Dealing with Government in Latin America and the Caribbean[1]

Basic Definitions

Countries surveyed in 2010 and how they are grouped for analysis:

In 2010, Enterprise Surveys (ES) interviewed 12,855 enterprises in 30 Latin American and Caribbean countries. In addition in 2009, 1,802 firms were interviewed in Brazil also following the standard ES global methodology.

For analytical purposes, the 31 countries are categorized into 3 groups:

Small Caribbean countries: Antigua and Barbuda, The Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Suriname, St. Kitts and Nevis, St. Lucia, and St. Vincent and the Grenadines

Medium-size countries: Bolivia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Jamaica, Nicaragua, Panama, Paraguay, Uruguay, and Trinidad and Tobago

Large countries: Argentina, Brazil, Chile, Colombia, Mexico, Peru, and República Bolivariana de Venezuela.

Two waves of Enterprise Surveys, 2006 and 2010:

Fifteen countries were surveyed in 2006 using the ES global methodology: Argentina, Bolivia, Chile, Colombia, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay, and República Bolivariana de Venezuela. In total, 10,930 firms were interviewed in 2006, of which 3,535 were re-interviewed in 2010.

Reference periods of the survey data:

The information collected in the surveys refers to characteristics of the firm at the moment of the survey (2006, 2010 and 2009 for Brazil) or to the last completed fiscal year (2005, 2009, and 2007, respectively). In addition, sales, employment, and labor productivity annual growth rates are calculated comparing data from the last complete fiscal year of each survey and recall data. Consequently, growth rates refer to the period 2002-05 for the 2006 surveys, 2004-07 for the 2009 Brazil survey, and 2007-09 for the 2010 surveys.

The Enterprise Surveys (ES) data provide a detailed picture of how businesses experience their interactions with the government across Latin America and the Caribbean (LAC). The quality and efficacy of a regulatory system have a significant effect on the private sector. Poorly designed or convoluted regulatory systems can become a burden for enterprises and may also open opportunities for corruption. The ES data also provide indicators of firms' degree of exposure to corruption when accessing different types of government services. The results show that while regulation in LAC imposes a greater burden on the private sector than anywhere else in the world, average corruption seems to be lower than in the rest of the world. Nevertheless, corruption varies significantly across the region, by country, and by sector. Private firms appear to benefit from overall economic development when corruption is low but not when it is high. This suggests that in countries with higher levels of corruption, rent-seeking behavior may be wiping out productivity gains.

Firms in LAC face a greater regulatory burden than firms in the rest of the world

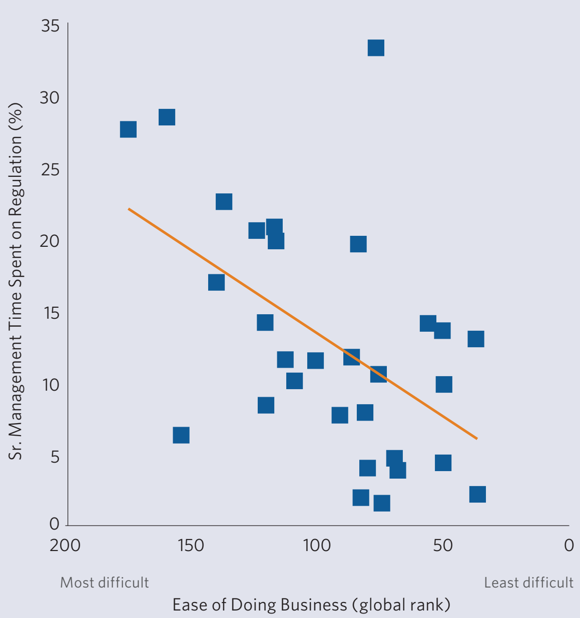
Firms in LAC are required to devote more time to complying with regulations than firms in other developing regions. On average, in LAC, 13 percent of senior management's time is spent dealing with regulation. This "time tax" is higher than in East Asia and the Pacific (7%), South Asia (6%), Sub-Saharan Africa (8%), and Eastern Europe and Central Asia (11%).

