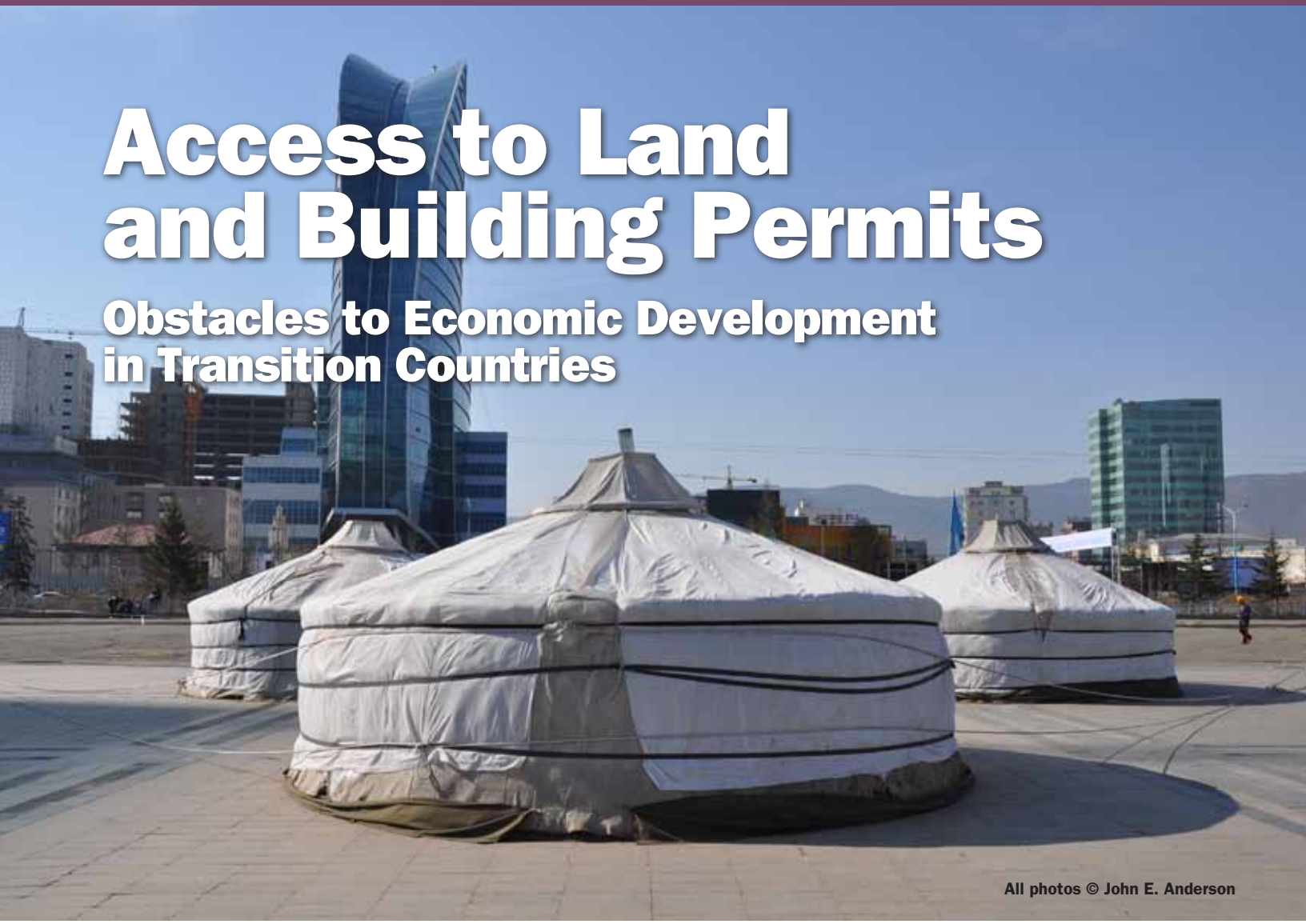
Access to Land and Building Permits

Obstacles to Economic Development in Transition Countries



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Traditional Ger homes are common in the City of Ulaanbaataar, Mongolia, where new high-rise office buildings are being built.

