

# How Do Investment Climate Conditions Vary Across Countries, Regions and Types of Firms?

Mary Hallward-Driemeier and David Stewart\*  
DECWD

Background paper prepared for the  
*World Development Report 2005: A Better Investment Climate for Everyone*

Revised, September 2004

**Abstract:** This paper draws on the World Bank's new sources of data, the results of surveys of over 30,000 firms in 53 developing countries and Doing Business indicators in 130 countries. The World Bank's Investment Climate Surveys provide new insights into both the perceptions of local entrepreneurs about constraints they face, but also objective measures of the quality of infrastructure, regulatory burdens, crime, access to finance, and the security of property rights. Doing Business indicators give the costs of fully complying with various regulatory procedures. Together, the formal requirements and the actual experience of different types of firms illustrate the scope for investment climate improvements. The gains, in terms of increased productivity, investment and job growth are considerable. That smaller firms face costs that are up to a third higher underscores that improving investment climate conditions will disproportionately benefit small firms.

---

\* The assistance of Giuseppe Iarossi, Giovanni Tanzillo, and Veselin Kuntchev in compiling many of the individual country datasets is much appreciated. The views expressed are those of the authors and do not necessarily reflect official views of the World Bank.

In making production, investment and employment decisions, entrepreneurs care about the security of their property rights, the potential costs imposed by regulations, the extent of corruption, and the quality of infrastructure. These are all part of the investment climate, the conditions that shape the incentives and opportunities facing firms. And all are influenced by the quality of government policies and behaviors. While the importance of improving the investment climate is increasingly recognized, to date it has been difficult to measure many aspects in a consistent and comparable manner.<sup>1</sup> The World Bank has contributed to the effort to collect and make available better data on the investment climate through two complementary efforts, the Investment Climate Surveys and the Doing Business database.

Researchers have looked at various aggregate indicators of a country's institutional and policy environment, such as the rule of law, corruption, openness to trade, legal origins, and financial sector depth.<sup>2</sup> This work has underscored the importance of secure property rights and good governance to economic growth.<sup>3</sup> But relying on aggregate indicators and cross-country regressions provides limited insights into the heterogeneity of institutional arrangements across and within countries—or the impact of those arrangements on the investment decisions of different types of firms.<sup>4</sup> It is also difficult to distinguish the effects of specific policy actions from the broader background institutions that influence the content and impact of those actions.<sup>5</sup>

The Investment Climate Surveys carried out by the World Bank with partners in 53 developing countries provide new insights into conditions facing firms. The surveys, based on large random samples of firms, give firm-level experiences with specific regulatory burdens, sources of finance, the quality and access to infrastructure services, security of property rights and corruption. The surveys also provide measures of firm performance, allowing for the impact of investment climate conditions on investment rates, growth and employment to be assessed.

This survey effort was expanded for the World Development Report 2005. Over 3250 micro and informal firms were surveyed using a similar instrument to facilitate comparisons of the investment climate facing smaller as well as larger firms. The countries surveyed are Bangladesh, Brazil, Cambodia, Guatemala, India, Indonesia, Kenya, Pakistan, Senegal, Tanzania and Uganda.

Indicators from the Doing Business database give the time and cost requirements if firms fully complied with certain regulatory procedures. The database covers 130 firms and now has two years of data. Topics include registering a business or property, enforcing contracts and resolving bankruptcies.

---

<sup>1</sup> Burgess and Venables (2003).

<sup>2</sup> BERI database, Kaufmann, Kraay, and Mastruzzi (2003) etc.

<sup>3</sup> Easterly (2001), Acemoglu and Johnson (2003); Acemoglu, Johnson, and Robinson (2002); Acemoglu, Johnson, and Robinson (2001b), Dollar and Kraay (2003), Barro (1997); Djankov and others (2003); Levine (1997); Sala-i-Martin (1997), Djankov and others (2002).

<sup>4</sup> Burgess and Venables (2003).

<sup>5</sup> Pritchett (2004).

The two sources of information complement each other. Benchmarking the content of laws and regulations helps identify which formal requirements are particularly onerous. Looking at the variations in how regulations are experienced shows how these regulations are implemented and their actual costs to firms. In many countries there are significant gaps between what is on the books and what is implemented – with corresponding opportunities for corruption. The constraints facing firms can also vary by type of firm. These two sets of information can help policy makers identify priorities for reform and monitor progress.

While the paper will draw on both datasets, it will focus on the results from the Investment Climate Surveys. While results from individual country surveys have been analyzed as part of the Investment Climate Assessment initiative, this paper is the first to draw on comparisons from the full set of countries. The paper begins by looking at the rankings of constraints as reported by firms. Objective measures are provided in addition to these perceptions of constraints. Regional discussions highlight different themes, although recognizing that particular priorities for reform needed to be assessed in each country individually. The paper then turns to variations within country – not just across different locations with a country, but across different types of firms. The size of firm and whether it is formally registered are two dimensions of particular interest. In addition, urban and rural firms, and foreign and local firms are discussed. The paper concludes with the impact of improving the investment climate on innovation, productivity, growth and employment. The variations in the investment climate demonstrate the scope for improvement, and that the firms that would benefit the most are small and medium enterprises.

### ***Top investment climate constraints as reported by firms***

The surveys ask for both perception data and more objective information. The perception data provides insights into what entrepreneurs see as their most pressing constraints and provides one way to compare potential areas for reform. With investment decisions ultimately resting on perceptions of the future, having such indicators are certainly useful.

In assessing perception data, however, two considerations need to be kept in mind. First, the link between perceptions and actual conditions needs to be examined. In particular this link is not necessarily straightforward in making comparisons across countries. Respondents can have very different yardsticks or assumptions about what is acceptable in a particular issue area. Thus, it is possible that entrepreneurs in Indonesia may complain less than their Korean counterparts about electricity. But this should not be interpreted that the quality of the electricity supply is necessarily worse in Korea. Having objective measures, such as the number of outages reported or the share of firms with private generators, give clearer indicators of the quality of the electricity supply. But it could still be consistent that electricity outages, while less common in Korea are still seen as a higher priority by local entrepreneurs there.<sup>6</sup> Thus perception data is better

---

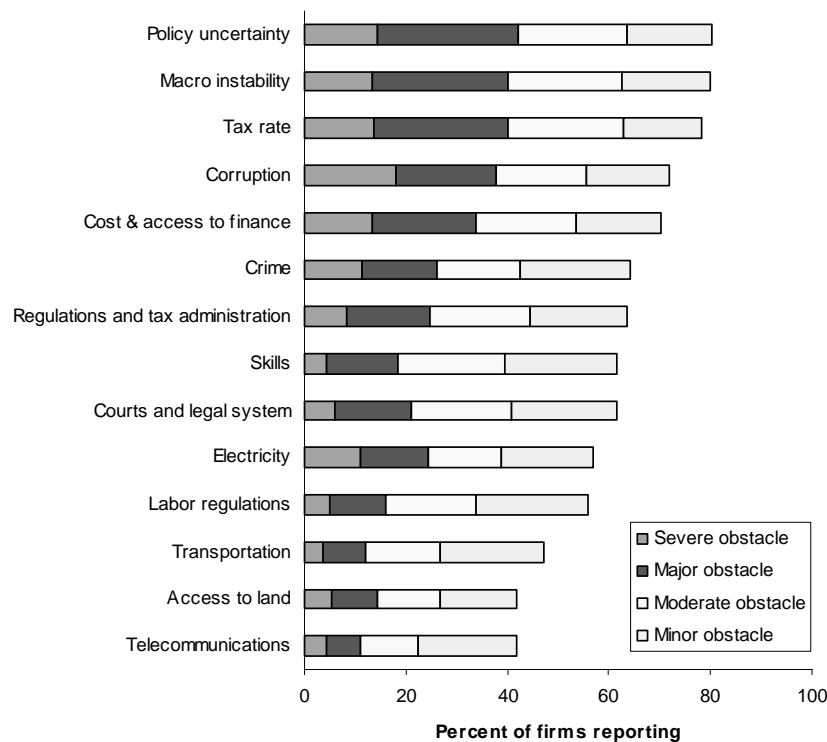
<sup>6</sup> A related concern is the ‘kvetch’ factor; entrepreneurs in some countries may complain more about every issue. Looking at the rank order of factors can then be more straightforward in comparing priorities.

suited for comparisons of the relative rankings of constraints rather than indicators of absolute conditions.