The quality and efficacy of a country's regulatory environment directly impacts firms. Two sub-indicators of the Worldwide Governance Indicators[2] provide good proxies to measure both dimensions of a regulatory environment: "regulatory quality" measures the ability of the government to develop and institute sound private sector regulation, while "government efficacy" indicates a government's policy capacity, including its provision of public services. Across LAC, the poorer the regulatory quality (Figure 1, Panel A) and government efficacy (Figure 1, Panel B), the more time firms are required to spend on regulation. Thus the Enterprise Surveys show

FIGURE 1 POOR GOVERNANCE IS ASSOCIATED WITH MORE BURDENSOME REGULATION

that where public services are poorly delivered and/or regulations are not well formulated, time spent dealing with regulation is higher. [3]

FIGURE 2 A GREATER EASE OF DOING BUSINESS IS ASSOCIATED WITH LESS BURDENSOME REGULATION



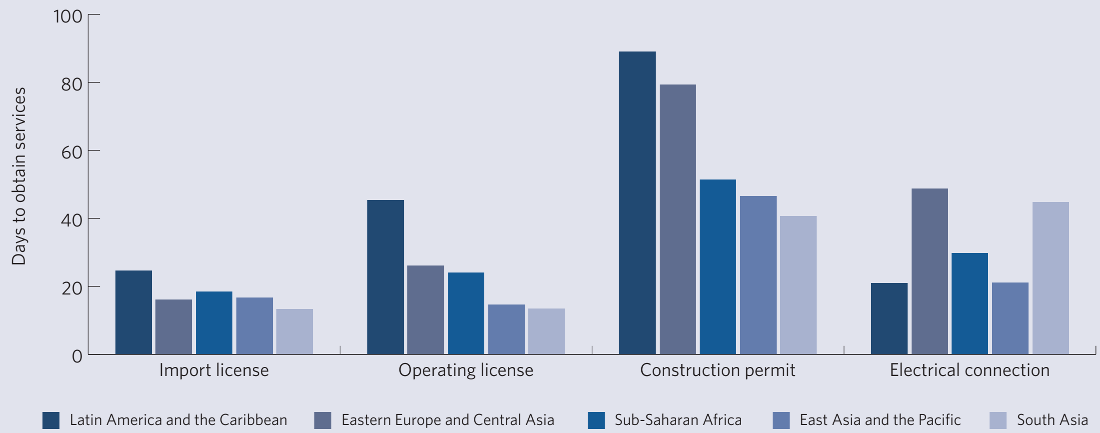
A more comprehensive measure of the enabling capacity of the business environment—the World Bank's Doing Business rankings[4]—shows a similar relationship: less burdensome regulation as experienced by firms is significantly associated with a greater ease of doing business (Figure 2). In LAC countries, which rank poorly on this scale, senior managers spend more time dealing with regulations. The relationship remained significant after accounting for differences in GNI per capita.[5]

The Enterprise Surveys show that the amount of time required to deal with regulation in Latin America is higher than in the rest of the world across a wide spectrum of activities in which firms engage public services (Figure 3). The waiting time to obtain import licenses, operating licenses, and construction permits are all higher than in any other region; only when it comes to obtaining electrical connections does LAC fare better than other regions.

The burden of regulation in LAC has increased in the last few years

Firms in LAC also report that the time spent on regulation has increased over time. The average time senior managers spend dealing with regulations, the time tax, rose in 12 of the 15 countries with cross-sectional data

FIGURE 3 LAC HAS MORE TIME CONSUMING INTERACTIONS WITH GOVERNMENT



Source: Enterprise Surveys.

for two rounds of surveys (conducted in 2006 and 2010), with significant increases in Argentina, Bolivia, El Salvador, Honduras, Nicaragua, Panama, Paraguay, and Uruguay.[6] The average time tax fell only in Colombia, Mexico, and the Bolivarian Republic of Venezuela, although Venezuela still has the third highest time tax in the region (Figure 4). This pattern remains the same if the reported time spent complying with government regulation is scaled by the number of employees in each firm.

FIGURE 4 THE BURDEN OF REGULATION INCREASED OVER TIME IN LATIN AMERICA AND THE CARIBBEAN

Source: Enterprise Surveys.

