Draft for discussion and comments

Far From Home:
Do Foreign Investors Import Higher Standards of Governance in Transition Economies?

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Abstract

Based on the Business Environment and Enterprise Performance Survey (BEEPS) of firms in transition countries, which unbundles corruption to measure different types of corrupt transactions and provide detailed information on the characteristics and performance of firms, we find that: i) corruption reduces FDI inflows and attracts lower quality investment in terms of governance standards; ii) in misgoverned settings, FDI firms may magnify the problems of state capture and procurement kickbacks, while paying a lower overall bribe burden than domestic firms; iii) FDI firms undertake those forms of corruption that suit their comparative advantages, generating substantial gains for them and challenging the premise that they are coerced, which makes it difficult to develop effective constraints on such behavior; and, iv) transnational legal restrictions to prevent bribery had not led to higher standards of corporate conduct among foreign investors by the year 2000. Rather than being construed as a case against foreign investment; we argue that state capture is created and maintained through restrictions on competition and entry in strategic sectors. Thus, enhancing competition by attracting a wider, more diverse set of FDI firms is critical to the broader strategic framework of fighting state capture and corruption.

The evidence and opinions presented here are the authors' responsibility and do not necessarily reflect those of their respective institutions or their Executive Directors. The authors are responsible for errors and omissions. This paper is an output of the joint research project on governance, corruption and influence in transition conducted by The EBRD and The World Bank, and also serves as a contribution to the 'Anticorruption in Transition' Report (coordinated by the World Bank's Europe and Central Asia Region) released at the September 2000 World Bank Annual Meeting in Prague. Details on the survey and data we utilize in this paper are contained in: 'Measuring Governance, Corruption and State Capture – How Firms and Bureaucrats Shape the Business Environment in Transition', World Bank Policy Research Working Paper #2312 (April 2000). All the outputs of this research project are available at http://www.worldbank.org/wbi/governance.

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"Thou hast it now: King, Cawdor, Glamis, all…and I fear, thou play'dst most foully for't"
Macbeth, Act III, Scene I

1- Introduction

It is now widely accepted that corruption poses substantial costs for economic development. There is strong empirical evidence that higher levels of corruption are associated with lower growth and lower per capita income across the globe. One of the channels through which corruption hinders growth is its impact on foreign direct investment (FDI). A number of recent studies have shown that corruption inhibits FDI.[1] Nowhere does this seem more relevant than in the meager flows of FDI to the transition countries of Eastern Europe and the former Soviet Union. More than a decade since the collapse of communism across the region, the hopes that the creation of market economies would attract substantial flows of FDI have not materialized, especially in the Balkans and the former Soviet countries. It is common to lay the blame on poor standards of governance and in particular high levels of corruption in the region.[2] But though most of the focus has been on the extent of foreign investors who have stayed away from the transition countries, comparatively little attention has been given to the behavior of those who have invested in these countries. Do foreign investors in transition countries import better standards of corporate conduct and governance or do they contribute to the problem? A recent wave of no bribery pledges, ethics codes, enhanced compliance procedures and transnational legal restrictions have been targeted to encourage foreign investors to meet higher standards of governance than those of the local environment. Yet we have no systematic evidence on how foreign investors behave when they are far from home.

Most existing studies of corruption and FDI are based on indices of corruption perceptions at the country level and bilateral aggregate investment flows. There has also been a considerable collection of anecdotal evidence and case studies on the practices of foreign investors.[3] But to assess the behavioral standards of foreign firms that actually invest in transition economies, we need firm-level data that would allow comparisons of the propensity to engage in corruption of both foreign firms and domestic firms. The recent Business Environment and Enterprise Performance Survey (BEEPS), a comprehensive survey of over 4000 firms in 22 transition countries, provides such data.[4] The BEEPS data unbundles the concept of corruption to distinguish and measure different types of corrupt transactions, as well as providing detailed information on the characteristics and performance of firms. This allows us to develop a detailed and nuanced picture of the types of corruption that different sorts of firms engage in and the impact of such corruption on firm performance.

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[1] See Abed and Davoodi (2000), Alesina and Weder (1999), Smarzynska and Wei (2000) and Wei (1997).

[2] Recent measures of corruption place the region among the most corrupt in the world. For measures of corruption and a discussion of the problems inherent in making such cross-country comparisons, see Kaufmann, Kraay and Zoido-Lobaton (1999). The World Bank (2000) report: Anti-Corruption in Transition presents regional comparisons of the level of corruption based on Kaufmann et al (1999). Section 5 discusses the link between corruption and aggregate FDI flows.

3 Examples abound. Political economy analyses of FDI: Box 4.1 Moran – political economy of protectionism…IBM in Mexico, Fiat in Poland, Suzuki in Hungary – we provide a statistical evaluation to complement what is usually case-study evidence. The Bribe-Payers' Index of Transparency International also represents an important effort to understand the propensity for foreign firms to pay bribes, though it is based not on surveys of firms and their practices, but on the perceptions of firms in the domestic markets. See: http://www.transparency.org.

[4] This survey was financed by the EBRD and the World Bank Institute. A description of this survey is given in Appendix 1. Details on the survey and its methodological approach to measuring governance can be found in Hellman, Jones, Kaufmann and Schankerman (2000).

The main findings of the paper can be summarized as follows:

- While corruption reduces the quantity of FDI flows into the transition economies, it also appears on average to attract lower quality investors with regard to some important governance standards. In particular, in countries where the state is highly susceptible to capture by economic vested interests, FDI firms are significantly more likely than their domestic counterparts to engage in corrupt forms of political influence, a phenomenon that we have referred to as *state capture*. (Hellman, Jones and Kaufmann, 2000; Hellman and Kaufmann 2001)

- By contrast, in countries that have avoided the trap of significant state capture by vested interests, FDI firms are significantly less likely than their domestic counterparts to engage in corrupt forms of political influence

- Different types of foreign investors engage in particular types of corruption tailored to their comparative advantages. FDI firms with local partners are more likely to engage in state capture. Larger multinational firms with headquarters overseas rely much less on state capture, yet are much more likely to resort to kickbacks in their dealings with foreign states.

- Though often foreign investors might claim that they are specifically targeted for bribes by "grabbing hand" governments[5], we find no evidence that FDI firms pay higher overall bribes than their domestic counterparts, even though they are more likely to engage in specific forms of corruption. In addition, the direct performance gains to foreign investors from these forms of corruption are shown to be considerable, strengthening the view that FDI firms enjoy a substantial share of the rents from corruption. The evidence therefore does not support the view of coercion of foreign investors to pay bribes.

- On the basis of this survey evidence collected in 1999-2000, transnational legal restrictions to prevent bribery, such as the US Foreign Corrupt Practices Act and the much more recent OECD Convention on Bribery of Foreign Public Officials, have not led to higher standards of corporate conduct among foreign investors bound by their provisions, though the OECD Convention is still in the very early stages of implementation.

Data and Concepts

The data set on which this research is based is the 1999-2000 Business Environment and Enterprise Performance Survey (BEEPS). The BEEPS survey was designed to assess the quality of the business environment, including governance and corruption[6] on the basis of the experiences and practices of firms. The survey was conducted through face-to-face interviews with firm managers or owners in site visits during the period June through August 1999 in the 22

[5] For the notion of government as a grabbing hand, see Shleifer and Vishny (1998).

[6] As many of the forms of corruption examined in the survey are illegal in most countries, firms must be expected to be reluctant to admit that they engage in such activity. 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. The survey questions examine corruption from a number of different angles providing consistency checks on each firm's responses. Moreover, tests were conducted to detect any systematic positive or negative bias among the firms in any given country.

transition countries.[7] In each country, between 125 and 150 firms were interviewed with the exception of three countries where larger samples were used: Poland (246), Russia (552) and Ukraine (247). The sample was structured to be representative of the domestic economies with specific quotas placed on size, sector, location, and export orientation. The sample was heavily weighted towards privately owned firms, though there were quotas for state-owned firms.