John E. Anderson

Limited access to land is a substantial hindrance to economic development in many transition economies. Additionally, when the ability to gain appropriate permits to use the land is subject to delays, bribes, or corruption, the efficiency of the land allocation mechanism is compromised and overall economic growth is constrained.

In this article I summarize findings from empirical models of land access, permit activity, time costs, and corruption, using both country and firm characteristics as explanatory variables. Data come from the European Bank for Reconstruction and Development (EBRD)–World Bank Business Environment and Enterprise Performance Survey (BEEPS 2009) for business enterprises in transition economies of Europe and Central Asia, supplemented with country-specific economic measures and EBRD indices of reform. Results indicate that limited access to land and difficulty in obtaining permits are substantial impediments to economic development, and these conditions clearly create an environment in which bribery flourishes.

Land Markets in Transition Economies

The context of this study is analysis of firm-level performance in transition economies where access to land has been subject to varying types of land privatization regimes in the past 20 years since independence. Stanfield (1999, 1–2) provides a helpful strategy for thinking about how land markets have been created in such economies, recognizing that "Markets in land linked to markets in capital and labor are central to market economies."

Indeed, land market liberalization must be linked to liberalization of capital and labor markets

simultaneously if transition countries are to advance their economies. Stanfield also suggests that many existing institutions of land administration must make radical changes to support the privatization of land rights. Defining and enforcing property rights and providing transparent and efficient land registration mechanisms free of bribery and corruption are essential to supporting economic development (Estrin et al. 2009).

Boycko, Schleifer, and Vishny (1995) suggest two ways that access to land and real estate is critical to restructuring a transition economy and promoting economic development in general. First, land and buildings are complementary to plants and equipment, which typically have already been privatized in these countries. Until land and buildings are also privatized, control of these productive assets continues to be held jointly by local politicians and managers, leading to an inefficient ownership structure. Second, privatization of land and real estate provides firms with a source of capital for restructuring their business investments. For example, a former state-owned enterprise that has surplus land and buildings can sell those assets to raise funds for other investments. However, Boycko, Schleifer, and Vishny (1995, 136) conclude, "Because it serves local governments so well, politicization of urban land and real estate persists, and slows down the restructuring of old firms and the creation of new ones."

Deininger (2003) makes the case that well-functioning land markets foster general economic development, citing four key tenets. First, in many developing economies the distribution of land ownership prevents operational efficiency. If land ownership cannot be transferred easily, or if land use is not separable from land ownership, then there may be a mismatch between the owners and the most efficient land users. If land markets are allowed to transfer land use from less productive to more productive uses, then overall economic efficiency is enhanced. Second, transferable land use rights can allow rural residents to move into the nonagricultural sector of the economy, which can help boost the output of that sector and the overall economy. Third, by making land use rights transferable the ownership and use of land can be separated, facilitating more efficient land use. Fourth, a well-developed land market allows land transfers to occur with low transaction costs, which frees up credit in the economy.

Economic Consequences of Limited Access to Land

Firms use a combination of land, labor, and capital inputs to produce a given quantity of output. Consider a situation where the first input is land, for which the firm faces a constraint on the quantity available, but the other two inputs are freely available in any quantity needed. In a competitive market, a profit-maximizing firm uses additional units of any freely available input until the value of the additional product derived from the last unit of the input used equals its market price. In this case, however, if the available land is constrained, the firm would purchase a less than optimal amount. Consequently, the firm would not achieve an optimal input combination, leading to an inefficient allocation of resources.

Even if the quantity of land is not constrained, obstacles to obtaining building, construction, or use permits may impede the conduct of business. In such circumstances, the amount of land may be accessible, but the permitting process increases its effective price. Once again, the firm is forced to operate inefficiently.