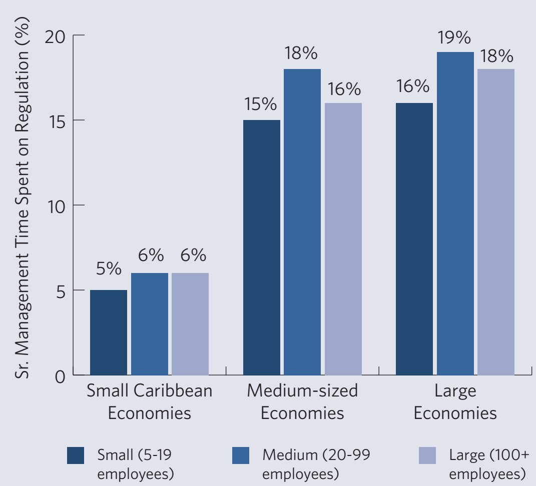
Note: *Change significant at 90% level

Small Caribbean economies face less time intensive regulations than the rest of the continent

The time tax is lower in the small Caribbean countries than in the rest of Latin America. There is ongoing debate as to how small countries differ from large ones in terms of business regulation. One view is that because small countries rely more on trade, they are more conscious of cutting costs and maintaining business-friendly regulatory environments (Alesina 2002; Alesina and Wacziarg 1998; Rose 2006). There is some evidence in LAC to support this view. The time tax increases with country size, as measured by population, with the most stark contrast occurring between Caribbean countries and the rest of Latin America. The percentage of senior management's time spent dealing with regulation is less than 6 percent for the small Caribbean countries, versus 16 percent in both medium-sized countries and large countries.

The average time tax is lower across all firm size groups among small Caribbean economies (Figure 5). In medium-sized and large economies, medium-size firms—those with 20 to 99 employees—report the highest time tax levels. Perhaps due to greater visibility, more complex operations, and lack of connections or ability to circumvent bureaucracies, these medium-size firms dedicate more time to complying with regulations.

FIGURE 5 THE TIME TAX VARIES BY FIRM SIZE IN LATIN AMERICA AND THE CARIBBEAN



Source: Enterprise Surveys.

Enterprise Surveys provide indicators of the incidence and depth of bribe requests

The Enterprise Surveys measure the occurrence of bribe requests during six specific transactions involving public services that are critical to business operations: applications for construction permits, operating licenses, import licenses, water connections, electrical connections, and meetings with tax officials. *Bribery incidence* measures the percentage of enterprises subject to bribe requests in at least one of these six transactions. *Bribery depth* is a composite measure of the percentage of transactions in which bribes were requested or expected. Thus bribery incidence measures the likelihood of being exposed to bribe requests, and bribery depth measures the intensity or frequency of this exposure.

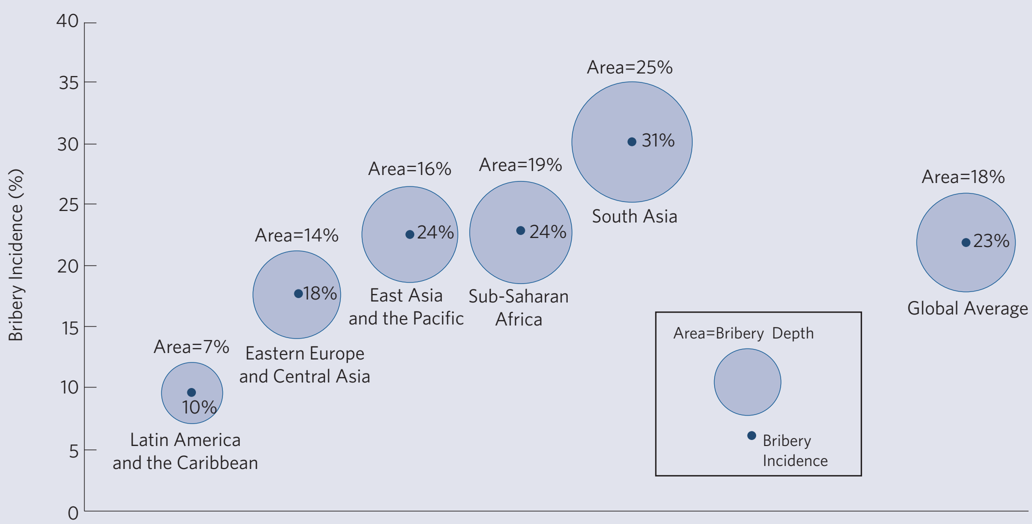
Firms in LAC face a lower incidence and depth of bribery