Second, that firms complain most about something does not mean that it should be the priority for reform – certainly not without bringing in other factors such as the costs of reforms and the interaction and potential for spillovers between policy areas. The point is not about giving firms all that they want. Policy makers’ goal should not be to increase private firms’ profits per se, but should be following means of maximizing society’s interests more broadly. Thus, many firms complain that taxes are too high. The point is not to lower tax rates necessarily. But, it could be a call to look at the balance of services provided for the taxes paid. This paper lays out some of the rankings based on perceived constraints. It then follows them up with objective measures of the quality of these dimensions of the investment climate.

In the Investment Climate Surveys, firms are asked to rank up to 18 potential issues on the degree to which they represent an obstacle to the growth and operation of the business. Answers range from ‘no obstacle’, to ‘minor’, ‘moderate’, ‘major’ to ‘very severe’. Figure 1 reports the findings, pooling together all the firm surveys. It is striking that the number one concern of firms is ‘policy uncertainty.’ Firms are unsure not just of what new laws governments may pass in the future, but also about how existing ones may be applied.

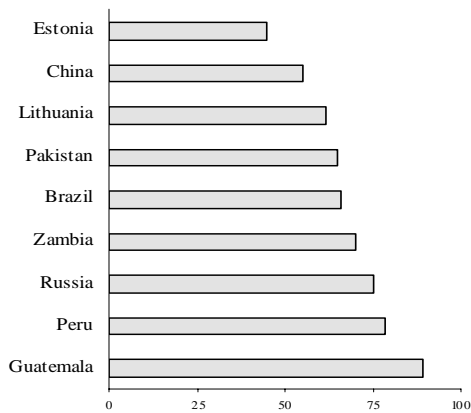
**Figure 1. Policy uncertainty ranks as the top obstacle facing firms in developing countries**



Source: World Bank Investment Climate Surveys

This kind of uncertainty can certainly dampen the enthusiasm to invest or commit too much now for gains that won't be realized until later. Eliminating policy related risks is not feasible—nor desirable in the extreme. A perfectly predictable dictator would not be a sign of a good investment climate. Rather, adding transparency to the policy process could help build credibility. Limiting the amount of discretion in how regulations are applied would also help mitigate risks perceived by firms. And, many such measures would not require many resources to implement. Figure 2 demonstrates the overwhelming number of firms that respond that it is more likely than not that the interpretation of regulations will be unpredictable.

**Figure 2. Most firms report that the interpretation of regulations is unpredictable**



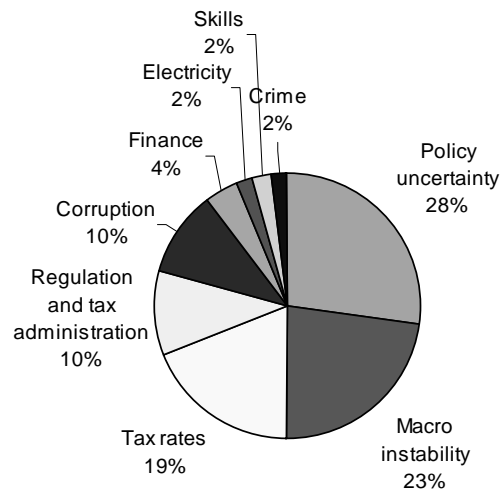
*Source:* World Bank Investment Climate Surveys

Security of property rights introduces both costs and risks. Almost 95% of firms see regulations' interpretations as being unpredictable at least some of the time, making their property rights less secure. Also, half of firms report that they are not confident that the court would uphold the property rights they do have. As a result, many firms do not rely on written contracts, conduct business only with people they know and incur costs when suppliers deliver goods late or that are below agreed upon quality. Late payments can be a problem and with few formal mechanisms seen as available or reliable, collecting such payments is a problem reported by many firms. Labor contracts too are often informal. While workers can suffer from less job security and benefits, many employers also report that absenteeism can be a significant concern.

Underscoring the importance of risks in the mind of entrepreneurs is that macroeconomic instability ranked as the second most severe constraint. Policy uncertainty and macroeconomic instability are the top constraints in more than half of countries. (see figure 3) The role of risk in investment decisions is not a new insight per se<sup>7</sup>, but much of the recent emphasis has been on costs, particularly the costs associated with a poor regulatory environment. The survey results reinforce that policy makers need to address ways of lowering policy-related risks to generate a desired investment response.

<sup>7</sup> Chermak (1992) reviews the earlier literature.

**Figure 3. Uncertainty ranks as top constraints across countries**



*Note:* This reports on the share of countries reporting the issue as the top constraint.  
*Source:* World Bank Investment Climate Surveys

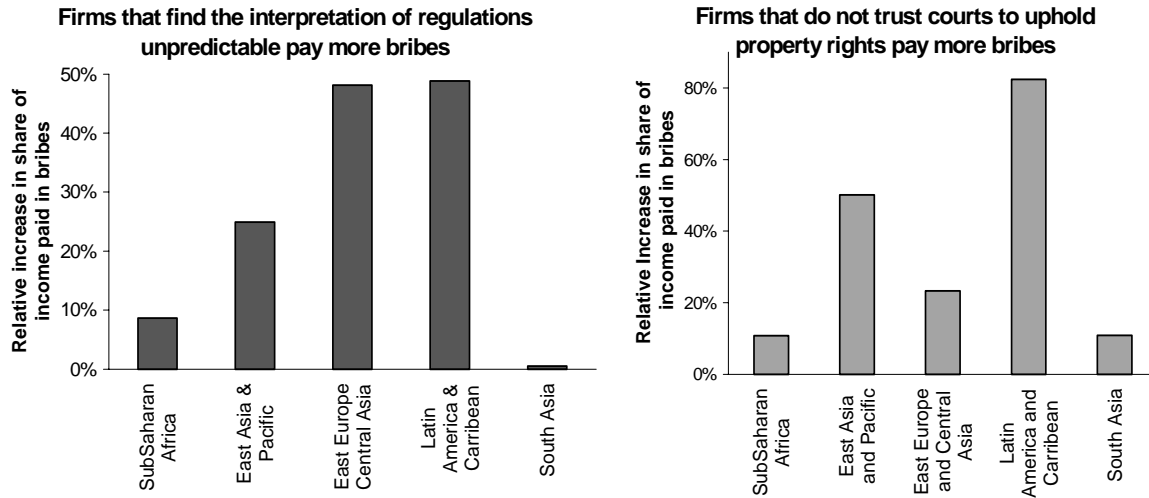
Corruption also ranks highly as a constraint. This too can have both a risk and a cost component. To the extent there is uncertainty that bribes will be required or what size they might be, there is a risk. But in many situations, ‘irregular’ payments are the norm, with amounts well known and expected. They are treated as a necessary cost of getting business done. Bribes are reported as paid by the majority of firms. Likely under-reported, there is no denying this is a widespread feature in developing countries. The size of bribes varies, up to 6 percent of sales in Peru, Azerbaijan, Algeria and Cambodia.

**Table 1 Bribes vary by firm size, sector and region**

|                    | <u>Firms reporting bribes</u> | <u>Bribes paid as share of sales</u> |
|--------------------|-------------------------------|--------------------------------------|
| FORMAL             | 55.5                          | 3.9                                  |
| Micro (<10)        | 49.9                          | 4.4                                  |
| Small (10-19)      | 56.7                          | 4.8                                  |
| Medium (20-49)     | 57.6                          | 4                                    |
| Large (50-249)     | 58.5                          | 3.4                                  |
| Very large (250 +) | 55.7                          | 3                                    |
| INFORMAL           | 27.4                          | 8.6                                  |
| Small (<10)        | 25.5                          | 8.5                                  |
| Large (10+)        | 49.1                          | 9.3                                  |
| East Asia          | 59.1                          | 4.2                                  |
| Eastern Europe     | 43.1                          | 2.8                                  |
| CIS                | 51                            | 3.4                                  |
| Latin America      | 68.8                          | 7                                    |
| South Asia         | 74.2                          | 3.2                                  |
| Sub-Saharan Africa | 50                            | 5.2                                  |

Figure 4 also shows how gaps between formal policies and how they are implemented and greater uncertainty of property rights are associated with higher bribes in most regions.