In either situation one could ask, "What would the firm be willing to pay in order to be able to operate most efficiently?" Clearly, the land constraint or permit restriction imposes a cost on the firm and reduces its efficiency, and the firm presumably would be willing to pay a bribe to a government official to gain access to additional land or obtain a permit to use the available land. Hence, limited access to land and permits can encourage informal payments or bribes. Carlin, Schaffer, and Seabright (2007) have suggested that managers' responses to survey questions regarding the business environment in which they operate and the constraints they face can measure the hidden implicit cost of those constraints.

Country and Firm Data and Survey Results

The primary data for this study are 15 country-specific characteristics from various sources and 13 firm characteristics from the 2009 round of the EBRD-World Bank BEEPS, which is conducted every three years. The survey covers a broad range of topics related to the business environment and performance of firms as well as questions on business-government relations. A total of 11,999 business enterprises in 30 transition economies of Europe and Central Asia are represented. These

A McDonald's restaurant thrives on the main street through Chisinau, Moldova, one of the transition countries where firms report the most severe land access obstacles in the BEEPS data.

data have been used extensively in the transition and development literatures, most recently in Commander and Svenjar (2011). Table 1 lists the country and firm characteristics and indicates their effects on five aspects of economic development.

Access to Land as an Obstacle to Economic Development

The BEEPS questionnaire asks firms about a number of potential obstacles to efficient operation, including access to land. A key question asks, "Is access to land No Obstacle, a Minor Obstacle, a Moderate Obstacle, a Major Obstacle, or a Very Severe Obstacle to the current operations of this establishment?" Survey respondents may also respond "Do not know" or "Does not apply." Overall, 43 percent of the firms surveyed reported land access as an obstacle to some extent. There is wide variation in firm responses across the countries in the sample, however, with the share of firms reporting land access as an obstacle ranging from a low of 6 percent in Hungary to a high of 62 percent in Kosovo (figure 1).

Nine of the 15 possible country-specific explanatory variables have a statistically discernable effect on the likelihood that a firm will report land access as an obstacle (table 1, column 1). Firms were more likely to report land access obstacles in CIS countries (Commonwealth of Independent States, or former Soviet republics) and in faster growing countries. The CIS effect is particularly important, with firms in those countries approximately 28 percent more likely to report land access obstacles than comparable firms in non-CIS transition countries. In countries with a high VAT rate, firms were less likely to report access to land as an obstacle.

Among the EBRD indices of reform listed in table 1, the mixed likelihood of increases and decreases on these measures may indicate that uneven reforms across sectors of the economy can have opposing effects on firms' experiences. If land privatization and policies providing land access are not moving in tandem with financial market reforms and broader privatization reforms, such a pattern of mixed signs may emerge.

Firm characteristics associated with a greater likelihood of land access obstacles include competition against unregistered or informal firms, subsidization of the firm by the government, the number of employees, and limited partnership

TABLE 1
Significant Factors Affecting Reported Obstacles Due to Access to Land, Permits, and Bribes

	1. Access to Land as an Obstacle	2. Severity of Land Access as an Obstacle	3. Number of Permit Applications	4. Days of Effort in Permit Applications	5. Bribe Frequency
Country Factors					
Commonwealth of Independent States (CIS)	Increase	Increase	Increase	Increase	
Corporate tax rate				Decrease	Increase
EBRD index of banking sector reform	Increase	Increase			
EBRD index of competition policy	Decrease			Decrease	Increase
EBRD index of enterprise reform			Increase	Increase	Decrease
EBRD index of foreign exchange and trade liberalization		Decrease	Increase	Increase	Decrease
EBRD index of infrastructure reform	Increase			Increase	Increase
EBRD index of price liberalization		Increase	Decrease	Decrease	Increase
EBRD index of large-scale privatization	Decrease				
EBRD index of small-scale privatization	Increase	Increase			Increase
GDP growth rate	Increase		Increase		Increase
GDP per capita			Decrease	Decrease	
Private sector share of GDP	Decrease		Decrease		Increase
Size of agricultural sector			Decrease	Decrease	Decrease
VAT rate	Decrease		Decrease	Decrease	
Firm Factors					
Competition against unregistered or informal market firms	Increase				Increase
Female manager			Decrease	Decrease	
International quality certification		Increase	Increase	Increase	
Interviewer suspicions	Increase	Decrease		Decrease	Decrease
Joint venture with a foreign partner					Increase
Limited partnership legal status	Increase			Decrease	
Manager's experience	Decrease			Decrease	Decrease
Manufacturing sector	Decrease		Decrease		Decrease
Number of employees	Increase	Decrease	Increase	Increase	
Shareholding company traded on stock market legal status				Decrease	
Sole proprietorship legal status			Decrease	Decrease	
State-owned enterprise		Increase			
Subsidized by government	Increase		Increase		