Fewer enterprises in LAC report being requested to pay bribes, and at a lower depth, than in the rest of the developing world. Bribery requests occur in 7 percent of the specified public service transaction areas in LAC; elsewhere in the developing world, the average of this bribery depth is 18 percent. One in ten firms in LAC is requested to pay at least one bribe when using public resources, the lowest incidence of any region. Outside of LAC, 23 percent of firms in the developing world are asked for bribes in the same transactions. In LAC, 73 percent of firms engaged in transactions to obtain licenses or services, compared with a 79 percent average outside the region. The lower rate of these transactions may partly explain the lower incidence of bribes in the region. Regardless, on average, firms in LAC face bribe requests at less than half the rate of bribe incidence elsewhere in the developing world (Figure 6).

Nonetheless, corruption levels vary across countries in the LAC region

While the average level of corruption in LAC is low, there is wide variation across the region. Reported

FIGURE 6 BRIBERY INCIDENCE AND DEPTH IN LAC ARE BELOW OTHER REGIONAL AVERAGES

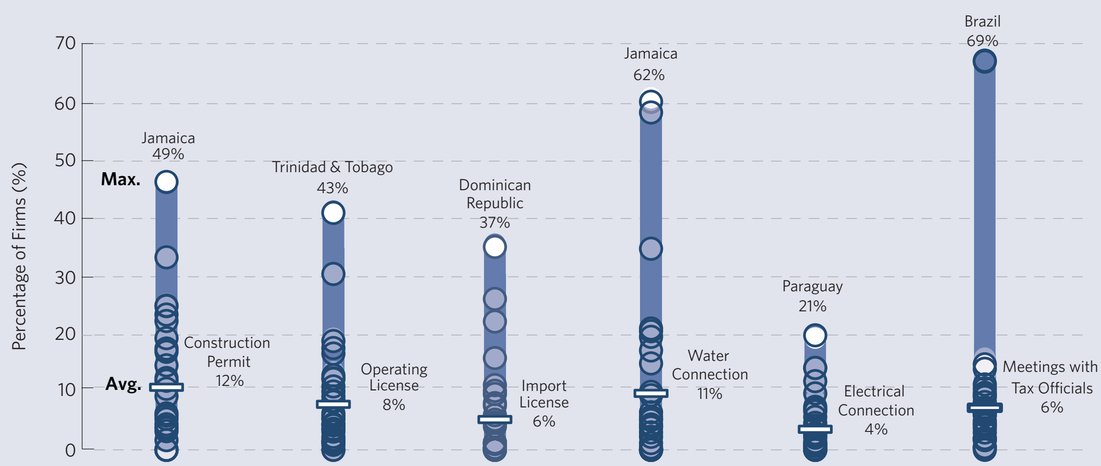


Source: Enterprise Surveys.

corruption is most widespread and deepest in Paraguay, where 32 percent of firms reported at least one bribe request and 21 percent of key transactions are subject to them. Bribery incidence in the region is lowest in Barbados, where just over 1 percent of firms reported bribe requests. Chilean firms have the region's lowest bribery depth at less than 1 percent.

Corruption in LAC does not occur uniformly, but at varying frequencies depending on the public service area. Figure 7 shows the percent of firms that face a bribe request

FIGURE 7 CORRUPTION VARIES WIDELY ACROSS COUNTRIES AND TRANSACTIONS



Note: Each circle represents a separate country average, with maximum values within the region highlighted in white. Bars represent LAC regional averages.

by type of transaction, with country averages represented by individual circles. While corruption rates vary by transaction type—from a regional average of 4 percent of firms being requested to pay a bribe when applying for an electrical connection to an average of 12 percent when applying for construction permits—they vary to an even greater extent from one country to another. Moreover, no one country dominates in all areas: of the six transaction areas included in the bribery incidence measure, the highest rates of reported corruption are spread among five different countries; only Jamaica has the highest rate of requested bribes in two areas. This suggests that where corruption is high, it may be concentrated in specific transaction areas.