The sample also included a significant number of firms with foreign direct investment, defined as any firm in which a foreign-registered firm has an ownership stake. The survey also enables us to identify the percentage of capital owned by the foreign firm to determine whether the firm is majority foreign-owned. We can also distinguish between FDI firms with headquarters overseas that are generally establishments of multinational firms and FDI firms with local headquarters that are more likely to be joint ventures with local partners. This will enable us to examine whether different types of FDI firms maintain different standards of governance within the transition countries.

Table 1 presents a cross-country summary of the sample composition of the BEEPS in terms of the number of domestic firms and foreign firms of different types.

Table 1 – Domestic and Foreign Firms in the BEEPS Sample

					FDI HQ	
Country	**Total firms**	**Domestic firms**	**FDI**	**FDI (%)**	**Local HQ**	**Foreign HQ**
Albania	160	139	21	71.6	12	9
Armenia	125	123	2	85.0	0	2
Azerbaijan	137	124	13	80.1	12	1
Belarus	132	117	15	47.7	14	1
Bulgaria	130	113	17	56.1	17	0
Croatia	127	110	17	46.1	17	0
Czech Republic	149	116	33	83.5	24	9
Estonia	132	106	26	54.7	23	3
Georgia	129	111	18	50.5	15	3
Hungary	146	119	27	78.2	26	1
Kazakhstan	147	120	27	82.9	11	16
Kyrgyzstan	132	117	15	36.3	14	1
Latvia	166	125	41	63.5	40	1
Lithuania	112	106	6	51.3	6	0
Moldova	138	122	16	66.9	14	2
Poland	245	205	40	56.0	37	3
Romania	125	105	20	56.9	19	1
Russia	552	515	37	54.6	31	6
Slovak Republic	137	122	15	52.9	13	2
Slovenia	125	108	17	66.9	17	0
Ukraine	247	217	30	45.3	28	2
Uzbekistan	126	108	18	49.3	17	1
Overall	3619	3148	471	60.9	407	64

[7] The countries included: Albania, Armenia, Azerbaijan, Belarus, Bulgaria, Croatia, Czech Republic, Estonia, Georgia, Hungary, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Poland, Romania, the Russian Federation, the Slovak Republic, Slovenia, Ukraine, and Uzbekistan.

Unbundling and measuring corruption in the transition economies[8]

Most existing studies of the link between corruption and FDI use country-level measures of corruption based primarily on the perceptions of external actors. We rely on firm-level data that measures the experience of firms engaging in corrupt practices. Moreover, the BEEPS survey was designed to unbundle the concept of corruption to identify distinct types of corrupt transactions that we have shown elsewhere to have distinct causes and consequences (Hellman, Jones and Kaufmann 2000). Consequently, we can compare both the extent and type of corruption experienced by foreign versus domestic firms, as well as among different types of foreign firms.

We focus on two forms of corruption:

- *State capture:* defined as the extent to which firms make illicit private payments to public officials in order to influence the formation of laws, rules, regulations or decrees by state institutions, and
- *Public procurement kickbacks:*[9] defined as illicit private payments to public officials to secure public procurement contracts.

We would distinguish these forms of corruption from what international legislation refers to as facilitation payments, which are private payments to public officials in order to facilitate implementation of administrative regulations placed by the state on the firm's activities. Facilitation payments are generally not covered by international anti-bribery conventions. More importantly, facilitation payments are more likely to be extracted from firms by the "grabbing hand" of the state [10] with the resulting rents predominantly going to bureaucrats that have the power and discretion to intervene in the market. State capture and public procurement kickbacks are more likely to be initiated by firms to gain advantages in legislative and procurement decisions. They tend to be tools of influence rather than forms of predation with the resulting rents shared by both firms and bureaucrats. [11,12] Focusing on state capture and procurement kickbacks allows us to disentangle the various forms of corruption experienced by firms and examine those forms that might provide better insights into the firm's incentives and behavior.

The BEEPS survey provides the first empirical measures of state capture. Firms were asked to disaggregate the types of bribery in which "firms like yours" have been engaged. Those that report having made private payments to public officials for the purpose of influencing the content of laws, decrees or regulations are designated as *captor firms*. Similarly, firms were asked if

[8] This section draws heavily on Hellman, Jones and Kaufmann (2000) where a fuller discussion can be found not only of the measurement of corruption, but also firm level mechanisms underlying these aggregate indices.

[9] Hellman, Jones and Kaufmann (2000) made the tripartite distinction between administrative corruption, state capture and *influence*, defined as the extent to which firms have influence on the formation of laws, rules, regulations and decrees by state institutions without recourse to illicit and non-transparent private payments to public officials. Influence was found to be related to the origins of the firm and the legacy of its ties to the state through previous or continuing state ownership. In this paper the focus is on the narrower phenomenon of corruption and we do not examine the propensity of international investors to exercise influence. Instead we introduce public procurement corruption as a specific form of corruption that is frequently anecdotally associated with foreign firms and does not fit easily into the two-way classification of corrupt transactions into state capture and administrative corruption.

[10] The "grabbing hand" model of government was proposed by Shleifer and Vishny (1993).

[11] Such a view might be termed the "shaking hands" model of government.

[12] See World Bank (2000) for a detailed analysis of corruption in the transition economies based on the two dimensional classification by administrative corruption and state capture.

they had made private payments to public officials to obtain public procurement contracts, though this question was only asked of the subset of firms that already identified themselves as having trade with the state. Thus, a group of *kickback firms* can be identified from the larger sample. Table 2 presents the data on the share of captor firms and kickback firms in each country.

In addition, Table 2 provides a measure of the average share of bribe payments by firms as a share of their annual revenue.[13] This is an indicator of the extent of total bribe payments for all forms of corruption, including facilitation payments, by the firm in each country. The data in Table 2 allow us to examine both the types of corruption engaged in by firms and the extent of corruption payments.

Table 2 – Measuring the Types and Level of Corruption in Transition Economies

Country	Share of Captor Firms[2]	Share of Kickback Firms[3]	Average Share of Annual Firm Revenues Paid in Bribes[1]
Albania	11	51	4.0
Armenia	7	26	4.6
Azerbaijan	24	52	5.7
Belarus	2	5	1.3
Bulgaria	11	13	2.1
Croatia	10	26	1.1
Czech Republic	7	43	2.5
Estonia	5	28	1.6
Georgia	8	18	4.3
Hungary	4	15	1.7
Kazakhstan	6	21	3.1
Kyrgyzstan	7	19	5.3
Latvia	14	22	1.4
Lithuania	14	15	2.8
Moldova	12	9	4.0
Poland	9	32	1.6
Romania	13	39	3.2
Russia	9	22	2.8
Slovakia	12	35	2.5
Slovenia	10	27	1.4
Ukraine	12	33	4.4
Uzbekistan	2	24	4.4
Overall	9.5	26	3.0

Source: Hellman, Jones and Kaufmann (2000) based on BEEPS.

Notes:
1 – Firms were asked: What percentage of revenues do firms like yours pay per annum in unofficial payments to public officials? The responses ranged across 0%; less than 1%; 1 to 2%; 2-10%; 10 to 12%; 12 to 25%; over 25%. The variable was interpolated at 0%, 1%, 2%, 6%, 11%, 19% and 25%.
2 - Firms were asked whether state capture in each of the following dimensions (parliamentary legislation, presidential decrees, central bank, criminal courts, commercial courts, political parties) had no impact; minor impact; significant impact or very significant impact on their business. Those firms that reported a significant or very significant impact were classified as *affected by state capture* in that dimension. The state capture index is calculated at the unweighted average of the proportion of firms in each country affected by each of the six components of state capture.
3 – Those firms that traded with the government were asked: how often do firms like yours nowadays need to make extra unofficial payments to public officials gain government contracts? The responses ranged across always; usually; frequently; sometimes; seldom and never. Those responding sometimes or more frequently were classified as kickback firms.

[13] The question was posed in terms of firm revenues rather that profits since estimates of revenues are more reliable. In addition the question was posed indirectly in terms of "firms like yours" to reassure respondents that their responses would not be attributable directly to their firm. We take total payments as a proxy for administrative corruption since evidence from the BEEPS suggests that the majority of bribe payments are for this purpose.