Notes: **Increase** = factor increases likelihood; **Decrease** = factor decreases likelihood; **blank** = not applicable

legal status. Of particular note are the firms that report they compete against informal market firms and those that are subsidized by the government. These two characteristics increase the reported probability of land access obstacles by 8 and 6 percent, respectively.

Presumably, state-subsidized firms also report that they compete against unregistered or informal market firms, so the combined increase in probability may be approximately 14 percent. On the other hand, characteristics associated with lower probabilities of reporting land access as an obstacle include operating in the manufacturing sector or having a more experienced manager.

Beyond merely stating that land access is an obstacle, firms were asked to report on the severity of the obstacle (figure 2). On a scale from zero to 4 (with zero indicating no obstacle and 4 indicating a very severe obstacle), the overall mean for the 5,206 firms responding to this question is 2.47. When we correct for sample selection bias, we take into account that firms reporting land access as an obstacle may be systematically different from those not reporting an obstacle. Country and firm characteristics with statistically significant positive and negative effects of severity are shown in table 1, column 2.

The BEEPS also includes a way for the interviewer to respond to concerns about truthfulness in the survey responses: "It is my perception that the responses to the questions regarding opinions and perceptions (were): Truthful, Somewhat truthful, Not truthful." Interviewer suspicions are associated with a greater likelihood of reporting land access as an obstacle (about a 3 percent greater probability). For example, among firms reporting land access as an obstacle, interviewer suspicions were associated with a significantly less intense reported obstacle. Apparently, suspicions are raised in the mind of the survey recorder when the firm representative is being overly optimistic relative to the recorder's expectations.

FIGURE 1
Percentage of Firms in Transition Countries Reporting Access to Land as an Obstacle