While bribery rates do not vary significantly with a country's income level, private sector firms engage with public services less frequently in wealthier countries. In all six transaction areas, firms in wealthier countries—those with GDP per capita equal to or above the 50th percentile for the region—reported applying for services at lower rates.[7] The share of firms exposed to bribe requests, however, is statistically the same in both poorer and wealthier countries for all transaction areas except applications for construction permits.[8] So that while there is no appreciable difference between poorer and wealthier countries when it comes to facing bribe requests, firms in poorer countries are more likely to engage in the sorts of transactions where a bribe request may occur.

Large firms in LAC seek more access to public services but are not necessarily targeted for more bribes

Large firms in LAC use public services and interact with government officials more often than do medium-size firms across all three groups of countries—large, medium-size, and small Caribbean countries (Figure 8). While this result is not surprising, it turns out that even though large firms in LAC are more likely to use public services, they are statistically no more likely to be subjected to bribe requests (as measured by both incidence and depth) than medium-size firms.

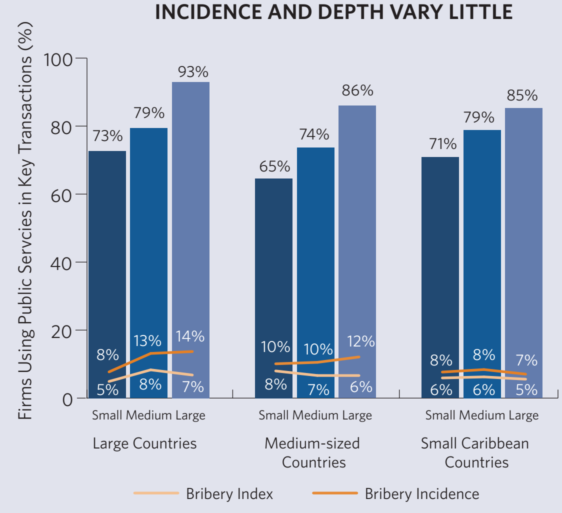
Meanwhile, small firms are less likely to be asked to pay bribes and show a lower rate of bribery depth than do medium and large firms. These smaller firms, however, also engage in transactions with public officials at lower rates; thus their reduced exposure to bribe requests may be due to less frequent engagement in transactions to utilize public services.[9]

Finally, corruption rates also vary by location *within* countries in LAC (Figure 9). In the region's largest countries, bribery is often localized in large metropolitan areas. In Argentina and Peru, enterprises report notably higher rates of bribery incidence in the two largest metropolitan areas than elsewhere in the country. Similarly, the average bribery incidence in Mexico City and Rio de Deneiro is far higher than for the rest of the country. In Chile and Colombia, where average rates of bribery incidence are comparatively low, rates of bribe requests remain low even in the largest metropolitan areas (Figure 9).