FDI flows to the transition economies

The existing literature on corruption and FDI has focused on whether the volume of FDI is affected by the level of corruption in the host country. Wei (1997) finds a negative relationship between corruption and FDI in a data set of bilateral aggregate investment flows. Alesina and Weder (1999) find that aggregate FDI flows are negatively related to corruption, although not very strongly. Smarzynska and Wei (2000) find again, although this time with firm-level data, that corruption is negatively related to FDI. Regarding the transition economies, there is no recent survey of the determinants of FDI flows. The only related paper is Abed and Davoodi (2000) who find that corruption is negatively related to FDI flows to the transition economies, but that structural reforms are more important as a determinant of FDI.[14]

Table 3 presents cross-country measures of cumulative net FDI flows to the transition economies since the onset of transition in absolute and per capita terms. Though FDI flows to the region overall have been relatively small, there is considerable diversity across the region in particular between the countries of the CIS and the rest of the region. Most CIS countries have received little FDI (with the exception of Azerbaijan and Kazakhstan[15] which have received more significant amounts of oil-related investment). In contrast, the countries of Central and Eastern Europe and the Baltics have received much higher levels of inward investment.

[14] The authors proceed to argue that corruption is caused by a lack of progress in structural reforms. However these results are hampered by a failure to recognize that corruption in the form of state capture can be a cause of the lack of progress in structural reform. This political economy dynamic is analyzed in Hellman et al (2000).

[15] The theory that corruption regimes may actually be favored by foreign investors is illustrated by the case of Kazakhstan. Several US oil companies are currently under investigation for paying kickbacks to the Kazak government. (Economist 24th July).

Table 3 – Recent and Cumulative FDI flows to the Transition Economies

	Cumulative FDI inflows		Recent FDI inflows			
	(Million US$)	(US$ per capita)	(US$ per capita)		(% of GDP)	
	1989-2000	1989-2000*	1999	2000	1999	2000
Albania	597	176	15	42	1.4	3.5
Bulgaria	307	71	21	27	2.1	2.8
Bosnia and Herzegovina	3,307	407	98	120	6.5	8.1
Croatia	4,085	907	304	167	6.8	3.9
Czech Republic	21,673	2,102	605	434	11.7	9.1
Estonia	1,926	1,337	154	168	4.3	4.9
FR Yugoslavia	1,015	118	13	6	1.1	0.5
FYR Macedonia	437	219	14	85	0.8	5.0
Hungary	18,926	1,885	140	115	2.9	2.5
Latvia	2,499	1,056	139	169	5.0	5.6
Lithuania	2,387	648	129	102	4.5	3.3
Poland	29,052	751	164	240	4.1	5.9
Romania	6,768	303	48	45	3.1	2.8
Slovak Republic	3,611	669	130	278	3.6	7.4
Slovenia	1,534	768	72	67	0.7	0.7
Central and Eastern Europe and the Baltic States	*98,124*	*772*	*136*	*138*	*3.9*	*4.4*
Armenia	605	159	34	39	7.1	7.8
Azerbaijan	4,092	502	64	61	12.8	12.1
Belarus	776	78	22	9	1.9	1.0
Georgia	687	128	11	19	2.2	3.4
Kazakhstan	8,499	571	106	77	9.4	6.3
Kyrgyzstan	458	97	9	9	3.6	3.1
Moldova	438	102	8	23	2.6	7.1
Russia	9,998	69	5	-2	0.4	-0.1
Tajikistan	144	23	3	4	1.9	2.2
Turkmenistan	882	165	18	19	4.8	4.5
Ukraine	3,345	67	10	12	1.6	1.9
Uzbekistan	697	28	5	3	1.5	1.2
Commonwealth of Independent States	*30,621*	*166*	*25*	*23*	*4.1*	*4.2*
Total	128,745	504	88	88	4.1	4.4

Sources: IMF; Central Banks and EBRD.

Notes: FDI is measured as the net inflow recorded in the balance of payments. For most countries, figures cover only investment in equity capital and in some cases contributions-in-kind. For those countries (e.g. Estonia, Slovak Republic) where net investment into equity capital was not easily available, more recent data include reinvested earnings as well as inter-company debt transactions. Gross inflows of FDI are in some cases considerably higher than net inflows on account of increasing intra-regional investment flows.

*Population for the cumulative per capita FDI flow is measured as at 2000.

Table 4 examines the links between these FDI flows and the country-level aggregate measures of corruption from the BEEPS survey. There are many difficulties associated with attempting to understand the decisions of foreign investors with a simple cross-section of aggregate data. As a consequence, the results are intended to be merely suggestive and corroborative of the more systematic studies discussed above. The table contains OLS regressions in which the dependent variable is a measure of FDI flows. We present results based on two measures of FDI flows -

cumulative FDI flows 1989-99 and 1989-2000. It is important to highlight that the FDI variables reflect *net* flows. However, to the extent that corruption also induces capital to leave the country, as well as deterring the inflow of foreign capital, this is a useful measure of the link between FDI and corruption. We include separately the three indices of corruption -- state capture, public procurement kickbacks, and the overall share of bribes in annual revenues. In addition a measure of natural resource abundance is included,[16] since this is an important factor in attracting FDI. Finally we include a dummy for those countries that could be considered to operate substantially unreformed communist systems,[17] since this factor potentially overwhelms determinants as an explanation for FDI flows to these countries.

With the above caveats in mind, we find a consistent pattern across the specifications. The share of revenues paid in bribes is negatively related to FDI flows however they are measured. State capture also emerges as negatively related to FDI flows. Surprisingly public procurement corruption is unrelated to FDI flows, although this possibly reflects the fact that not all foreign investors are engage in businesses that require winning public contracts. Finally, we find that after controlling for corruption, natural resources are insignificant as an explanation of FDI flows, and likewise in many cases, perhaps surprisingly, the unreformed communist dummy.

Table 4 – Corruption and aggregate FDI flows

	Cumulative FDI flows 1989-1999 (US$ per capita)					
	(1)	(2)	(3)	(4)	(5)	(6)
Bribe Share			-190.8**			-190.9**
			(-2.64)			(-2.74)
State Capture	-15.1			-22.8**		
	(-1.46)			(-2.26)		
Public Procurement Kickbacks		5.9			2.6	
		(0.63)			(0.27)	
Natural Resources	-16.4	-205.5	25.5	-22.7	-235.0	-28.3
	(-0.05)	(-0.62)	(0.09)	(-0.08)	(-0.72)	(-0.10)
Unreformed Communist				-798.4**	-481.1	-512.3
				(-2.20)	(-1.20)	(-1.58)
N	22	22	22	22	22	22
R^2	0.11	0.04	0.28	0.30	0.11	0.37
	Cumulative FDI flows 1989-2000 (US$ per capita)					
	(1)	(2)	(3)	(4)	(5)	(6)
Bribe Share			-226.7**			-226.8**
			(-2.73)			(-2.87)
State Capture	-16.3			-25.5**		
	(-1.35)			(-2.18)		
Public Procurement Kickbacks		8.9			5.1	
		(0.84)			(0.46)	
Natural Resources	-69.2	-290.9	-3.7	-76.8	-325.6	-69.8
	(-0.18)	(-0.77)	(-0.01)	(-0.22)	(-0.87)	(-0.22)
Unreformed Communist				-948.2	-566.6	-628.1*
				(-2.25)	(-1.23)	(-1.71)
N	22	22	22	22	22	22
R^2	0.11	0.05	0.29	0.30	0.13	0.39

[16] A dummy variable which takes the value 1 for Russia, Azerbaijan and Kazakhstan, and 0 for the other countries.

[17] In this sample, Belarus and Uzbekistan are classified as unreformed communist. See the EBRD (2000) for assessments of the progress in economic and institutional reform of the transition economies.

Source: BEEPS' IMF, Central Banks, EBRD
**significant at %5; * significant at 10%

Corruption by FDI Firms

With firm-level measures of both the propensity to engage in different types of corruption and the level of overall bribe payments from BEEPS, we can move beyond the analysis of corruption and FDI flows to examine the pattern of corrupt behavior across different types of firms. In particular we ask: are firms with FDI more or less likely than domestic firms to engage in corruption?