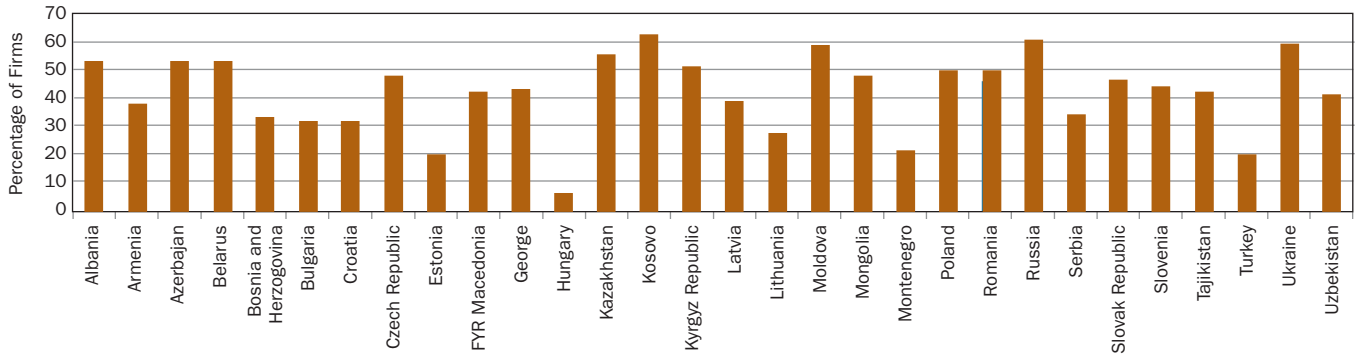
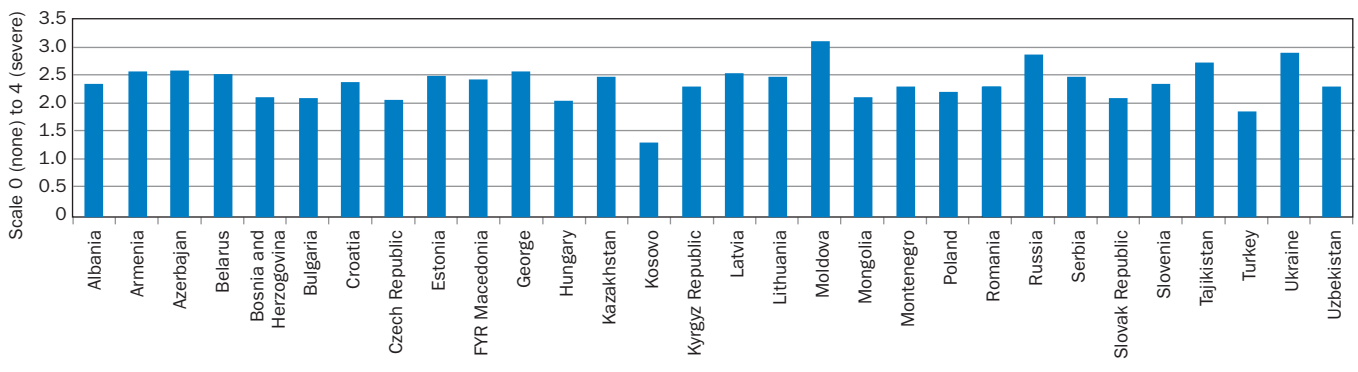


FIGURE 2
Severity of Land Access as an Obstacle to Firms in Transition Countries



Permit Seeking

In order to use the land to which it has access, a firm must be able to obtain relevant permits that can be crucial to the production process. By impeding land use, construction, or business occupancy permits, government officials may limit effective access to land. The BEEPS includes questions regarding the number of permits the firm obtained during the previous two years, the number of working days the staff spent on procedures related to obtaining those permits, formal and informal payments for permits, and waiting periods from application to receipt of permits. One question asks, "How many permits did this establishment obtain in the last two years?" Another asks, "How many working days were spent by all staff members on the procedures related to obtaining the permits applied for over the last two years?"

Responses to these questions are used in modeling both the number of permit applications and the related time costs (figures 3 and 4). About 34

Firms in Turkey report one of the lowest rates of land access as an obstacle in the BEEPS data, even though topographic features in Istanbul would appear to make access difficult.

FIGURE 3
Mean Number of Permits Obtained by Firms in Transition Countries, 2007–2008