Corruption at the firm level in LAC has decreased over time

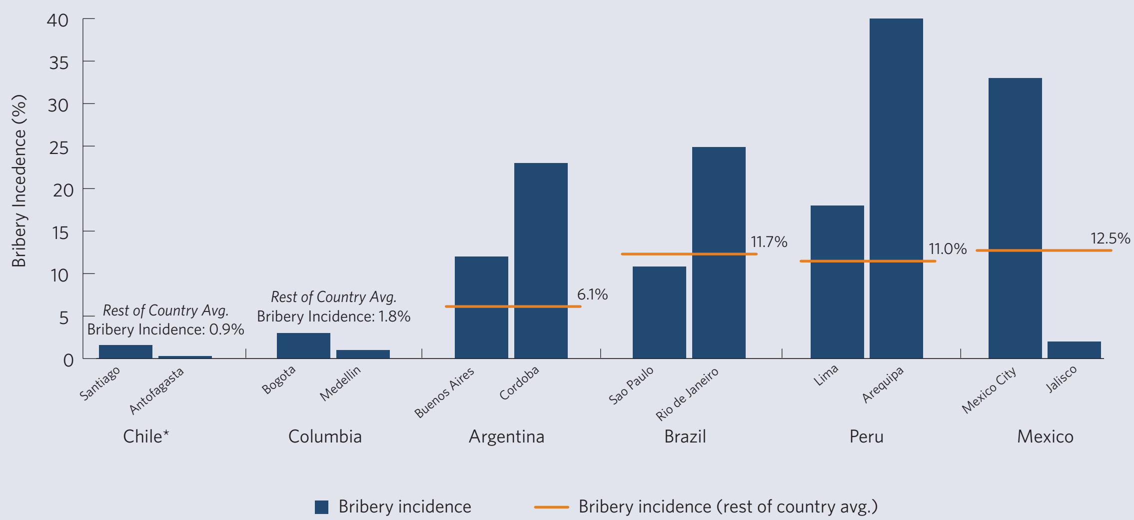
A positive sign for the region regarding corruption is that bribery depth has fallen or remained steady in many of the 15 countries where the Enterprise Surveys were conducted in 2006 and 2010. During that time, bribery depth dropped in 8 of the 15 LAC countries with comparable data from both years. The decrease was especially strong and significant in Bolivia and Ecuador. In the 7 countries where bribery depth rose, increases were generally small,[11] ranging from less than

FIGURE 8 INTERACTION WITH PUBLIC OFFICIALS DIFFERS BY FIRM SIZE, THOUGH BRIBERY INCIDENCE AND DEPTH VARY LITTLE



Source: Enterprise Surveys.

FIGURE 9 **BRIBERY IS HIGH IN LATIN AMERICAN AND CARIBBEAN CITIES OF VARIOUS SIZES**



Source: Enterprise Surveys.

Note: Two largest metropolitan areas shown for each country. Countries are shown in ascending order of the overall country average of bribe depth.

*Due to damage caused by the 2010 earthquake in Chile, interviews were not conducted in Bio Bio, which includes the city of Concepcion.

1 percent in Uruguay to 2.5 percent in the Bolivarian Republic of Venezuela; none of these increases were statistically significant.

In LAC, high corruption seems to wipe out productivity gains from rising incomes

It would be expected that overall economic development would help firms raise their productivity through, for example, better infrastructure, better access to finance and a less cumbersome regulatory environment for firms. However, these benefits of economic development can stall if corruption is high. This is the case in LAC, where higher GNI per capita is strongly associated with higher labor productivity among firms, but only for countries with relatively low levels of corruption. As corruption rises above a critical level, improvements in GNI per capita cease to be associated with higher labor productivity; while the mechanism by which this occurs cannot be explained by the data, this result indicates that in the face of high levels of corruption, any productivity gains emerging from higher incomes are wiped out by rent seeking behavior.[12]

Endnotes

1. Lead authors: David C. Francis, Mohammad Amin, and Jorge Rodríguez Meza with the collaboration of the LAC report team

2. Data taken from 2010; Brazil data from 2009.

3 The "time tax" is regressed against the "Regulatory Quality" and "Government Efficacy" sub-indicators, each ranging from -2.5 to 2.5 (www.govindicators.org). This relationship is significant at the 99 percent level and remained significant after accounting for differences in Gross National Income per capita.

4 From the 2010 *Doing Business* Report; data for Brazil from 2009.

5 Significant at the 99 percent level, remaining significant at the 95 percent level after controlling for GNI per capita.

6 Significant at the 90 percent level.

7 This difference is significant for all transactions except applications for water connections.

8 Firms in poorer countries are exposed to higher rates of bribe requests when applying for construction permits.

9 A two-stage model is used to control for selection-bias effects in the estimation of both bribery depth (Heckman) and incidence (Heckman-Probit). The relationship remains the same after accounting for country population size.

10 Outside of the Distrito Federal and the State of Mexico.

11 No cross-sectional increases were significant at the 90 percent level.

12 The relationship between income and labor productivity was estimated using Ordinary Least Squares. The regressions were run separately for countries with high and low average levels of corruption incidence; different cut-off levels were tried for the high vs. low levels of corruption to get the sharpest results. Results reported are for the cut-off level of 66th percentile value of corruption, at which the difference between high and low corruption countries is the sharpest.

References

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