Table 5 presents measures of the extent to which different types of firms are engaged in corruption without controlling for other firm characteristics that affect such payments. For each form of corruption (state capture, public procurement kickbacks, and total bribe payments) we compare the average level of corruption for foreign and domestic firms across all countries in the sample. In addition, we divide the sample into two groups of countries, those for which the prevalence of that form of corruption is high and those for which it is low [18], based on the cross-country measures of each form of corruption.[19] This enables us to examine whether the underlying institutional environment, i.e. the extent to which certain forms of corruption have become prevalent in the environment, affect the propensity of different types of firms to engage in corruption.

Table 5 - The Links Between FDI and Corruption

	Share of Captor Firms[1]			**Share of Kickback Firms[2]**			**Total Bribes Paid (as a share of annual revenues)[3]**		
		Countries With:			***Countries With:***			***Countries With:***	
	All Countries	**High Capture**	**Low Capture**	**All Countries**	**High Kickbacks**	**Low Kickbacks**	**All Countries**	**High Bribes**	**Low Bribes**
All Firms	9.3	11.4	6.8	25.7	34.2	18.1	3.0	3.8	1.7
Domestic Firms	9.0	10.4	7.3	25.2	34.0	17.5	3.0	3.8	1.8
FDI Firms	11.5	18.7	4.0	29.2	36.1	22.4	2.8	4.3	1.4

Source: BEEPS

Notes:

The cross-country measures of corruption presented in table 2 are used to divide the sample into those in which the level of each dimension of corruption is high or low. However, to compare the differences between FDI and domestic firms, the behavioral measures of actual involvement in each dimension of corruption are used:

[1] – Firms were asked: How often do firms like yours need to make extra unofficial payments to public officials to influence the content of new laws, decrees or regulations. The responses ranged across always; usually; frequently; sometimes; seldom and never. Those responding sometimes or more frequently were classified as engaging in state capture.

[2] - Those firms that traded with the government were asked: How often do firms like yours nowadays need to make extra unofficial payments to public officials gain government contracts? The responses ranged across always; usually; frequently; sometimes; seldom and never. Those responding sometimes or more frequently were classified as engaging in public procurement corruption.

[3] –Firms were asked: What percentage of revenues do firms like yours pay per annum in unofficial payments to public officials? The responses ranged across 0%; less than 1%; 1 to 2%; 2-10%; 10 to 12%; 12 to 25%; over 25%. The variable was interpolated at 0%, 1%, 2%, 6%, 11%, 19% and 25%.

The results in Table 5 reveal an interesting pattern. In terms of the level of corruption, FDI firms and domestic firms pay, on average, a very similar share of their annual revenues in bribes. Yet it is in the propensity to engage in different forms of corruption where differences start to emerge. FDI firms are somewhat more likely than domestic firms to pay kickbacks for public

[18] Relative to the average level in the transition economies. In world-wide terms, none of these countries would be considered to have low levels of corruption.

[19] See Appendix 1 for a table of how the sample was divided into low and high groups for each form of corruption and for an explanation of the indicators upon which this division was is based.

procurement contracts, though the gap increases in countries where the payment of such kickbacks is on average *less* prevalent. In transition countries where procurement kickbacks are common in dealing with the state, both FDI and domestic firms are equally likely to pay them; while in countries where kickbacks are less common, FDI firms are more likely to engage in this form of corruption. Though in the case of kickbacks these differences between FDI and domestic firms may not be very substantial, it is interesting to see that despite recent developments in ethics codes, compliance procedures and transnational anti-bribery conventions, FDI firms do not demonstrate any *higher* standards of behavior than domestic firms. Indeed, nearly a third of all FDI firms surveyed report paying kickbacks to public officials when dealing with state procurement contracts.

With respect to state capture, the differences between domestic firms and FDI firms appear more pronounced in certain contexts. In countries with a significant state capture problem, FDI firms are *almost twice as likely* as domestic firms to be engaged in efforts to capture the state. Where state capture has been more effectively contained, FDI firms are much less likely than domestic firms to engage in it.

Although suggestive, these results need to be substantiated with a more thorough econometric analysis of the data, in which the variation in other characteristics of the FDI and domestic firms that might account for these results can be controlled. Table 6 presents the results of such an analysis, controlling for size of the firm, origin of the firm (state-owned, privatized or de novo) and country fixed effects.[20] With the inclusion of the control variables, FDI firms are no better or worse than domestic firms in their propensity to pay kickbacks. They also show no significant difference in the overall levels of bribes paid. Where FDI firms do differ from their domestic counterparts is their greater propensity to engage in state capture in countries where the problem of state capture is prevalent, as suggested by the interaction between the FDI dummy variable and the dummy variable for high capture states.

[20] We ran alternative specifications of the model with sector dummy variables and replacing the FDI dummy variable with a continuous measure of the share of foreign ownership. The results were substantially the same.

Table 6 – Domestic Firms, FDI and Corrupt Behavior

		Total Bribes Paid		Captor Firms		Kickback Firms	
		(1)	(2)	(1)	(2)	(1)	(2)
Size	Small	0.018**	0.018**	0.00	-0.15	0.73**	0.73**
		(4.56)	(4.55)	(0.01)	(-0.10)	(4.22)	(4.24)
	Medium	0.007*	0.007*	0.11	0.10	0.58**	0.58**
		(1.92)	(1.92)	(0.77)	(0.69)	(3.72)	(3.72)
	(Large)						
Origin	De Novo	0.013**	0.013**	0.27**	0.28**	0.71**	0.71**
		(4.02)	(4.02)	(2.26)	(2.36)	(5.53)	(5.53)
	Privatized	0.007**	0.007**	0.03	0.04	0.40**	0.40**
		(2.51)	(2.54)	(0.30)	(0.39)	(3.28)	(3.31)
	(State)						
FDI	FDI Firm	-0.000	-0.002	0.13	-0.23	-0.01	0.11
		(-0.09)	(-0.43)	(1.30)	(-1.33)	(-0.06)	(0.63)
	(FDI Firm) x (High Corruption)		0.003		0.56**		-0.20
			(0.52)		(2.66)		(-0.91)
Country Dummies		Yes	Yes	Yes	Yes	Yes	Yes
	N	2615	2615	2786	2786	1493	1493
	Model	OLS	OLS	Probit	Probit	Probit	Probit
	R^2 / Pseudo R^2	0.11	0.11	0.04	0.05	0.12	0.12

Foreign investors might respond that the higher level of state capture observed by FDI firms results from discriminatory targeting of foreign investors for corrupt payments on the part of public officials in the host countries. Indeed, it could be argued that in corrupt environments, FDI firms are the "sitting ducks" for rapacious politicians to extract rents. The regression results could reflect identification problems and possible biases.[21] The results themselves need not suggest that the association of higher state capture among FDI firms reflects deliberate choices on the part of those firms to engage in corruption. However, we reject this hypothesis for a number of reasons. First, if FDI firms were subject to discriminatory targeting by rent-seeking public officials, then their total bribe payments would be expected to exceed those of domestic firms. We find no significant differences in total bribes paid between FDI firms and domestic firms, as suggested by the analysis in Tables 3 and 4. Second, FDI firms should have easier exit options than domestic firms, preventing them from systematically becoming "sitting ducks" for the extraction of bribes.

The third argument against this hypothesis is the most revealing: engaging in state capture is associated with substantial benefits for the corrupt FDI firm.[22] To measure firm performance,

[21] A potential endogeneity bias arises because the policy environment variable that measures the level of corruption in the country of investment is constructed from the same firm level data that measure individual propensity to engage in corruption. In fact, with respect to state capture, the extent of state capture measure and the individual behavioral measure are constructed from different questions in the BEEPS questionnaire (see Appendix 1 for the details) so the endogeneity issue does not arise with these firm level equations. Secondly, even in the cases of total bribes paid and public procurement kickbacks in which the cross-country measures are constructed as the aggregate of the same question that the micro-level equations are based on, it can be shown that cross-country measure is *almost* orthogonal to the error term in any particular equation, resulting in little actual bias.