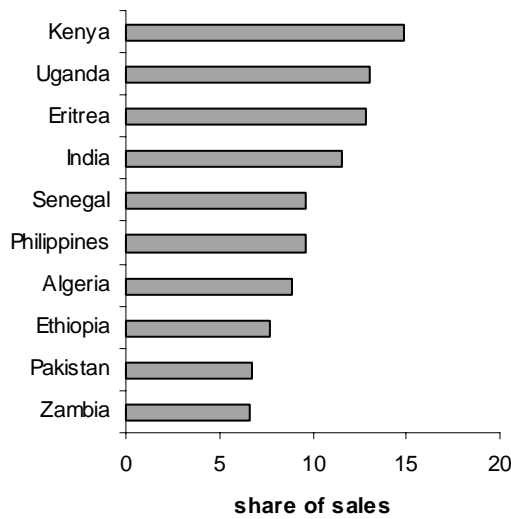
**Figure 4. Unpredictability of policy implementation and uncertainty of property rights are associated with higher bribes in most regions.**



Source: World Bank Investment Climate Surveys

Infrastructure disruptions are another source of costs. Chief among them are electrical outages. The overwhelming majority of firms report being affected by them, many multiple times a week. Firms are asked how such outages affect production. In India, Eritrea, Uganda and Kenya these losses can add up to over 10 percent (figure 5). While in countries like Poland it is around 0.6% of sales. Delays in transportation, breakage and theft are another concern of firms. Such delays make it harder to plan production, and can result in lost sales particularly to larger or multinational firms that are more sensitive to delivery schedules.

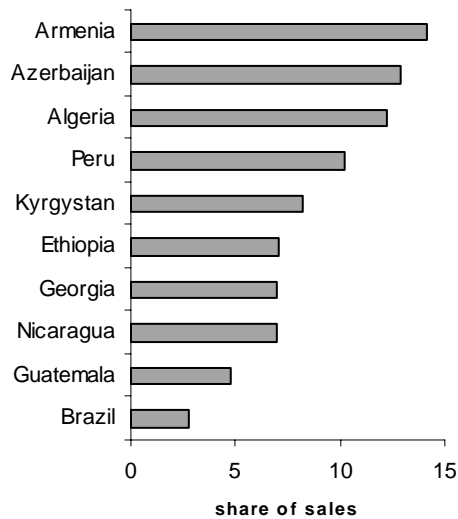
**Figure 5. Losses from electrical outages can surpass 10 percent of sales**



*Source:* World Bank Investment Climate Surveys

Crime is a cost that also adds up for many firms. There are costs of providing security. Many entrepreneurs also report paying for private ‘security’ payments or protection money too keep local gangs at bay. And there are losses from theft and vandalism itself. In Guatemala, over 40 percent of firms report crime as a problem, with costs approaching 5 percent of sales. In Armenia, the costs of crime are almost 15 percent of sales (figure 6).

**Figure 6. Costs associated with crime can be more than 5 percent of sales**



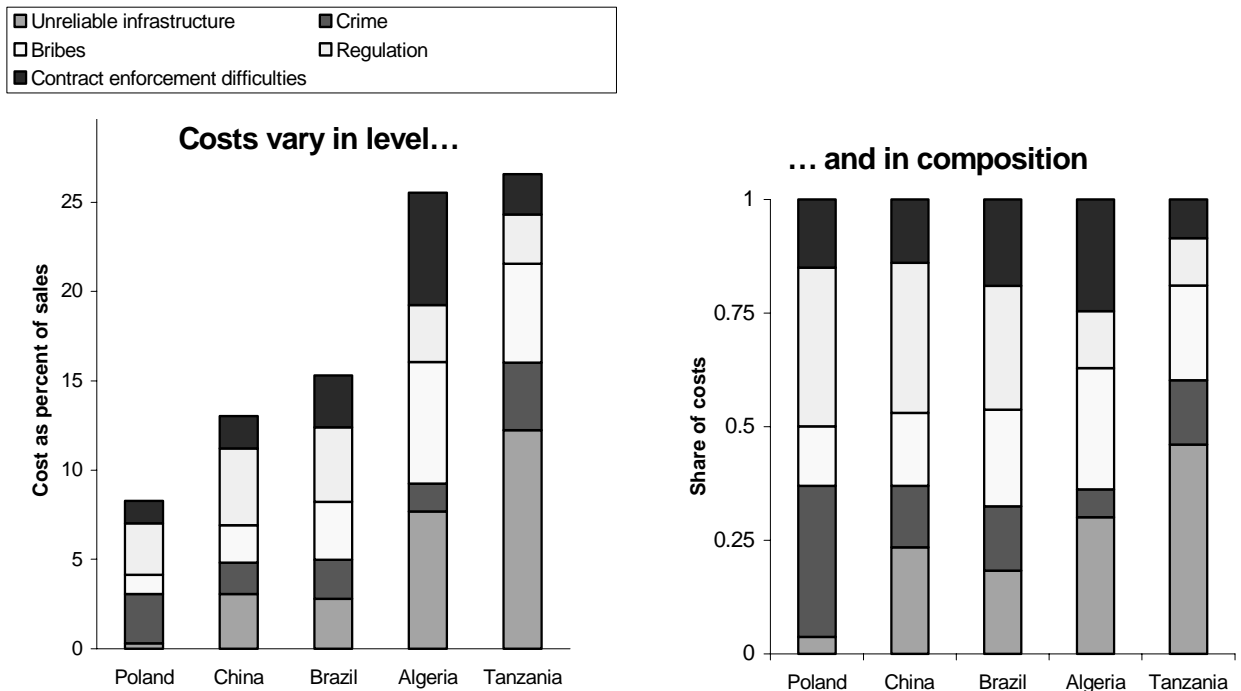
*Source:* World Bank Investment Climate Surveys

Tax rates rank quite highly in some regions. A perennial source of complaint, what is striking is that it ranks higher in countries where public services are low and informality is high. One of the sources of complaint about paying taxes is that many

firms know that local competitors in the informal sector are not subject to them, putting them at a cost advantage. The less compliance on tax payments, the more likely it is that those that pay will complain. The correlation with the share of firms complaining about tax rates and actual tax rates is positive, but only weak. Higher tax rates can encourage more firms to remain informal, keeping the tax base small and informal competition high. But what is also true, is that as much as firms may complain about taxes, there are other investment climate costs that outweigh them.

The different sources of costs discussed above can be converted to a share of sales. Figure 7 shows the results if the costs are added up for a selection of countries. While the share of costs from a poor investment climate add up to 8 percent of sales in Poland, they are over 25 percent of sales in Tanzania. China's costs are relatively low, at 13 percent of sales, which is consistent with its track record of attracting firms, including multinational firms. The range also shows the potential for bringing down costs and thus realizing higher output is thus large indeed.

**Figure 7. Costs vary substantially across countries – adding up to three times taxes**



*Note:* Controlling for firm size, age and sector.  
*Source:* World Bank Investment Climate Surveys

What is also striking is the composition of these costs. It is not the case that any single dimension dominates across countries. Infrastructure disruptions are the top constraint in Tanzania, but only a small share in Poland. Regulation is a bigger cost in China, but not so much in Algeria – where corruption accounts for a bigger share of the costs.

Each country would need to assess its own particular priorities, but there are themes across regions, as outlined below. Figure 8 lists the top constraints perceived by firms, and the discussion highlights particular country experiences within each region.

*Latin America:*

Firms in the seven Latin American countries surveyed ranked policy uncertainty as their top concern.<sup>8</sup> In fact, 5 of the 8 countries with the highest share of firms ranking policy uncertainty as a major or severe constraint are in Latin America. Seventy-six percent of firms in Brazil report policy uncertainty is a major or severe constraint compared to 47 percent in Honduras. Corruption is reported as the second most severe constraint in the region. More than half of firms report that bribes are paid to “get things done.” Bribes paid equal 6-7 percent of sales in Guatemala, Honduras and Nicaragua. Macroeconomic instability is the third most reported constraint.

