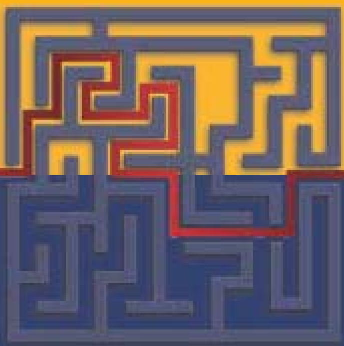
About *Doing Business*: measuring for impact



- The choice of indicators for *Doing Business* has been guided by economic research and firm-level data.
- *Doing Business* captures several important dimensions of the regulatory environment as it applies to local firms.
- In constructing the indicators *Doing Business* uses 2 types of data—data that come from readings of laws and regulations and data that measure the complexity and cost of regulatory processes.
- The indicators are developed around standardized case scenarios with specific assumptions. One such assumption is the location of a business in the largest business city of the economy.
- The objective of *Doing Business*: regulations designed to be efficient, accessible to all who use them and simple in their implementation.
- Over the past 11 years more than 25,000 professionals in 189 economies have assisted in providing the data that inform the *Doing Business* indicators.

Sound business regulations are important for a thriving private sector—and a thriving private sector is important for overall development. In the developing world the private sector is the largest employer, providing an estimated 90% of jobs.[1] Having the right business regulations and related institutions is therefore essential for the health of an economy.[2]

This is the 11th *Doing Business* report. Before the first report was produced, in 2003, few measures of business regulations existed, and even fewer that were globally comparable. Earlier efforts from the 1980s and 1990s drew on perceptions data. These expert or business surveys focused on broad aspects of the business environment and often captured the experiences of businesses. These surveys often lacked the specificity and cross-country comparability that *Doing Business* provides—by focusing on well-defined transactions, laws and institutions rather than generic, perceptions-based questions on the business environment.

Doing Business measures business regulations for local firms. The project focuses on small and medium-size companies operating in the largest business city of an economy. Based on standardized case studies, it presents quantitative indicators on the regulations that apply to firms at different stages of their life cycle. The results for each economy can be benchmarked to those for 188 other economies and over time.

De jure rules, such as those that are the focus of *Doing Business*, can be measured in a standardized way and are directly amenable to policy reforms. But these measures may not reflect the de facto experiences of firms. Data collected through firm-level surveys can better measure actual experiences. Over the years the choice of indicators for *Doing Business* has therefore been guided by economic research and firm-level data, in particular from the World Bank Enterprise Surveys. These surveys provide data highlighting the main obstacles to business activity as reported by entrepreneurs in more than 120 economies. Among the factors that the surveys have identified as important to businesses have been access to finance and electricity—inspiring the design of the *Doing Business* indicators on getting credit and getting electricity.

The design of the *Doing Business* indicators has also drawn on theoretical insights gleaned from extensive research literature. One early inspiration was a background paper for the World Bank's *World Development Report 2002: Building Institutions for Markets*, which created an index measuring the efficiency of judicial systems.[3] This paper contributed to a new stream of research literature in law and economics. The background papers developing the methodology for each of the *Doing Business* indicator sets are part of this research stream.[4] These papers established the importance of the rules and regulations that *Doing Business* measures for such economic outcomes as trade volumes, foreign direct investment, market capitalization in stock exchanges and private credit as a percentage of GDP.

Rules and regulations are under the direct control of policy makers—and policy makers intending to change the set of incentives under which businesses operate will often start by changing rules and regulations that have an impact on firm behavior. *Doing Business* goes beyond identifying an existing problem in the regulatory framework and points to specific regulations or regulatory procedures that may lend themselves to regulatory reform. And its quantitative measures of business regulations enable research on how specific regulations affect firm behavior and economic outcomes.

The first *Doing Business* report covered 5 topics and 133 economies. This year's report covers 11 topics and 189 economies. Ten topics are included in both the aggregate ranking on the ease of doing business and the distance to frontier measure.[5] The *Doing Business* methodology makes it possible to update the indicators in a relatively inexpensive and replicable way.

The project has benefited from feedback from governments, academics, practitioners and independent reviewers—most recently an independent panel appointed by the president of the World Bank Group. The panel's recommendations came too late for significant changes to this year's report, but the project will explore options for improvement in coming editions. To this end, operational oversight for the project will be moved to the Development Economics Vice Presidency of the World Bank Group, to strengthen synergies between *Doing Business* and other World Bank Group flagship reports. The initial goal remains: to provide an objective basis for understanding and improving the regulatory environment for business.

WHAT *DOING BUSINESS* COVERS

Doing Business captures several important dimensions of the regulatory environment as it applies to local firms. It provides quantitative measures of regulations for starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting investors, paying taxes, trading across borders, enforcing contracts and resolving insolvency. *Doing Business* also measures regulations on employing workers.