[22] Hellman, Jones and Kaufmann (2000) analyzes the private gains to state capture more broadly.

we use data from the BEEPS survey on real sales growth over the past 3 years.[23] Table 7 presents uncontrolled means of sales growth for FDI firms in different environments. In all the transition countries, FDI firms that engage in state capture, i.e. captor FDI firms, grow at a substantially faster pace than other FDI firms. In high capture environments, in particular, captor FDI firms, grow at more than twice the rate as other FDI firms.

Table 7. State Capture and the Performance of FDI Firms

	Real Sales Growth (last 3 years)
All Transition Countries	
Captor firms	53.5
Other firms	29.4
Overall	*32.1*
High Capture Economies	
Captor FDI firms	54.8
Other FDI firms	20.5
Overall	*24.4*
Low Capture Economies	
Captor FDI firms	47.4
Other FDI firms	36.6
Overall	*40.2*

These results can be confirmed in regressions that control for other factors that affect firm performance. Table 8 presents the regression results controlling for firm size, sector, origin and country fixed effects. The results show that firms with FDI firms generally grow faster than all other firms, as do all firms that engage in state capture in high capture countries. But FDI firms that engage in state capture get additional gains in terms of sales growth performance above and beyond those advantages, as suggested by the positive and significant coefficient on the interaction term between FDI and captor firms. Similar results, though not reported, can be found for FDI firms that pay public procurement kickbacks.

[23] Real sales growth is preferable to other potential performance indicators, given the strong incentives for misreporting profits in transition countries and wide variation in accounting standards across the region.

Table 8. FDI, State Capture and Firm Performance (OLS Regressions)

Independent Variables	**Sub-Category** *(Dummy variable base category in parentheses)*	**Dependent Variable: Real Sales Growth** *(previous 3 years)*
Sector	Mining	-3.5
		(-0.24)
	Services	2.6
		(0.89)
	(Manufacturing)	
Origin	De Novo	26.0**
		(5.79)
	Privatized	0.5*
		(0.11)
	(State owned)	
Size	Small	-24.4**
		(-4.30)
	Medium	-12.6**
		(-2.58)
	(Large)	
FDI	FDI Firm	7.2*
		(1.72)
	Interaction with Captor Firm	23.3*
		(1.84)
State Capture	Captor Firm	-12.9
		(-1.14)
	Interaction with	83.0**
	high capture economy	(1.95)

N = 2685

R^2 = 0.08

Country dummies included, but not reported

** significant at 5% level; * significant at 10% level. t-statistics in parentheses.

If FDI firms are being targeted by public officials for bribes to influence the content of laws, regulations and decrees, they are apparently well compensated for all the attention. Yet the fact that FDI firms do not face a higher overall bribe burden than domestic firms, that they enjoy substantial private gains as a result of engaging in state capture, and that they can more easily exit host markets if they suffered from discriminatory predation suggests that state capture reflects a strategic choice by such firms to secure advantages in these markets. Consequently, FDI would appear to *magnify the risks* of state capture in environments where the state is already susceptible to such corrupt forms of influence.

Corruption and the Characteristics of FDI Firms

Having investigated the comparison between foreign investors and domestic firms, we examine differences among the FDI firms. The group of FDI firms in the BEEPS sample can be divided between those with local headquarters – mainly joint ventures with local partners – and those with headquarters abroad – mainly establishments of multi-national firms. Differences might be expected in the propensity of these types of firms to engage in corruption. Multi-nationals tend to have greater resources for ethics training and compliance procedures, more serious reputational concerns and somewhat higher risks of detection given their prominence. In

contrast, foreign investors often seek out local joint venture partners who "understand how to get things done" in their countries and have more extensive personal networks to facilitate business. Such differences should affect their propensities to engage in corruption.

As previously, we analyze the uncontrolled results before proceeding to econometric specifications. Table 9 presents data on the propensity of FDI firms with local headquarters and FDI firms with foreign headquarters to engage in state capture and pay public procurement kickbacks, as well as the total bribes paid. For comparison, the last row repeats the results for domestic firms from Table 5.

Table 9. Characteristics of FDI and Corrupt Behavior

	Share of Captor Firms[1]			Share of Kickback Firms[2]			Total Bribes Paid (as a share of annual revenues)[3]		
		Countries with:			*Countries with:*			*Countries With:*	
	All Countries	**High Capture**	**Low Capture**	**All Countries**	**High Kickbacks**	**Low Kickbacks**	**All Countries**	**High Bribes**	**Low Bribes**
Domestic Firms	9.0	10.4	7.3	25.2	34.0	17.5	3.0	3.8	1.8
FDI Firms Local HQ	12.5	19.9	4.5	28.2	33.3	23.3	3.0	4.8	1.4
FDI Firms Foreign HQ	5.3	6.3	4.9	36.0	53.8	16.7	1.3	1.6	0.9

Source: BEEPS

1 - Firms were asked: How often do firms like yours nowadays need to make extra unofficial payments to public officials to influence the content of new laws, decrees or regulations. The responses ranged across always; usually; frequently; sometimes; seldom and never. Those responding sometimes or more frequently were classified as engaging in state capture.

2 – Those firms that traded with the government were asked: How often do firms like yours nowadays need to make extra unofficial payments to public officials gain government contracts? The responses ranged across always; usually; frequently; sometimes; seldom and never. Those responding sometimes or more frequently were classified as engaging in public procurement corruption.

3 – Firms were asked: What percentage of revenues do firms like yours pay per annum in unofficial payments to public officials? The responses ranged across 0%; less than 1%; 1 to 2%; 2-10%; 10 to 12%; 12 to 25%; over 25%. The variable was interpolated at 0%, 1%, 2%, 6%, 11%, 19% and 25%.

Again the data reveal an interesting pattern. FDI firms with local HQ are much more likely to engage in state capture than those with foreign HQ, especially in high capture countries. The FDI firms with local HQ also pay considerably higher levels of bribes. Yet they do not outperform the multi-national firms on all forms of corruption. FDI firms with foreign HQ are more likely to pay procurement kickbacks in dealing with the state in highly corrupt environments. Indeed, over 50 per cent of the FDI firms with foreign HQ working in highly corrupt countries said they had paid such kickbacks.

These results suggest that foreign investors might choose the type of corruption to engage in on the basis of their comparative advantages. "Local" FDI firms with strong contacts in the host country's political and economic decision-making corridors might be better equipped to seek advantages through state capture, i.e. through influencing the formation of various laws, rules and decrees. FDI firms with foreign HQ would have fewer ties to such structures and might be more inclined to focus private payments to those granting specific contracts in working with the state. If so, this would again reflect a more strategic approach to corruption on the part of firms than has been generally recognized.

We investigate below whether these bivariate relationships continue to hold once we condition for all other relevant firm characteristics simultaneously. The results examining the impact of firm characteristics on the propensity to engage in state capture, to pay kickbacks and the overall bribes paid are presented in Table 10. We examine the propensity of FDI firms with foreign

headquarters to engage in different forms of corruption in more highly corrupt countries by interacting the FDI dummy variable with the aggregate measures of the different forms of corruption at the country level. The regression results confirm that FDI firms with foreign HQ do pay less in overall bribes than other FDI firms, but at the same time are more likely to pay procurement kickbacks than "local" FDI firms in highly corrupt environments. Differences in their propensity to engage in state capture are not significant.