Crime is an issue that stands out in Latin America. Crime is reported by half of firms as a major or severe constraint, twice the proportion of any other region and four times the proportion in Eastern Europe and Central Asia. The costs of crime range from just under 3 percent of sales in Brazil to 10 percent of sales in Peru.

Related to both the policy uncertainty and corruption, the majority of firms report that the interpretation of regulations is unpredictable. All the Latin American countries surveyed fell in the top third of countries reporting that this is a problem. In Guatemala, almost 90 percent of firms report that regulations are not interpreted consistently, 79 percent in Peru and 66 percent in Brazil. With very high rates of participation in the informal sector (the informal economy is 67 percent of GNP in Bolivia, 60 percent in Peru and 40 percent in Brazil), this is an area where greater transparency and private sector consultation could help strengthen firms’ incentives to invest.

The burden of different regulations can be high for many firms. Days to clear customs is a bottleneck in many countries. All the Latin American countries surveyed were in the bottom half of the distribution in terms of the days needed to clear imports through customs. In Honduras it takes about 5 days to clear customs, while in Ecuador it takes 16 days. If a firm fully complied with formal regulations, registering a business would take 74 days on average across the region, almost 50 percent higher than the global average of 51 days. In Haiti, it takes 203 days. The time to enforce a contract can also be long; taking 275 days in El Salvador, but 1459 days in Guatemala. In practice, the surveys show there is a large variation around these numbers, as firms use middlemen to help with the procedure, pay ‘speed money’ or chose to comply with only some of the requirements.

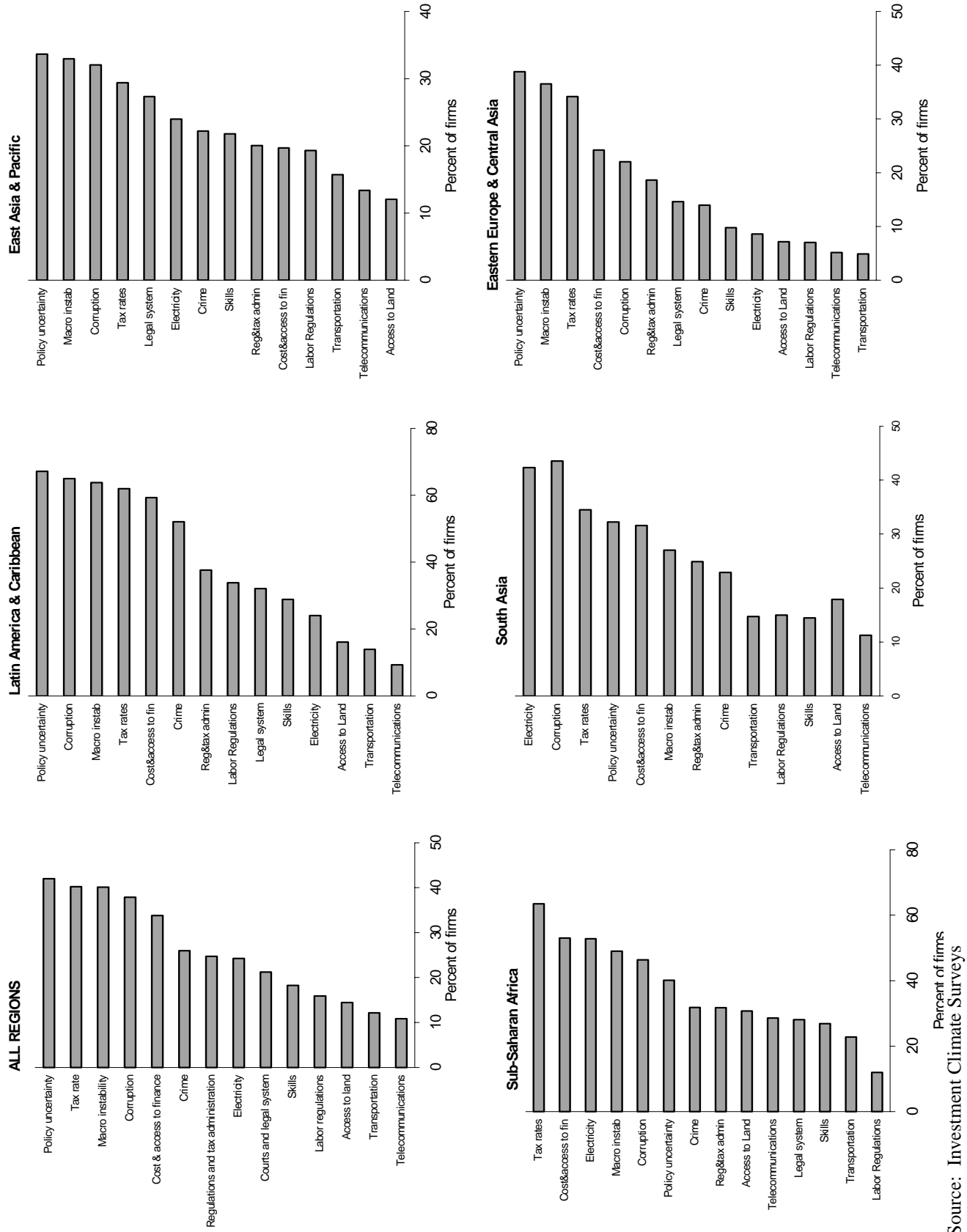
*East Asia*

There is considerable diversity in the quality of the investment climate and level of development of countries in the region. Many countries have targeted improvements

---

<sup>8</sup> The Investment Climate Surveys in Bolivia (2001), Brazil (2003), Ecuador (2003), Guatemala (2003), Honduras (2003), Nicaragua (2003) and Peru (2002), cover 4700 registered firms. In addition, 450 micro and informal firms were interviewed in Brazil and 250 in Guatemala in 2004.

**Figure 8: Top constraints by region**



Source: Investment Climate Surveys

in this area which is evident in some of the indicators. Policy uncertainty is the leading constraint overall, with one in three firms in the region reporting it as a major or severe constraint<sup>9</sup>. However, there are variations across countries; only 22% of firms in Malaysia ranked it as a severe or major constraint while 48 percent did in Indonesia. Macroeconomic instability ranked as the second most severe constraint. Corruption ranked as the third most severe constraint. While the majority of firms report that bribes need to get paid to ‘get things done’, countries in East Asia ranked in the bottom half of the distribution across all countries surveyed. The share of sales paid in bribes is reported as 2.6 percent in China and 6 percent in Cambodia.

Confidence that courts will uphold property rights is a significant indicator of risk and is correlated with investment. Such confidence is reported by more than 80 percent of firms in Malaysia and China, 60 percent in Indonesia and 40 percent in Cambodia.

There is considerable variation in the regulatory burdens facing firms. The time management spends dealing with officials and red tape can be substantial, from 10 percent in Malaysia, 11 percent in the Philippines, and 19 percent in China. The time needed to formally register a business is 198 days in Laos, 151 in Indonesia, 41 in China and 22 in South Korea. While registering property can take 143 days in Malaysia and 2 days in Thailand.

#### *Sub-Saharan Africa*

Firms report that taxes are their most significant constraint. With a smaller tax base, firms, particularly small and medium sized firms, can bear a disproportionate share of the tax burden. With the informal sector representing 72 percent of non-agricultural employment in Sub-Saharan Africa, many firms do not pay any taxes – or only report a fraction of sales to authorities. High tax rates – particularly given that many local counterparts effectively gain a competitive advantage by avoiding them – is thus seen as a large obstacle. The other side is that firms do not see too many benefits stemming from formality. This is seen the large share of firms that do not have confidence that courts will uphold their property rights (the majority of firms report this) and in the lack of access to finance (reported as the second most important constraint).

Policy uncertainty and corruption are other significant constraints. Policy uncertainty is rated as a major or severe constraint by 27 percent of firms in Uganda and 57 percent in Zambia. Unpredictable interpretations of regulations is a problem reported by 40 percent of firms in Uganda and 70 percent in Zambia. Corruption is the top constraint of many firms. In Kenya, over 75 percent of firms report bribes are paid, averaging over 5 percent of sales.