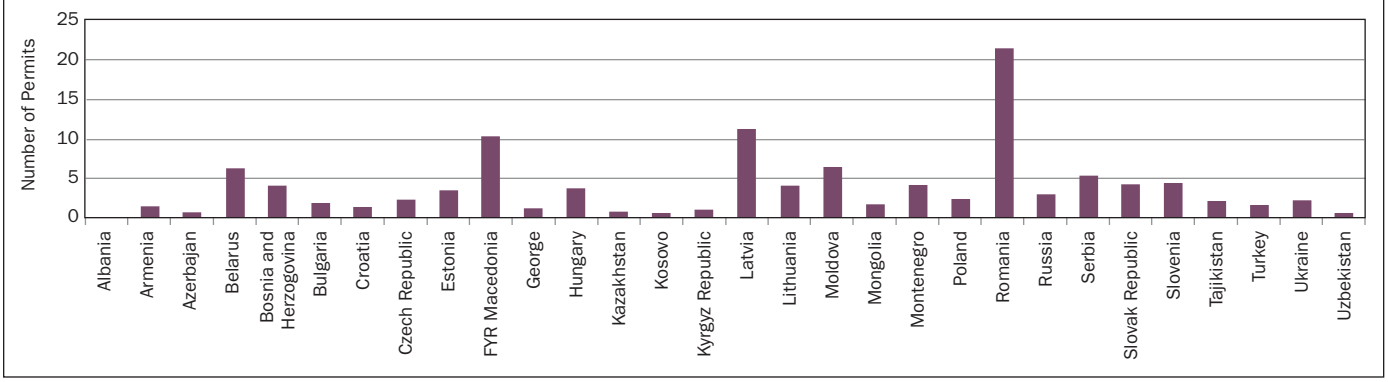
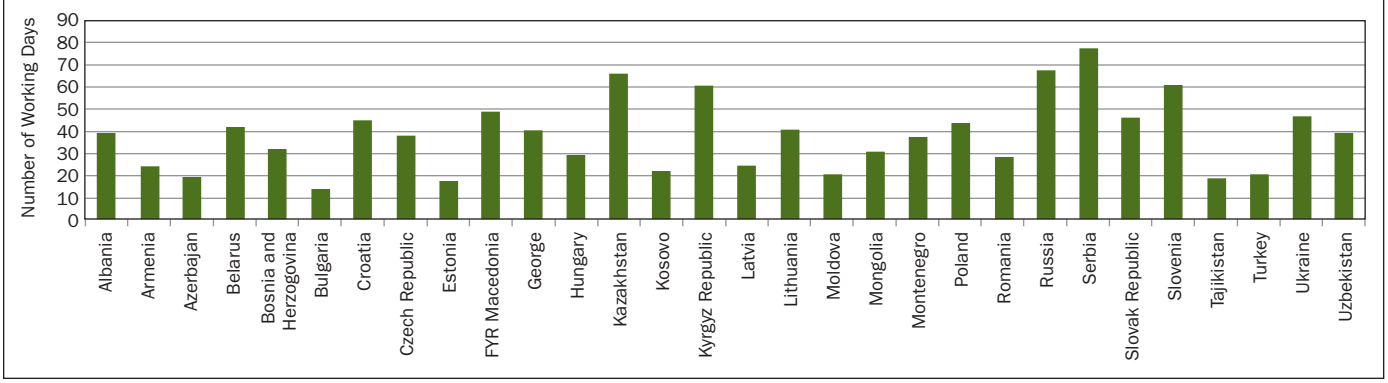


FIGURE 4
Mean Number of Working Days Spent on Permit Applications by Firms in Transition Countries



An ancient Buddhist temple compound is being surrounded by new high-rise construction in Ulaanbaatar, Mongolia, the transition country with the highest reported bribe frequency in the BEEPS data.

percent of the businesses in the survey applied for permits, with a mean number of 3.9 applications, a mean number of 38.0 working days of effort, and a mean waiting time of 45.9 days. There is a very high variance among countries in the number of permits applied for, the days of effort expended, and the waiting time for permits.

The model of the number of permit applications reflects the interaction of supply and demand factors. A firm demands permits as it plans to develop its property while the government supplies permits according to its rules. Nine country characteristics have a significant effect on the number of permit applications requested, with four factors increasing the number and five factors decreasing it (table 1, column 3).

To understand time costs involved for firms seeking permits, the modeling approach involves a first-stage model to control for the selection bias that may exist with systematic differences between firms applying for permits and those that do not apply. The second-stage model results for permit time cost show that ten country-specific variables have statistically discernable effects—four factors increase staff time expended and six factors reduce staff time (table 1, column 4). Two firm-specific factors significantly increase days of effort, while six reduce the number of days of effort.