This year's report does not present rankings of economies on the employing workers indicators or include the topic in the aggregate ranking on the ease of doing business. It does present the data on the employing workers indicators. Additional data on labor regulations collected in 189 economies are available on the *Doing Business* website.[6]

An emphasis on smart regulations

Doing Business is not about eliminating the role of the state from private sector development. On the contrary, *Doing Business* recognizes that the state has a fundamental role in private sector development. A key premise of *Doing Business* is that economic activity requires good rules. These include rules that establish and clarify property rights, reduce the cost of resolving disputes, increase the predictability of economic interactions and provide contractual partners with core protections against abuse. The objective is to have regulations designed to be efficient, accessible to all who use them and simple in their implementation.

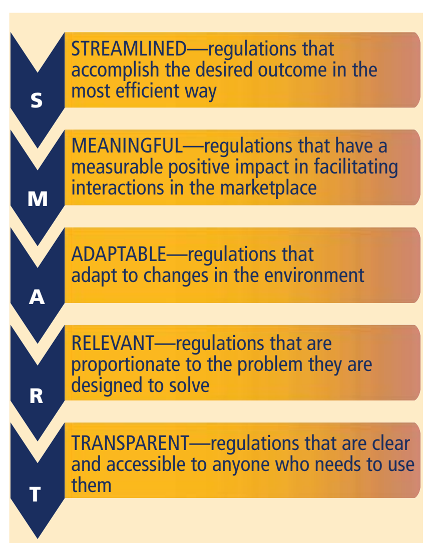
Accordingly, some *Doing Business* indicators give a higher score for better and more developed regulation, as the protecting investors indicators do for stricter disclosure requirements for related-party transactions. Other indicators, such as those on dealing with construction permits, automatically assign the lowest score to economies that have no regulations in the area measured or do not apply their regulations (considered "no practice" economies), penalizing them for lacking appropriate regulation. Still others give a higher score for a simplified way of applying regulation with lower compliance costs for firms—as the starting a business indicators do, for example, if firms can comply with business start-up formalities in a one-stop shop or through a single online filing portal. And finally, some indicators recognize economies that apply a risk-based approach to regulation as a way to address environmental and social concerns—that is, by imposing greater regulatory requirements on activities that pose a higher risk to the population and lesser regulatory requirements on lower-risk activities.

Among the 30 economies ranking highest on the ease of doing business, a substantial number—Canada, Denmark, Germany, Japan, the Republic of Korea, New Zealand, Norway, Sweden—come from a tradition of the government having quite a prominent presence in the economy, including through setting out rules to regulate different aspects of private sector activity. Yet all these economies perform well not only on the *Doing Business* indicators but also in other international data sets capturing dimensions of competitiveness. The economies performing best in the *Doing Business* rankings therefore are not those with no regulation but those whose governments have managed to create rules that facilitate interactions in the marketplace without needlessly hindering the development of the private sector. Ultimately, *Doing Business* is about smart regulations, and these can be provided only by a well-functioning state (figure 2.1).

Two types of data

In constructing the indicators the *Doing Business* project uses 2 types of data. The first comes from readings of laws and regulations in each economy. The *Doing Business* team, in collaboration with local expert respondents, examines the company law to find, for example, the disclosure requirements for related-party transactions. It reads the civil law to find the number of procedures necessary to resolve a commercial sale dispute through local courts. It reviews the labor code to find data on a range of issues concerning employer-employee relations. And it plumbs other legal instruments for other key pieces of data used in the indicators, several of which have a large legal dimension. Indeed, about three-quarters of the

FIGURE 2.1 How does *Doing Business* define SMART business regulations?



data used in *Doing Business* are of this type and are easily verifiable against the law. The local expert respondents play a vital role in corroborating the *Doing Business* team's understanding and interpretation of rules and laws.

Data of the second type serve as inputs into indicators on the complexity and cost of regulatory processes. These indicators measure the efficiency in achieving a regulatory goal, such as the number of procedures to obtain a building permit or the time taken to grant legal identity to a business. In this group of indicators cost estimates are recorded from official fee schedules where applicable. Time estimates often involve an element of judgment by respondents who routinely administer the relevant regulations or undertake the relevant transactions. To construct the time indicators, a regulatory process such as starting a business is broken down into clearly defined steps and procedures (for more details, see the discussion on methodology in this chapter). In constructing the starting a business indicators *Doing Business* builds on Hernando de Soto's pioneering work in applying the time-and-motion approach in the 1980s to show the obstacles to setting up a garment factory on the outskirts of Lima.[7]

In developing the data of this second type, the *Doing Business* team conducts several rounds of interaction with the expert respondents—through conference calls, written correspondence and visits by the team—until there is convergence on the final answer.[8] For data of the first type, because they are based on the law, there is less need for convergence and for a larger sample of experts to ensure accuracy.

WHAT *DOING BUSINESS* DOES NOT COVER

The *Doing Business* data have key limitations that should be kept in mind by those who use them.