---

<sup>9</sup> The Investment Climate Surveys in Cambodia (2003), China (2002, 2003), Indonesia (2004), Malaysia (2003) and the Philippines (2003), cover over 6500 registered firms. In addition, 250 micro and informal firms were interviewed in both Cambodia and Indonesia.

An unreliable electricity supply is reported as a constraint by over 52 percent of firms in the region<sup>10</sup>, 42 percent in South Asia, 24 percent in East Asia and Latin America and less than 10 percent in Eastern Europe and Central Asia. Losses from power outages average 6-7 percent of sales in Zambia and Ethiopia, and 10 percent of sales or more in Senegal, Eritrea and Kenya.

Doing Business illustrates some of the variations in complying with regulations. Registering property can take over 300 days in Angola, Cote d'Ivoire, Ghana and Rwanda. Resolving a bankruptcy can take 4.5 years in Angola, the Democratic Republic of Congo, Kenya – and half that time in Botswana, Cote d'Ivoire, Ghana, Namibia, Nigeria and Uganda.

### *South Asia*

Corruption is identified as the number one constraint by firms in South Asia<sup>11</sup>. Almost all firms in Bangladesh report that bribes are paid, averaging almost 3 percent of total sales. The only region that reports corruption is more of a constraint is Latin America, where bribes can be over 5 percent of sales in Ecuador, Nicaragua or Guatemala.

An unreliable electricity supply was reported as the second leading constraint. Over 40 percent of firms rank electricity as a major or severe constraint to the operation and growth of their business—compared to less than 10 percent in Eastern Europe and less than 25 percent in Latin America and East Asia. Losses from electricity outages average over 10 percent of sales in India and over 6.5 percent in Pakistan.

Insecure property rights are also a large concern. In Bangladesh, 83 percent of firms lack confidence that courts will uphold their property rights. In Pakistan it is 63 percent of firms.

Barriers to entry and exit are relatively high in the region. According to *Doing Business*, registering a business takes 24 days in Pakistan, 35 in Bangladesh, 50 in Sri Lanka and 89 in India. Resolving a bankruptcy takes 3.2 years on average across all regions. However, South Asia's average is 4.8 years, with procedures taking up to 10 years in India.

### *Eastern Europe and Central Asia*

The Investment Climate Surveys were implemented in all 27 countries in the region in 2002/03, covering over 7000 registered firms. The number one concern reported is policy uncertainty. Almost 40 percent of firms rank it as a major or severe constraint, 12 percent of firms in Slovenia and Estonia to 60 percent in Belarus. Macroeconomic instability is reported as the second most pressing constraint.

---

<sup>10</sup> The Investment Climate Surveys in Eritrea (2002), Ethiopia (2002), Kenya (2003), Nigeria (2001), Senegal (2004), Tanzania (2003), Uganda (2003) and Zambia (2003) cover over 2000 registered firms and an additional 1000 micro and informal firms were interviewed in Kenya, Senegal, Tanzania, and Uganda.

<sup>11</sup> The Investment Climate Surveys in Bangladesh (2002), Bhutan (2002), India (2000, 2003) and Pakistan (2002) cover 3900 registered firms. In addition, 1000 micro and informal firms were interviewed in Bangladesh, India and Pakistan.

Confidence in courts to uphold property rights varies from less than 30 percent of firms in Moldova to 70 percent in Estonia. The time management has to spend dealing with officials ranges from 5.5 percent in the Czech Republic to about 15 percent in Ukraine, Georgia and Serbia and Montenegro.

*Doing Business* illustrates the enormous variation in the time to comply with regulations. For example, registering property takes over 950 days in Bosnia and Herzegovina and only three days in Lithuania. Enforcing a contract can take over 1000 days in Poland, Serbia and Montenegro and Slovenia but only 189 in Latvia.

#### *Middle East and North Africa*

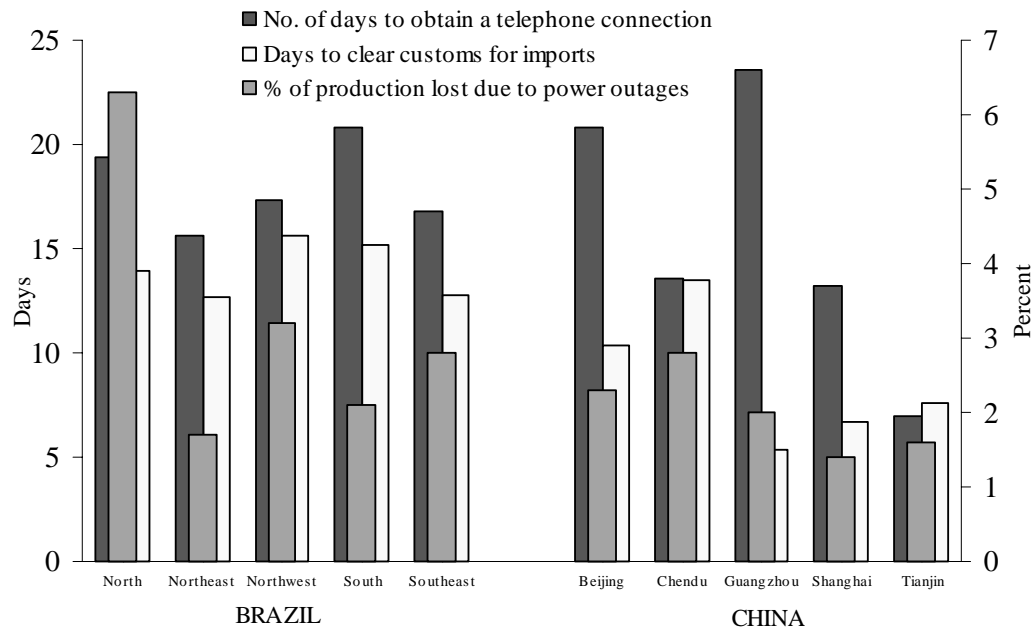
The Investment Climate Surveys in Morocco (2001) and Algeria (2003) cover over 1400 registered firms. With fewer countries covered, rather than make generalizations about the region, two observations are made. Clearing customs has been improved in Morocco; the average time to clear imports through customs is 2.7 days. Corruption is a major constraint in Algeria, with 75 percent of firms reporting bribes are paid.

The variation in complying with regulations does show substantial variations. *Doing Business* measures the time it takes to register a business as 64 days in Saudi Arabia, 46 in Lebanon, 14 in Tunisia, and 11 in Morocco. Registering property takes 193 days in Egypt, 75 days in Kuwait, 16 in Oman, and 4 in Saudi Arabia.

#### *Differences within countries*

Examples have been given of aggregate findings by country or region. But there are also significant variations within countries that should be highlighted. One obvious dimension is across locations within a country. Many regulations are set or enforced by sub-national governments. Figure 9 shows the differences across cities and regions within China and Brazil. But the issue is not limited only to large countries. These variations within the same country show how sub-national governments, their reforms and ability to enforce laws, make a big difference on the incentives facing firms. An important message is that local governance matters.

**Figure 9. Variations within countries can be substantial**



Source: World Bank Investment Climate Surveys

### Differences across different types of firms

Firms share common interests on many issues, including stable macro-economic policies, better infrastructure, and more law and order in their communities. But interests may diverge or conflict on specific policy issues. The potential for conflicting interests is most apparent when considering proposals to reduce regulatory impediments to competition. Proposals to lower regulatory barriers to competition will typically be resisted by protected firms, but benefit firms that depend on products from the protected sector as inputs. For example, it has been estimated that the imposition of restrictions on imports of steel into the United States in 2002 benefited local steel producers by \$240 million, but imposed costs for firms relying on steel of nearly \$600 million.<sup>12</sup> Similarly, proposals to develop a bond market may be resisted by banks but welcomed by industrial firms. Conflicts can also arise over the priority given to infrastructure development in different locations as well as the attention given to a range of other investment climate constraints. While priorities and constraints need to be assessed in each country context, it helps to understand some of the common differences that can arise between types of activities and types of firms.