Table 10 –Characteristics of FDI and Corrupt Behavior

		Dependent Variables					
		Total Bribes Paid[1]		Captor Firms[2]		Kickback Firms[3]	
Independent Variables		(1)	(2)	(1)	(2)	(1)	(2)
Size	Small	0.021**	0.021**	0.06	0.05	0.07	0.09
		(2.52)	(2.52)	(0.15)	(0.13)	(0.16)	(0.20)
	Medium	0.020**	0.020**	0.36	0.35	0.53	0.56
		(2.85)	(2.80)	(1.07)	(1.04)	(1.31)	(1.39)
	(Large)						
Origin	De Novo	-0.008	-0.009	0.16	0.18	0.80*	0.86*
		(-0.96)	(-1.03)	(0.40)	(0.45)	(1.65)	(1.77)
	Privatized	-0.003	-0.004	0.32	0.33	0.00	-0.02
		(-0.35)	(-0.45)	(0.76)	(0.78)	(0.01)	(0.05)
	(State)						
FDI	FDI Foreign	-0.021**	-0.014	-0.23	0.07	0.26	-0.83
	HQ	(-3.05)	(-1.31)	(-0.69)	(0.16)	(0.73)	(-1.21)
	x interaction with		-0.012		-0.67		1.61**
	high corruption		(-0.88)		(-0.97)		(2.01)
	(FDI local HQ)						
Country Dummies		Yes	Yes	Yes	Yes	Yes	Yes
	Model	OLS	OLS	Probit	Probit	Probit	Probit
	N	325	325	318	318	191	191
	R^2 / Pseudo R^2	0.27	0.27	0.10	0.11	0.14	0.16

1. Firms were asked: What percentage of revenues do firms like yours pay per annum in unofficial payments to public officials? The responses ranged across 0%; less than 1%; 1 to 2%; 2-10%; 10 to 12%; 12 to 25%; over 25%. The variable was interpolated at 0%, 1%, 2%, 6%, 11%, 19% and 25%.
2. Firms were asked: How often do firms like yours nowadays need to make extra unofficial payments to public officials to influence the content of new laws, decrees or regulations. The responses ranged across always; usually; frequently; sometimes; seldom and never. Those responding sometimes or more frequently were classified as engaging in state capture.
3. Those firms that traded with the government were asked: How often do firms like yours nowadays need to make extra unofficial payments to public officials gain government contracts? The responses ranged across always; usually; frequently; sometimes; seldom and never. Those responding sometimes or more frequently were classified as engaging in public procurement corruption.

Does regulation control the conduct of foreign investors?

The risks posed by the corrupt practices of foreign investors have not escaped the attention of policy makers, and in principle many foreign investors are governed by legislation explicitly prohibiting corruption. Early unilateral action in this direction was taken by the United States in 1977, the result of which was the Foreign Corrupt Practices Act (FCPA).[24] More recently, multilateral negotiations at the OECD resulted in a Convention on Bribery of Foreign Public Officials, signed at the end of 1997. However, little attention has yet been paid to the efficacy of

[24] The Act prohibits US firms from using bribes to "maintain or secure business in foreign countries".

these measures in achieving their stated objective of reducing corruption.[25] As Table 11 shows[26], there appears to be significant variation in the conduct of foreign investors from different countries with respect to corruption. These differences might be related to differences in the regulatory environments, but if so, those firms from countries with less exacting standards of corporate conduct might be responsible for most of the earlier findings that foreign investors were engaging in various forms of corruption. This would have significant implications for the role and effective governance of FDI in transition economies.

Table 11: Corrupt Behavior Among FDI from Different Countries

Country of Origin*	Total Bribes Paid[1] (% of annual revenues)	Share of Captor Firms[2]	Share of Kickback Firms[3]
Austria	0.5	15.8	42.9
Finland	1.8	0	0
France	3.3	21.1	40.0
Germany	2.5	11.3	20.6
Greece	3.8	18.2	60.0
Italy	5.0	20.0	N/A
Netherlands	1.0	0	33.3
Russia	6.1	23.1	37.5
Sweden	1.3	5.9	40.0
Switzerland	1.5	8.3	0
Turkey	3.0	0	N/A
UK	1.1	0	11.1
USA	3.6	16.7	42.9
Domestic Firms	3.0	9.0	25.2
FDI Firms	2.8	11.5	29.2

Source: BEEPS

* Provided the sample contains more than five firms from that country which reported information on one of the categories of corruption (those categories for which this is not the case are recorded as N/A)

Notes:

[1] – Firms were asked: What percentage of revenues do firms like yours pay per annum in unofficial payments to public officials? The responses ranged across 0%; less than 1%; 1 to 2%; 2-10%; 10 to 12%; 12 to 25%; over 25%. The variable was interpolated at 0%, 1%, 2%, 6%, 11%, 19% and 25%.

[2] - Firms were asked: How often do firms like yours nowadays need to make extra unofficial payments to public officials to influence the content of new laws, decrees or regulations. The responses ranged across always; usually; frequently; sometimes; seldom and never. Those responding sometimes or more frequently were classified as engaging in state capture.

[3] – Those firms that traded with the government were asked: How often do firms like yours nowadays need to make extra unofficial payments to public officials gain government contracts? The responses ranged across always; usually; frequently; sometimes; seldom and never. Those responding sometimes or more frequently were classified as engaging in public procurement corruption.

[25] Indeed, the little research that has been directed at the FCPA has simply taken it for granted that US firms are constrained in their ability to make corrupt payments and has addressed the question of how this affects the level of US FDI and the ability of US firms to compete with other foreign investors. Opponents argued that the Act, by effectively raising the cost of overseas business for US firms, would simply undermine their ability to compete with firms from other countries (not similarly constrained), with no compensating reduction in corruption. More sympathetic observers argued that the act could represent a useful commitment device to avoid bribery if US firms compete primarily with each other, or supply goods for which there is no effective substitute. The empirical evidence is mixed. Hines (1995) finds, in a dataset consisting only of aggregate data, that the growth rate of US FDI became more sensitive to corruption after 1977, which he interprets as due to the FCPA. However, by failing to control for the aversion of all FDI to corruption, this result is hard to interpret. In a more systematic study, Wei (1997) finds in a dataset of bilateral investment that the relationship between corruption and aggregate FDI is no different for US investors. In other words, US investors are averse to corruption in host countries, but no more so than investors from other countries.

[26] The data in this table is often based on small samples of firms, and as a result the measures are associated with a high level of standard error. This data is intended to motivate the investigation of the effect of legislation on the conduct of firms, rather than provide definitive evidence on the conduct of investors from particular countries.

To investigate the impact of anti-corruption legislation more systematically, we define three groups of source countries[27] of foreign investment from which firms are in principle increasingly[28] constrained by the OECD Convention or the FCPA[29]. The unregulated countries are those which have no legislation constraining the behavior of their firms in foreign countries. Since all OECD members (and 5 non-members) signed the Convention, the unregulated countries all come from outside the OECD. A second group consists of both those countries that have ratified the OECD Convention and those that have signed, but not yet ratified it at the time of the survey (but excluding the US).[30] US firms constitute a separate group since they have been subject to the FCPA for many years prior to signing and ratifying the OECD Convention.

To the extent that legislation leads to changes in behavior[31], we would hypothesize that the effect is likely to be most strong for the US firms, followed by the OECD convention countries. Table 12 examines the conduct of foreign investors and the relationship with anticorruption legislation, together with the corresponding results for the whole group of foreign investors and the domestic firms for comparison. [32] Given the smaller sample, we do not divide the countries according to the extent of corruption as in previous tables.

The hypothesis that legislation constrains the behavior of foreign investors would be supported by evidence showing increasing levels of corruption when reading across table 12 from the column depicting the results for US firms under the FCPA to the last column showing the results for domestic firms. Yet no such pattern emerges and, in fact, the US investors, a priori

[27] See Figure A2 in Appendix 2 for an illustration of the relationship between these categories.

[28] For the few firms in the BEEPS with multiple foreign investors from different countries, the firms were classified in the category corresponding to the *most constrained* of the foreign investors. Thus any firm with a US share was grouped with the US firms, any firm with a ratifier, but no US firm was classified as a ratifier, and so on.

[29] A fully convincing analysis of the effectiveness of legislation as a policy instrument for reducing corruption among foreign investors would require a comparison of behavior before and after the legislative change (After controlling for any other time-varying factors that could also be important). However, we utilize instead cross-sectional variation in anti-corruption legislation among source-countries to identify the impact of this legislation on the behavior of foreign investors in the transition economies. It should be borne in mind that as a result of the lack of a time dimension in our data our identification is less powerful (In particular we might accept the hypothesis that legislation has a significant impact on behavior, when in fact this finding is due to other unobserved country characteristics that are correlated with the propensity of firms to engage in corruption.), and for this reason the results are preliminary.

