic countries of the FSU and Moldova
23. How frequent are power outages?								
-1 once in more than 3 m.	34	65	64.4	86.2	44.3	16.4	28.9	50.0
-2 once a month	30	15	18.7	7.3	17.5	28.5	42.2	21.0
-3 once in two weeks	6	6	3.3	0.4	15.1	8.8	5.7	5.1
-4 once a week	10	6	3.1	2.9	13.1	13.0	12.2	7.3
-5 once a day	12	2	0.2	0.0	6.1	19.7	8.4	9.1
-6 no power for long period	7	3	6.1	0.0	1.2	13.2	1.8	6.2
24. How long does it take to get a public telephone line connected?								
-1 less than 1 month	26	23	17.7	35.2	16.6	39.2	15.3	24.5
-2 1 to 3 months	22	22	26.4	24.1	15.5	21.9	26.2	18.9
-3 3 to 6 months	5	12	15.6	3.9	14.9	4.0	5.0	6.3
-4 6 months to 1 year	4	7	7.0	3.5	12.1	2.1	2.1	7.3
-5 more than 1 year	5	10	14.2	3.0	11.1	1.5	8.6	5.0
-6 difficult to say	35	24	17.9	29.2	27.8	28.2	40.5	35.5
25. How would you generally rate the efficiency of government in delivering services?								
-1 very efficient	0	1	0.0	0.0	2.3	1.4	0.0	0.0
-2 efficient	2	4	4.2	0.9	7.4	4.7	0.4	1.7
-3 mostly efficient	22	32	32.1	29.0	34.4	35.4	17.8	14.9
-4 mostly inefficient	38	35	36.1	45.7	22.4	33.4	41.0	40.3
-5 inefficient	22	16	16.6	18.4	13.3	14.4	24.2	24.9
-6 very inefficient	13	9	7.8	3.7	16.7	8.4	12.4	15.9
-1 very efficient	1	1	0.0	0.0	4.4	1.2	0.7	0.4
-2 efficient	6	4	1.2	2.2	8.3	5.7	3.7	7.3
-3 mostly efficient	16	19	21.0	19.9	15.0	10.4	16.0	19.3
-4 mostly inefficient	36	30	37.2	34.0	15.5	30.1	34.6	41.3
-5 inefficient	21	20	21.0	27.3	10.9	20.1	26.4	17.9
-6 very inefficient	14	14	13.9	12.8	16.9	24.6	9.9	8.7
Additional comments	22	24	24.8	20.6	25.6	41.8	18.8	8.5

Appendix 3.   Correlation matrix

	FDI9395	GDP9395	GNPUS92	SCH93	OPEN9395	DEFL9395	GGC9395	GASTPR	Q1	Q8	Q9	Q11	Q14	CRED
FDI9395	1,00 18													
GDP9395	0,51 18	1,00 18												
GNPUS92	0,52 18	0,22 18	1,00 18											
SCH93	0,06 16	-0,03 16	0,20 16	1,00 16										
OPEN9395	-0,01 17	0,14 17	0,11 17	0,34 15	1,00 17									
DEFL9395	-0,36 17	-0,54 17	-0,40 17	0,19 15	-0,06 16	1,00 17								
GGC9395	0,04 17	0,40 17	0,31 17	0,21 15	0,38 17	-0,67 16	1,00 17							
GASTPR	-0,53 18	-0,67 18	-0,47 18	0,36 16	0,05 17	0,34 17	0,00 17	1,00 18						
Q1	0,44 18	0,47 18	0,26 18	-0,10 16	-0,13 17	-0,42 17	0,12 17	-0,53 18	1,00 18					
Q8	0,83 18	0,73 18	0,46 18	-0,03 16	-0,08 17	-0,56 17	0,22 17	-0,65 18	0,62 18	1,00 18				
Q9	0,75 18	0,60 18	0,41 18	-0,17 16	-0,03 17	-0,30 17	-0,08 17	-0,66 18	0,53 18	0,85 18	1,00 18			
Q11	0,76 18	0,48 18	0,39 18	-0,20 16	-0,06 17	-0,31 17	-0,13 17	-0,65 18	0,74 18	0,78 18	0,85 18	1,00 18		
Q14	0,75 18	0,46 18	0,72 18	-0,01 16	0,11 17	-0,39 17	0,28 17	-0,66 18	0,33 18	0,66 18	0,55 18	0,48 18	1,00 18	
CRED	0,86 18	0,59 18	0,58 18	-0,07 16	-0,02 17	-0,43 17	0,10 17	-0,70 18	0,72 18	0,90 18	0,91 18	0,89 18	0,75 18	1,00 18

Appendix 4.1.   Foreign direct investment - regressions for additional indicators

FDI

Variable	Adjusted R^2	Parameter Estimate	Standard Error	T for H0:Parameter=0	Prob > |T|
INTERCEP		-5,968	4,472	-1,334	0,201
Q2		2,215	1,324	1,673	0,114
Adjusted R^2	0,096				
INTERCEP		8,101	5,637	1,437	0,170
Q4		-2,922	2,482	-1,177	0,256
Adjusted R^2	0,022				
INTERCEP		-5,278	2,206	-2,393	0,029
Q5		2,127	0,685	3,105	0,007
Adjusted R^2	0,337				
INTERCEP		-4,828	2,483	-1,944	0,070
Q10		2,610	1,015	2,571	0,021
INTERCEP		8,504	1,635	5,202	0,000
Q15		-1,763	0,404	-4,368	0,001
Adjusted R^2	0,515				
INTERCEP		-7,595	2,508	-3,029	0,008
Q16		2,270	0,622	3,652	0,002
Adjusted R^2	0,421				
INTERCEP		6,537	4,270	1,531	0,145
Q17		-1,100	0,925	-1,189	0,252
Adjusted R^2	0,024				

Appendix 4.2. GDP growth regressions for additional indicators

Variable	Adjusted R^2	Parameter Estimate	Standard Error	T for H0:Parameter=0	Prob > |T|
INTERCEP		-25,206	19,127	-1,318	0,206
Q2		5,622	5,661	0,993	0,336
Adjusted R^2	-0,001				
INTERCEP		3,360	12,295	0,273	0,788
Q3		-3,466	4,369	-0,793	0,439
Adjusted R^2	-0,022				
INTERCEP		-15,034	23,786	-0,632	0,536
Q4		3,860	10,474	0,369	0,717
Adjusted R^2	-0,054				
INTERCEP		-32,668	9,179	-3,559	0,003
Q5		8,296	2,850	2,911	0,010
Adjusted R^2	0,305				
INTERCEP		-13,797	11,850	-1,164	0,261
Q10		3,102	4,843	0,641	0,531
Adjusted R^2	-0,036				
INTERCEP		9,733	8,958	1,087	0,293
Q15		-4,026	2,212	-1,820	0,088
Adjusted R^2	0,120				
INTERCEP		-41,014	10,672	-3,843	0,001
Q16		8,683	2,646	3,282	0,005
Adjusted R^2	0,365				
INTERCEP		-11,230	18,068	-0,622	0,543
Q17		1,075	3,914	0,275	0,787
Adjusted R^2	-0,058				