*Type of activity.* The type of activity a firm undertakes has an obvious impact on the nature and magnitude of the barriers, costs, and risks it faces. Importers may be more concerned about the cost of customs administration than hairdressers. Manufacturing firms may feel more constrained by regulations than farmers. Firms involved in R&D

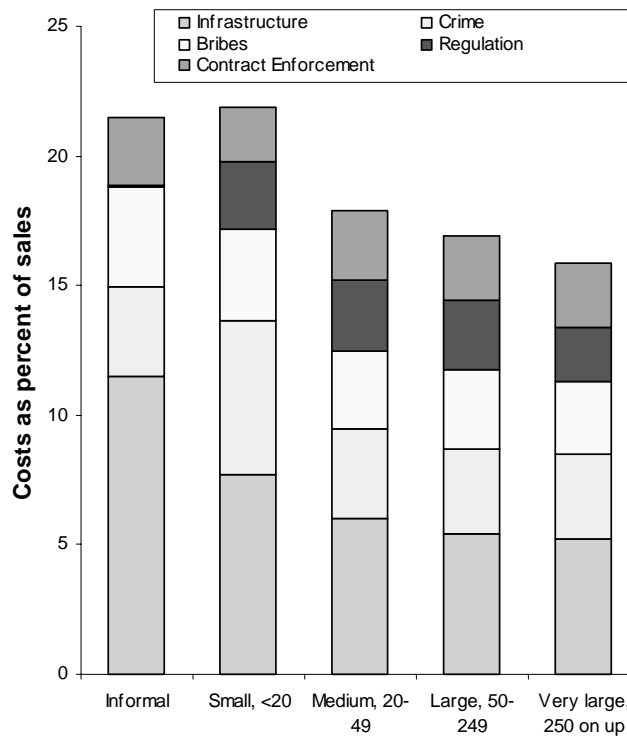
<sup>12</sup> Hufbauer and Goodrich (2003) -- see Chapter 4..

activities may place more emphasis on intellectual property rights than street-traders. And firms involved in infrastructure provision may feel more exposed to regulatory risk than those in most other activities.

*Large and small firms.* The quality of the investment climate varies by size of firm. Smaller firms often face higher costs and report slightly higher unease about property rights and unpredictable regulations. Some of the costs represent fixed costs – which, proportionately, are higher for smaller firms. This can be true of license or permit fees or even of bribes. Evidence from the surveys indicates that bribe payments are 50 percent larger as a share of sales for small firms. Large firms may make higher payments, but the burden they represent may be smaller.

Repeating the exercise of adding up various costs associated with a weak investment climate illustrates that the overall burdens are larger for smaller firms (controlling for age, sector and country). Thus small firm’s can face costs up to one third larger than very large firms (figure 10).

**Figure 10. Costs of a poor investment climate are higher for small firms**



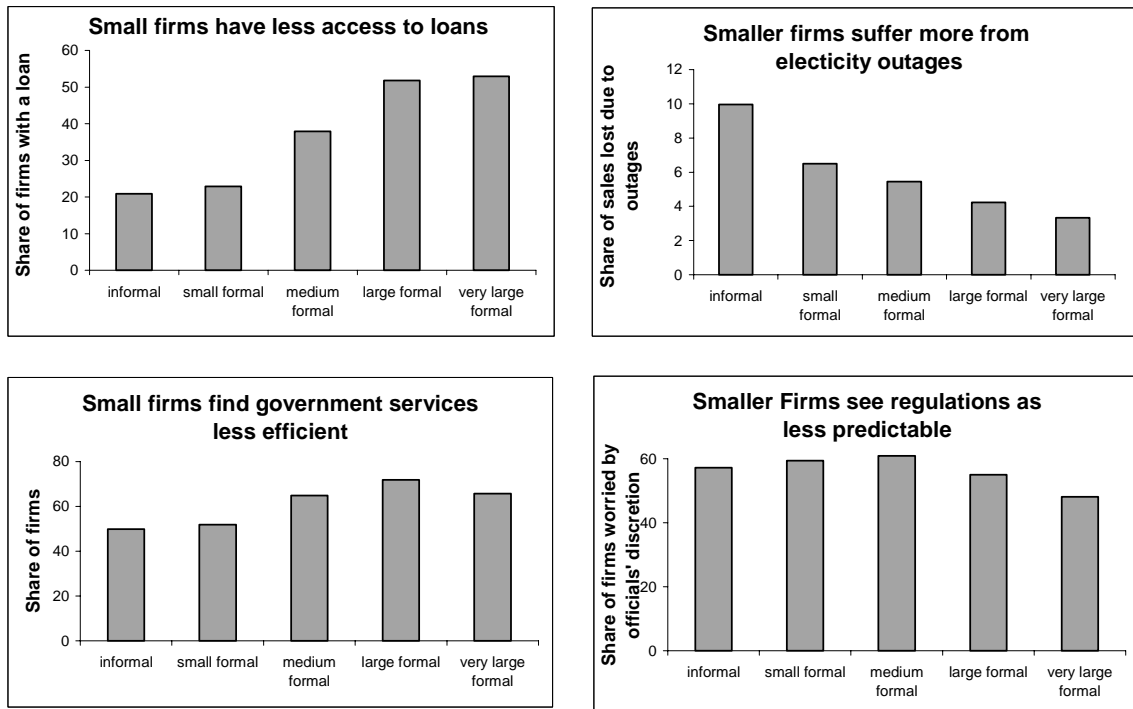
*Note:* Controlling for firm age, sector and country.  
*Source:* World Bank Investment Climate Surveys

Smaller firms also tend to have greater difficulties getting finance than larger firms and to pay higher interest rates—survey data show that small firms are 50 percent more likely to see this as a major or severe constraint. Larger firms are more likely to

have a bank loan, reflecting the advantages of having a track record and holding more assets that can be pledged as collateral (figure 11).

Smaller firms tend to complain more about corruption, but find regulations—particularly labor regulations—less constraining. It is possible that they are not fully compliant with regulations, making them targets for demands for informal payments from officials. Small firms also report greater harassment and uncertainty due to unpredictable interpretations of regulations by officials—and have less confidence that the judicial system will uphold their property rights.

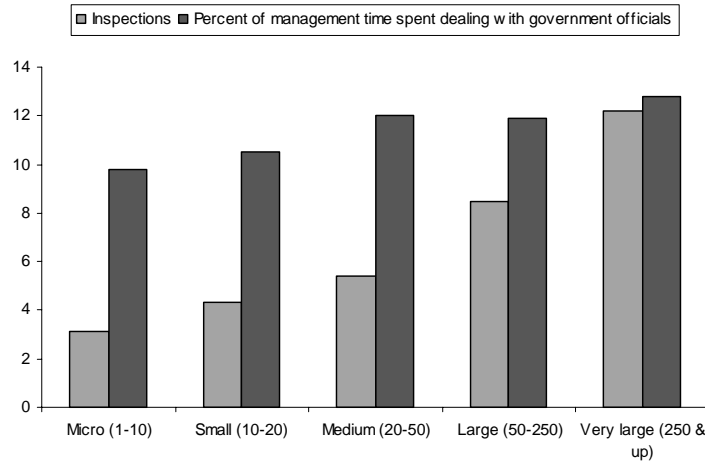
**Figure 11. Constraints vary by firm size and formal status**



*Source:* World Bank Investment Climate Surveys and WDR Surveys of Micro and Informal firms in 11 countries.

Smaller firms also have less access to alternatives. For example, if electricity is unreliable, private generation is possible. However, generators are expensive and larger firms benefit from economies of scale. The same is true for dealing with property crime. Providing security can be relatively cheaper for large firms. Larger firms often have deeper pockets – with greater access to finance making certain alternatives feasible and make the smoothing of shocks more feasible. A significant implication is that improving the basic elements of the investment climate will disproportionately help small firms.

**Figure 12. Management time spent with officials can be extensive**



Source: World Bank Investment Climate Surveys

*Formal and informal firms.* Informality is one of the defining features of the landscape in most developing countries. While measurement difficulties abound, it has been estimated that informal activities account for 76 percent of GDP in Nigeria, 55 percent in Guatemala, and 50 percent in the Philippines.<sup>13</sup> The investment climate for informal firms can differ markedly from that for firms in the formal economy. Operating free from taxes and regulatory requirements reduces some burdens. But just as small firms face greater constraints than larger firms, the constraints can be even greater for small informal firms (see figures 10, 11 and 12).