[30] The precise rules concerning the coming into force of the Convention can be found at http://www.oecd.org. For our purposes it is sufficient to note that the Convention entered into force for the first group of countries on February 15th 1999, and for other countries subsequently as it was ratified domestically. Since the BEEPS was implemented during the summer of 1999, we identify only this first group of countries as governed by the Convention during the survey.

[31] We treat the existence of legislation governing firms from a particular country as exogenous to the behavior foreign investors from that country. More problematic is the fact that the OECD Convention only came into force recently for the first group of implementing countries. As a result, since our data were collected in 1999, it could be objected that it is simply too soon to detect the ultimate impact it will have. In response we offer two arguments. Firstly, although this is undoubtedly true, one would still expect to observe some impact, even if significantly less than the eventual maximum. Secondly, in addition to examining the impact of the OECD Convention, we also identify the impact of the FCPA, which has been in force for over twenty years and is surely as effective now as it is ever likely to be.

[32] It should be noted that the FCPA and the OECD Convention which was modeled on the FCPA contain an exception for "facilitation payments". Since these payments are very similar to our definition of administrative corruption, there is less theoretical reason to suppose that either US Investors or OECD Ratifiers should be more constrained with respect to this form of corruption.

the most constrained, do not exhibit lower levels of corruption than either OECD Convention countries or the unregulated countries, and in some cases appear to be significantly higher.

Table 12: Legislation in the Source Country and Corrupt Behavior

FDI Source Country (by anti-corruption legislation)	Unregulated Countries	OECD Convention Countries*	FCPA (US)	All FDI Firms†	Domestic Firms
Total Bribes Paid	4.7	2.3	3.6	2.8	3.0
Share of Captor Firms	16.7	9.8	16.7	11.5	9.0
Share of Kickback Firms	31.8	27.3	42.9	29.2	25.2
Number of Observations	60	310	63	471	3148

*excludes US firms

Table 13 makes these claims more statistically precise, by computing pair wise significance tests for the difference between the level of corruption among the various groups.These pair wise tests confirm that neither US firms nor firms from the OECD Convention countries exhibit a lower propensity than firms from unregulated countries to engage in these common forms of corruption, though total bribe payments made firms from OECD Convention countries are generally lower. US firms do not exhibit significantly lower levels of corruption, and, based from this dataset in some cases, exhibit systematically *higher* levels.

Table 13. Legislation in the Source Country and Corrupt Behavior (Pair wise Comparisons)

	Total Bribes Paid (% of annual revenues)	Share of Captor Firms	Share of Kickback Firms
Unregulated Countries	4.7**	16.7	31.8
OECD Convention Countries	2.3	9.8	27.3
Unregulated Countries	4.7	16.7	31.8
FCPA (US)	3.6	16.7	42.9
OECD Convention Countries	2.3	9.8	27.3
FCPA (US)	3.6**	16.7	42.9

Source: BEEPS
**pair wise t-test significant at 5% level; * pair wise t-test significant at 10%

Tables 14 examines these findings econometrically, controlling simultaneously for other factors that determine the propensity to engage in corruption, including firm characteristics and country dummies[33] for the location of the investment. We include dummy variables for the regulatory variables – (FCPA, OECD Ratification Country, OECD Signatory Country), in which the base category includes the unregulated firms and all those not covered by the other dummies. In general we find the same pattern of results. Given that two of the dependent variables (likelihood to capture and to kickback) are probabilistic, probit specifications were used, while OLS was performed in the specification where total bribes paid was used as the dependent variable.

[33] Armenia, Belarus, Bulgaria and Lithuania were excluded from the probit analysis since the outcome did not vary among foreign investors in these countries and the estimates are not identified.

Table 14: Legislation in the Source Country and Corrupt Behavior (Econometric Results)

		Dependent Variables:		
		Total Bribes Paid	**Propensity to Capture**	**Propensity to Kickbacks**
Size	Small	0.021**	-0.062	-0.07
		(2.39)	(-0.19)	(-0.18)
	Medium	0.022**	0.234	0.32
		(2.82)	(0.81)	(0.86)
	(Large)			
Origin	De Novo	-0.009	0.402	0.77
		(-0.96)	(1.19)	(1.49)
	Privatized	-0.004	0.300	-0.02
		(-0.39)	(0.82)	(-0.04)
	(State)			
FDI Source	FCPA (US)	0.002	0.207	0.53
		(0.26)	(0.69)	(1.27)
Country	OECD Ratifier	-0.010	-0.107	0.01
		(-1.32)	(-0.41)	(0.02)
	OECD Signatory	-0.005	-0.015	0.34
		(0.50)	(-0.05)	(0.78)
	(Unregulated)			
Number of observations		299	314	160
Empirical Model		OLS	Ordered Probit	Ordered Probit
Pseudo R2		0.27	0.07	0.12

Country dummies (for country receiving the investment) were included but not reported.
** significant at 5% level; * significant at 10% level.

Conclusions

Though the mechanisms by which corruption hinders FDI are by now well known, comparatively little is known about the behavior of FDI firms in corrupt environments. The results are sobering. Corruption not only reduces FDI inflows but attracts lower quality investment in terms of governance standards. In misgoverned settings, rather than importing higher standards of governance, FDI firms would appear to magnify the problems of state capture and procurement kickbacks, while paying a lower overall bribe burden than domestic firms. FDI firms undertake forms of corruption that are suited to their comparative advantages, as "local" FDI with joint venture partners tend towards state capture, while "multi-national" FDI is more likely to rely on more focused procurement kickbacks. It is critical to recognize, from a political economy perspective, that these forms of corruption generate substantial gains to FDI firms, thereby challenging the premise that these firms are coerced and making it that much more difficult to develop effective constraints on such behavior.

Preliminary evidence on transnational legal restrictions to prevent bribery, such as the US Foreign Corrupt Practices Act and the much more recent OECD Convention on Bribery of Foreign Public Officials, suggests that they have not led to higher standards of corporate conduct among foreign investors bound by their provisions. Though it is clearly too early to expect results from the OECD Convention, the experience of the FCPA, in effect for over 20 years, does not appear to be encouraging on the basis of the evidence provided by this sample of

investors in transition economies. This suggests that the OECD Convention will need to focus much more attention on effective implementation of its transnational restrictions on bribing public officials.

These findings should not be read as a case against foreign investment. Indeed, as we have argued elsewhere, state capture is created and maintained through restrictions on competition and entry in strategic sectors. Encouraging greater competition in the economy is essential in creating a more competitive market for influence, which should place constraints on the ability of any small group of actors to capture the state. Our findings confirm that FDI firms can contribute to this monopolization of influence through corruption, as much as, if not more so, than domestic firms. Efforts to enhance competition by attracting a wider and more diverse set of FDI firms is a critical component in broader strategic framework to fight state capture and corruption.

Policy measures to tackle corruption among foreign investors must address the powerful incentives these firms have to engage in rent-seeking corruption, while providing incentives and venues for channeling their legitimate demands to have some influence over public decisions that affect them.[34] Transnational restrictions will play a role in establishing norms of behavior among foreign investors, but there are strong limitations to their effective implementation. More important will be to address the lack of accountability, transparency and competition in the domestic market for political influence that enables such forms of corruption.

[34] Such activities are accepted as a necessary part of democratic politics in advanced countries and to quote Rose-Ackerman (1999), "One can complain about the importance of wealth and large corporations in the political life of developed countries, but at least well documented lobbying activities and campaign contributions are preferable to secret bribes in maintaining democratic institutions."

Appendix 1: Measuring Forms of Corruption and Classifying Countries

Methods of measuring and comparing levels of total bribes paid across countries are already well-established. The BEEPS survey follows the convention of previous surveys around the world which ask firm managers to estimate the proportion of annual revenues typically paid by "firms like yours" in unofficial payments to public officials.[35] Table A1 records the average level of such payments in each country.