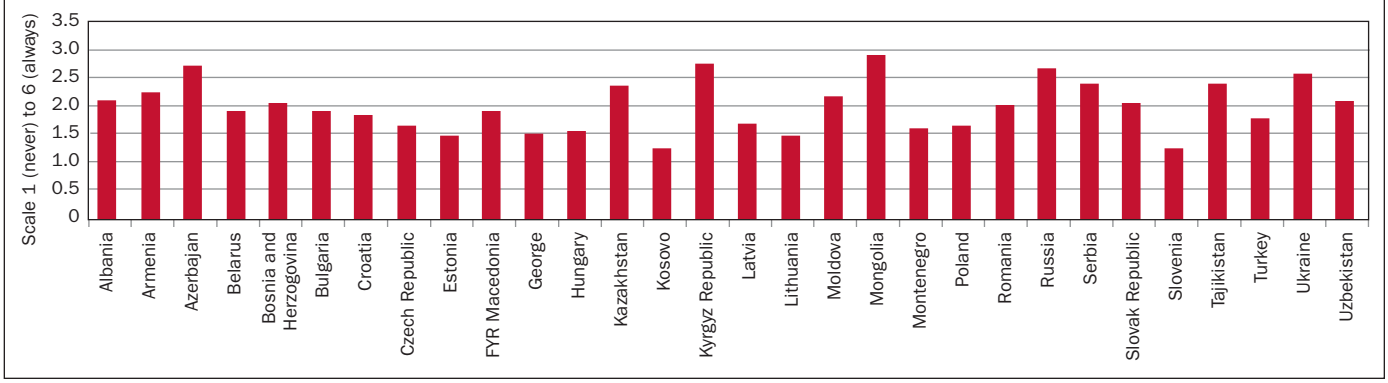
Bribes to Government Officials

The BEEPS also asks a question about informal payments to government officials: "Thinking about officials, would you say the following statement is always, usually, frequently, sometimes, seldom or never true?...It is common for firms in my line of business to have to pay some irregular 'additional payments or gifts' to get things done…" Responses are coded on a scale of 1 to 6, with 1 being never and 6 being always (figure 5). In a simple regression model of the frequency of bribes, ten country-specific explanatory variables and five firm-specific variables have statistically discernable effects (table 1, column 5).

Summary and Conclusions

Limited access to land and permits to use that land can contributes to economic inefficiency and corruption in transition countries. In this research I have estimated empirical models of firms reporting limited access to land and permits and instances

FIGURE 5
Mean Frequency of Bribes Reported by Firms in Transition Countries



of bribery as obstacles to economic development. Those models indicate that both country and firm characteristics affect land access, permit access and effort, and bribery.

At the country level, higher per capita GDP systematically reduces the likelihood of firms seeking permits, the number of permits, and the time cost to obtain them. That implies that more developed economies require fewer permits and present lower permit obstacles, thereby reducing costs. Furthermore, the higher the GDP growth rate the greater the likelihood that firms experience limited access to land and the need to apply for permits, as well as the likelihood that firms are asked to pay bribes. This may indicate bottlenecks in the development process as firms in CIS countries are much more likely to report that access to land is an obstacle. They also are required to apply for more permits, and they incur much larger time costs related to permit applications.

Higher corporate tax rates do not affect access to land or permits, but do increase the likelihood of being asked to pay bribes. Firms in more highly privatized economies report fewer problems with access to land and fewer permits needed, but more problems related to bribery. Indices of privatization and reform are often significant, but have both positive and negative impacts. This may reflect uneven reform processes in which liberalization in one sector of the economy does not have full impact due to constraints in other sectors.

Firms competing against others that are unregistered or operate in the informal market are more likely to report limited access to land, more likely to seek permits and incur time costs related to permits, and more likely to be asked to pay bribes. Firms subsidized by the government or those with larger numbers of employees also are more likely to report limited access to land, seek more permits, and incur larger permit time costs.

The primary lesson to be learned from this research is that limited access to land is a serious obstacle to economic development in transition countries. Furthermore, the ability to obtain permits to effectively use that land is crucial. Limited access to land and permits not only hinders economic development, but also contributes to a culture of bribery and corruption. Countries wishing to speed their development process should therefore remove impediments to land access by fostering markets for land and land use rights, and should also remove unnecessary obstacles in the permit process. The result will be a more efficient use of land and a more dynamic economy.

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