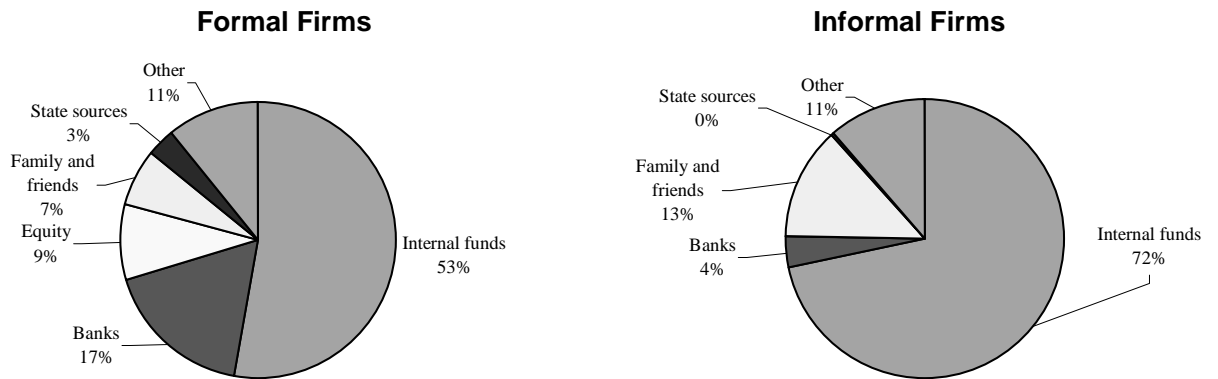
Informal firms often have more difficulty getting public services and finance at reasonable costs. For example, in Peru the nominal borrowing rate for informal firms was found to be more than four times the rate for formal firms of a similar size.<sup>14</sup> Figure 13 illustrates how much informal firms have to rely on internal finance and informal sources of finance. Informality is also a source of added risk. Noncompliance with taxes and regulations leaves informal firms vulnerable to being evicted or shut down, and makes them easy targets for bribes or bureaucratic harassment from officials. Again, the sums can be small, but relative to sales they can affect the viability of the enterprise.<sup>15</sup>

<sup>13</sup> Schneider (2002).

<sup>14</sup> de Soto (2000).

<sup>15</sup> For additional details on the results of the formal-informal comparisons, please see Hallward-Driemeier and Stone (2004).

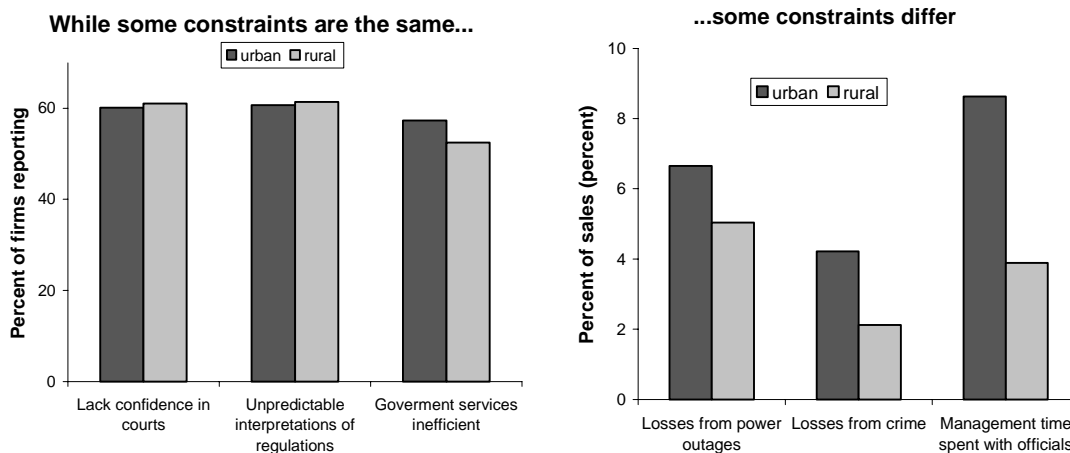
**Figure 13. Informal firms have less access to external formal finance**



Source: World Bank Investment Climate Surveys and WDR Surveys of Micro and Informal Firms in 11 countries.

*Rural and urban firms.* Firms operating in rural areas often face very different investment climates than their urban counterparts. Distance and lower population densities increase the costs of providing infrastructure and other public services in rural areas. One response is for rural firms to choose business opportunities that are less reliant on higher quality infrastructure services. Thus, for some, infrastructure may not rank as highly as an obstacle reflecting choices that make it a less significant component of their operations. Access to finance can be more of a constraint. Small market size can also reduce growth opportunities for rural firms, which thus face constraints similar to small firms generally. There also tends to be a high incidence of informality in rural areas, with similar costs and risks. On the other hand, informal firms in urban areas can suffer from increased costs of crime and more red-tap and harassment from officials (figure 14).

**Figure 14. Obstacles for informal firms in urban and rural areas**

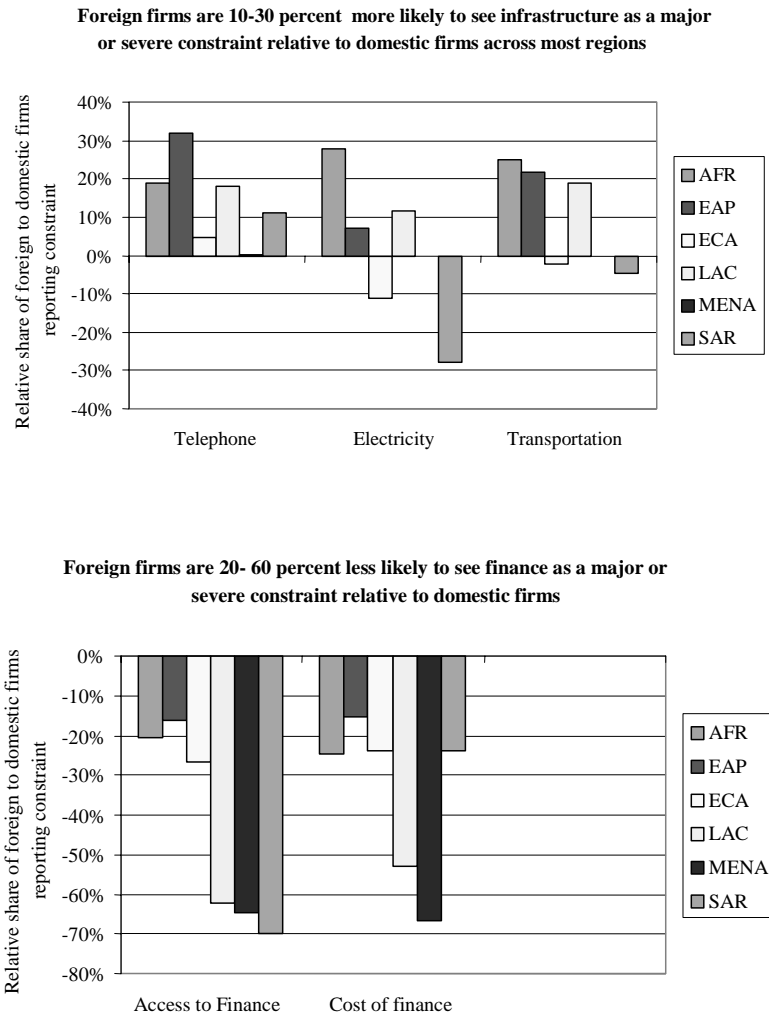


Note: Controlling for size of firm, sector and country.

Source: World Bank Investment Climate Surveys and WDR Surveys of Micro and Informal Firms.

*Foreign and local firms.* Even when engaged in the same activity, foreign and local firms can sometimes face different constraints. Foreign firms still face many regulatory barriers intended to protect local firms, and foreign firms may also be more vulnerable to expropriation. But foreign firms may also benefit from special investment incentives and can often rely on international arbitration to complement local courts. Foreign firms are usually less constrained in their access to finance than local firms, but typically place more of a priority on infrastructure—in part reflecting more sophisticated production methods and a greater propensity to export (figure 15).