Measuring state capture as a form of corruption distinct from the above is more complex as there are few existing indicators in the empirical literature on corruption. One key measurement problem is that the extent to which a set of state institutions is captured is not necessarily a function of the number of firms that engage in state capture. In an extreme case, a single powerful monopoly could generate a much higher level of state capture than a larger number of less powerful firms competing to buy off state officials. To compare state capture across firms and across countries, we therefore need both to identify the number of firms that engage in it and to measure the extent of the impact on all firms from the capture of the state by a subset of those firms. Consequently, we use two measures of state capture: 1) an *impact measure* of the extent of the capture economy defined as the share of firms in each country which report a direct impact on their business from the purchase of laws, decrees and regulations by firms through private payments to public officials, and 2) a *behavioral measure* that identifies captor firms, i.e. those that report having made private payments to public officials for the purpose of influencing the contents of laws, decrees or regulations.[36] The impact measure is used to construct the cross country index presented in Table A1. The behavioral measure was reported is reported in Table 2 above and was used to investigate differences in the propensity to engage in state capture at the firm level.

To construct the index of the capture economy, firms were asked to assess the extent to which the following six types of activities have had a direct impact on their business:[37]

- the sale of Parliamentary votes on laws to private interests;
- the sale of Presidential decrees to private interests;

[35] The question was posed in terms of firm revenues rather that profits since estimates of revenues are more reliable. In addition the question was posed indirectly in terms of "firms like yours" to reassure respondents that their responses would not be attributable directly to their firm. We take total payments as a proxy for administrative corruption since evidence from the BEEPS suggests that the majority of bribe payments are for this purpose.

[36] Of course, the impact measure of state capture is based on the speculation of firms that other firms are engaging in improper behavior and thus less reliable than the behavioral measure. The empirical analysis of the effects of state capture on firm-level performance below will be based on the more reliable behavioral measure. However, we believe that the impact measure still provides a useful relative indicator of perceptions of the impact of state capture across countries.

[37] The decision to include the sale of court decisions to private interests and the mishandling of Central Bank funds as elements of state capture requires some explanation. Courts are generally seen as institutions that implement existing laws as opposed to making them, though the precedent-setting function of courts can blur these boundaries. In the transition countries, where legal systems are still in the nascent stages of development, courts can be seen as playing a more formative role in the development of the legal framework. As regards the Central Bank, the institution's role in setting monetary policy and creating the regulatory framework for the developing financial system also blurs the distinction between the formation and implementation of rules. While recognizing the difficulty of drawing concrete boundaries within any particular institution, we have chosen to incorporate these institutions within the category of state capture as a result of the unique nature of the transition period. Yet it is important to note that removing these components from the index of state capture does not change substantially the ranking of countries on state capture presented in table 2.

- Central Bank mishandling of funds;
- the sale of court decisions in criminal cases;
- the sale of court decisions in commercial cases;
- illicit contributions paid by private interests to political parties and election campaigns.

The percentage of firms in each country which responded that the respective form of state capture has had a significant impact on their business are classified as affected by state capture. By averaging across all of the categories an aggregate index of the extent of the capture economy is presented in Table A1.

The measure of the extent of public procurement kickbacks is, in the terminology above, a direct behavioral measure, based on the assessment of the frequency with which a firm that does business with the government is required to make unofficial payments to gain government contracts. The index in Table A1 is constructed as the proportion of firms in each country *that trade with the state* and were required to make unofficial payments to win business.

Table A1 also groups the transition economies into 2 categories according to whether the level of corruption is high or medium. This is not intended to imply that there are no interesting or relevant differences between countries in each group, but only represent the broad tendency. These binary measures of the extent of corruption will be used in some of the later sections of the paper.

Table A1 – Measuring the Extent of Corruption in the Transition Economies

Country	Total Bribes Paid (as a % of annual revenue)[1]		Extent of State Capture[2]		Extent of Public Procurement Corruption[3]	
Albania	4.0	High	16	Medium	51	High
Armenia	4.6	High	7	Medium	26	High
Azerbaijan	5.7	High	41	High	52	High
Belarus	1.3	Medium	8	Medium	5	Medium
Bulgaria	2.1	Medium	28	High	13	Medium
Croatia	1.1	Medium	27	High	26	High
Czech Republic	2.5	Medium	11	Medium	43	High
Estonia	1.6	Medium	10	Medium	28	High
Georgia	4.3	High	24	High	18	Medium
Hungary	1.7	Medium	7	Medium	15	Medium
Kazakhstan	3.1	High	12	Medium	21	Medium
Kyrgyzstan	5.3	High	29	High	19	Medium
Latvia	1.4	Medium	30	High	22	Medium
Lithuania	2.8	High	11	Medium	15	Medium
Moldova	4.0	High	37	High	9	Medium
Poland	1.6	Medium	12	Medium	32	High
Romania	3.2	High	21	High	39	High
Russia	2.8	High	32	High	22	Medium
Slovakia	2.5	Medium	24	High	35	High
Slovenia	1.4	Medium	7	Medium	27	High
Ukraine	4.4	High	32	High	33	High
Uzbekistan	4.4	High	6	Medium	24	Medium
Overall	3.0		20		26	

Source: Hellman, Jones and Kaufmann (2000) based on BEEPS.

Notes:

1 – Firms were asked: What percentage of revenues do firms like yours pay per annum in unofficial payments to public officials? The responses ranged across 0%; less than 1%; 1 to 2%; 2-10%; 10 to 12%; 12 to 25%; over 25%. The variable was interpolated at 0%, 1%, 2%, 6%, 11%, 19% and 25%.

2 - Firms were asked whether state capture in each of the following dimensions (parliamentary legislation, presidential decrees, central bank, criminal courts, commercial courts, political parties) had no impact; minor impact; significant impact or very significant impact on their business. Those firms that reported a significant or very significant impact were classified as *affected by state capture* in that dimension. The state capture index is calculated at the unweighted average of the proportion of firms in each country affected by each of the six components of state capture.

3 – Those firms that traded with the government were asked: how often do firms like yours nowadays need to make extra unofficial payments to public officials gain government contracts? The responses ranged across always; usually; frequently; sometimes; seldom and never. Those responding sometimes or more frequently were classified as engaging in public procurement corruption.

Appendix 3 – The BEEPS data by the legislative status of the source country

Table A2 summarizes the BEEPS sample of foreign investors. For completeness the table lists all the signatory countries, whether or not the BEEPS sampled foreign investors from these countries, together with the number of data points in the BEEPS from each country[38]. The signatories are further classified as OECD Member countries and according to their ratification status at the time of the collection of the BEEPS data.[39]

[38] This consists of all 29 OECD member countries together with Argentina, Brazil, Bulgaria, Chile and the Slovak Republic. The BEEPS contains firms from all 34 Signatory countries except Argentina, Australia, Brazil, Chile, Luxembourg, Mexico and New Zealand.

[39] This data can be found at (http://www.state.gov/www/issues/economic/bribery_2000_rpt.pdf)

Table A2 – Signatories of the OECD Convention and the BEEPS sample

Country	OECD Member	Ratification of Convention	Firms in the BEEPS†
Argentina	No	No	0
Australia	Yes	No	0
Austria	Yes	No	22
Belgium	Yes	No	5
Brazil	No	No	0
Bulgaria	No	Yes	1
Canada	Yes	Yes	2
Chile	No	No	0
Czech Republic	Yes	No	8
Denmark	Yes	No	4
Finland	Yes	Yes	15
France	Yes	No	21
Germany	Yes	Yes	87
Greece	Yes	Yes	13
Hungary	Yes	Yes	1
Iceland	Yes	Yes	1
Ireland	Yes	No	6
Italy	Yes	No	13
Japan	Yes	Yes	5
Korea	Yes	Yes	1
Luxembourg	Yes	No	0
Mexico	Yes	No	0
Netherlands	Yes	No	19
New Zealand	Yes	No	0
Norway	Yes	Yes	4
Poland	Yes	No	5
Portugal	Yes	No	0
Slovak Republic	No	No	1
Spain	Yes	No	1
Sweden	Yes	No	20
Switzerland	Yes	No	13
Turkey	Yes	No	12
UK	Yes	Yes	30
USA	Yes	Yes	63
Ratification Country	Yes	Yes	150
Signatory Country	Yes/No	No	223
Unregulated Country	No	No	60

Source: OECD, United States Department of State
†The country of origin was not identified for 38 firms and these are not included.

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