**Figure 15. Local and foreign firms can differ in the views**



Source: World Bank Investment Climate Surveys.

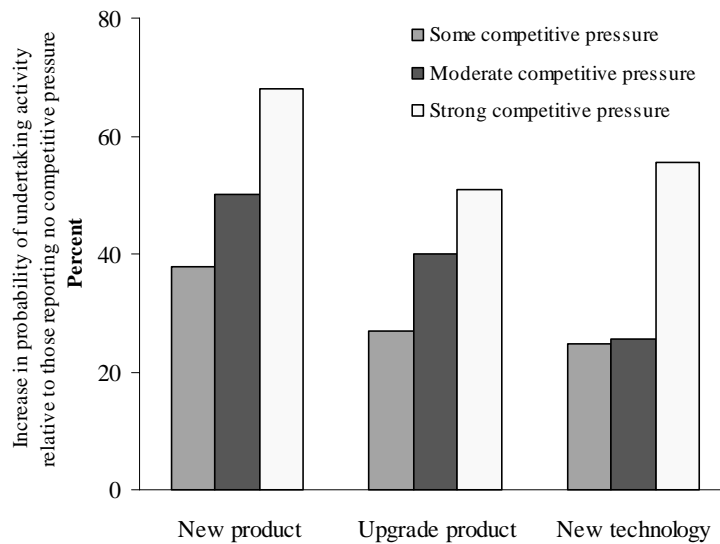
**Links to performance:**

These measures of the investment climate can be linked to firm performance. Using regression analysis to control for various firm characteristics, coefficients from the

included investment climate indicators can be used for a number of thought experiments. Comparing states in India that have a strong investment climate with those with a weak investment climate explains 40% of the productivity gap. Within China, if Tianjin could achieve the same investment climate conditions as Shanghai's, firm level productivity could increase by 15 percent and sales growth could increase by 20 percent.<sup>16</sup> More broadly, if countries could achieve the same investment climate conditions as the best performing location in developing countries, firms in Dhaka could reduce 40 percent of their productivity gap, those in Calcutta 80 percent. Wages could rise by 18 percent and 38 percent respectively in those cities. The impacts are large, and the benefits are shared between firms and workers.<sup>17</sup>

*Competition matters too in delivering results.* This paper has looked at a number of elements of the investment climate, and discussed them in terms of perceptions of their severity, risks and costs. But the extent of competitive pressures matters too. This in not just in terms of making opportunities open to the broad spectrum of private sector participants. Competition is also important in encouraging innovation. Using data from Eastern Europe and Central Asia, firms that report more competitive pressures from other suppliers were more than 50 percent as likely to innovate – controlling for the size, age, sector and location of firms (figure 16). With 90 percent of firms in Poland expressing significant competitive pressure, but only half the number in Georgia, there is considerable scope for reducing barriers to competition.

**Figure 16. Competitive pressures make firms significantly more likely to innovate**



*Note:* Controlling for firm age, ownership, sector and country.

*Source:* Investment Climate Surveys in 27 Eastern Europe and Central Asia countries/ Business Environment and Enterprise Performance Surveys (BEEPS II)

16 Hallward-Driemeier, Xu, and Wallsten (2003)

17 Dollar, Hallward-Driemeier, and Mengistae (2003)

## Conclusion

Improvements in measuring the investment climate are an important first step. Rather than a measure of ‘property rights’, there are now numbers that report on: the share of firms that believe courts will uphold their property rights, the time and costs it takes to enforce a contract, the time and costs to resolve a bankruptcy, the share of firms reporting crimes and the cost of these crimes, and the predictability of interpretations of regulations. And measures of ‘corruption’ include the share of firms that report bribes are paid, which inspections and public services associated with demands for additional payments, the corresponding time management spends with officials and the recourse firms have if bribes are demanded. The richer detail is clearly more useful for examining different institutional structures and which aspects of property rights or corruption are most important for firm behavior. And the list could continue for other dimensions of the investment climate.

Collecting disaggregated data about policies and their impact over a range of firms is needed to benchmark current policies across a wide spectrum of policy areas. And over time, these databases can monitor progress. But the next step is to understand how best to manage reform processes and to implement changes effectively. The data presented here should not be simply accepted as the blueprint for setting priorities. Clearly firms are self-interested. And the point is not to give them everything they ask for; their interests need to be balanced with broader interests of society, the costs of different reforms weighed against the potential benefits and spillovers between policy areas should be considered in sequencing reforms. Such analyses will benefit enormously from the new information that is now coming available.

## References

- Acemoglu, Daron, and Simon Johnson. 2003. "Unbundling Institutions." National Bureau of Economic Research Working Paper Series 9934. Cambridge, MA.
- Acemoglu, Daron, Simon Johnson, and James Robinson. 2001a. "The Colonial Origins of Comparative Development: An Empirical Investigation." *American Economic Review* 91(5):1369–401.
- , 2002. "Reversal of Fortune: Geography and Institutions in the Making of the Modern World Income Distribution." *Quarterly Journal of Economics* 117:1231–94.
- Barro, Robert. 1997. *The Determinants of Economic Growth*. Cambridge, MA: MIT Press.
- Burgess, Robin, and Tony Venables. 2003. "Towards a Microeconomics of Growth." London School of Economics: London. Processed.
- Chermak, Janie M. 1992. "Political Risk Analysis: Past and Present." *Resources Policy* 18(3):167–78.
- de Soto, Hernando. 2002. *The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else*. New York: Basic Books.
- Djankov, Simeon, Rafael La Porta, Florencio Lopez-de-Silanes, and Andrei Shleifer. 2002. "The Regulation of Entry." *Quarterly Journal of Economics* 117(1):1–37.
- Djankov, Simeon, Rafael La Porta, Florencio Lopez-de-Silanes, and Andrei Shliefer. 2003. "Courts." *Quarterly Journal of Economics* 118(2):453–518.
- Dollar, David, Mary Hallward-Driemeier, and Taye Mengistae. 2003a. "Investment Climate and Firm Performance in Developing Countries." The World Bank: Washington D.C. Processed.
- Dollar, David, Anqing Shi, Shuilin Wang, and L. Colin. Xu. 2004. *Improving City Competitiveness through the Investment Climate: Ranking 23 Chinese Cities*. The World Bank: Washington, D.C.
- Dollar, David and Aart Kraay. 2003. "Institutions, Trade and Growth: Revisiting the Evidence." World Bank Policy Research Working Paper 3004. Washington, D.C.
- Easterly, William. 2001. *The Elusive Quest for Growth: Economists' Adventures and Misadventures in the Tropics*. Cambridge, Mass.: MIT Press.

- Hallward-Driemeier, Mary, L. Colin. Xu, and Scott Wallsten. 2003. "The Investment Climate and the Firm: Firm-Level Evidence from China." World Bank Working Paper 3003. Washington D.C.
- Hallward-Driemeier and Andrew Stone. 2004. "The Investment Climate for Informal Firms", Background Paper for the World Development Report 2005.
- Kaufmann, Daniel, Aart Kraay, and Massimo Mastruzzi. 2003. "Governance matters III: Governance Indicators for 1996-2002." World Bank: Washington DC. Processed.
- Levine, Ross. 1997. "Financial Development and Economic Growth: Views and Agenda." *Journal of Economic Literature* 35(2):688–726.
- Maloney, W. F. 2000. *Informality Reconsidered*. World Bank: Washington, D.C.
- Pritchett, Lant. 2004. "Reform is Like a Box of Chocolates: Understanding the Growth Disappointments and Surprises." Kennedy School of Government, Harvard University: Cambridge, MA. Processed.
- Sala-i-Martin, Xavier. 1997. "I Just Ran Two Million Regressions." *American Economic Review* 87(2):178–83.
- Schneider, Friedrich. 2002. "Size and Measurement of the Informal Economy in 110 Countries Around the World". Paper presented at the *Workshop of Australian National Tax Centre* Conference. Canberra, Australia. July 17.
- World Bank 2004. *Doing business in 2005 - Obstacles to Growth*. World Bank: Washington, D.C.
- World Bank Investment Climate Surveys. <http://iresearch.worldbank.org/ics/>