Limited in scope

The *Doing Business* indicators are limited in scope. In particular:

- *Doing Business* does not measure the full range of factors, policies and institutions that affect the quality of the business environment in an economy or its national competitiveness. It does not, for example, capture aspects of security, the prevalence of bribery and corruption, market size, macroeconomic stability (including whether the government manages its public finances in a sustainable way), the state of the financial system, the state of the rental or resale property market or the level of training and skills of the labor force.
- Even within the relatively small set of indicators included in *Doing Business*, the focus is deliberately narrow. The getting electricity indicators, for example, capture the procedures, time and cost involved for a business to obtain a permanent electricity connection to supply a standardized warehouse, but they do not attempt to measure the reliability of the electricity supply itself. Through these indicators *Doing Business* thus provides a narrow perspective on the range of infrastructure challenges that firms face, particularly in the developing world. It does not address the extent to which inadequate roads, rail, ports and communications may add to firms' costs and undermine competitiveness (except to the extent that the quality of ports and roads is measured through the trading across borders indicators). *Doing Business* covers 11 areas of a company's life cycle, through 11 specific sets of indicators (table 2.1). Similar to the indicators on getting electricity, those on starting a business or protecting investors do not cover all aspects of commercial legislation. And those on employing workers do not cover all areas of labor regulation; for example, they do not measure regulations addressing health and safety issues at work or the right of collective bargaining.
- *Doing Business* does not attempt to measure all costs and benefits of a particular law or regulation to society as a whole. The paying taxes indicators, for example, measure the total tax rate, which in isolation is a cost to businesses. The indicators do not measure, nor are they intended to measure, the benefits of the social and economic programs funded through tax revenues. Measuring business laws and regulations provides one input into the debate on the regulatory burden associated with achieving regulatory objectives. Those objectives can differ across economies. *Doing Business* provides a starting point for this discussion.

Limited to standardized case scenarios

A key consideration for the *Doing Business* indicators is that they should ensure

TABLE 2.1 *Doing Business*—benchmarking 11 areas of business regulation

Complexity and cost of regulatory processes	
Starting a business	Procedures, time, cost and paid-in minimum capital requirement
Dealing with construction permits	Procedures, time and cost
Getting electricity	Procedures, time and cost
Registering property	Procedures, time and cost
Paying taxes	Payments, time and total tax rate
Trading across borders	Documents, time and cost
Strength of legal institutions	
Getting credit	Movable collateral laws and credit information systems
Protecting investors	Disclosure and liability in related-party transactions
Enforcing contracts	Procedures, time and cost to resolve a commercial dispute
Resolving insolvency	Time, cost, outcome and recovery rate
Employing workers	Flexibility in the regulation of employment

Note: The employing workers indicators are not included in this year's ranking on the ease of doing business nor in the calculation of distance to frontier or any data on the strength of legal institutions included in figures in the report.

comparability of the data across a global set of economies. The indicators are therefore developed around standardized case scenarios with specific assumptions. One such assumption is the location of a notional business—the subject of the *Doing Business* case study—in the largest business city of the economy. The reality is that business regulations and their enforcement very often differ within a country, particularly in federal states and large economies. But gathering data for every relevant jurisdiction in each of the 189 economies covered by *Doing Business* would be far too costly.

Doing Business recognizes the limitations of the standardized case scenarios and assumptions. But while such assumptions come at the expense of generality, they also help ensure the comparability of data. For this reason it is common to see limiting assumptions of this kind in economic indicators. Inflation statistics, for example, are often based on prices of a set of consumer goods in a few urban areas, since collecting nationally representative price data at high frequencies would be prohibitively costly in many countries. To capture regional variation in the business environment within economies, *Doing Business* has complemented its global indicators with subnational studies in some economies where resources and interest have come together (box 2.1).

Some *Doing Business* topics include complex areas, and so it is important that the standardized cases are carefully defined. For example, the standardized case scenario usually involves a limited liability company or its legal equivalent. The considerations in defining this assumption are twofold. First, private limited liability companies are, empirically, the most prevalent business form for firms with more than one owner in many economies around the world. Second, this choice reflects the focus of *Doing Business* on expanding opportunities for entrepreneurship: investors are encouraged to venture into business when potential losses are limited to their capital participation.

Limited to the formal sector

The *Doing Business* indicators assume that entrepreneurs have knowledge of and comply with applicable regulations.

BOX 2.1 Comparing regulations at the local level: *Subnational Doing Business*

Subnational Doing Business expands the *Doing Business* analysis beyond the largest business city of an economy. It captures differences in regulations or in the implementation of national laws across locations within an economy (as in India) or a region (as in South East Europe). Projects are undertaken at the request of governments.

Subnational Doing Business produces disaggregated data on business regulations in locations where information has been nonexistent or where national data are insufficient to fully assess the regulatory environment. But it is more than a data collection exercise. *Subnational Doing Business* has proved to be a strong motivator for regulatory reform:

- *Subnational Doing Business* involves multiple interactions with government partners at national, regional and municipal levels, resulting in local ownership and capacity building.
- The data produced are comparable across locations within the economy and internationally, enabling locations to benchmark their results both locally and globally. Comparisons of locations that are within the same economy and therefore share the same legal and regulatory framework can be revealing: local officials find it hard to explain why doing business is more difficult in their jurisdiction than in a neighboring one.
- Pointing out good practices that exist in some locations but not others in an economy helps policy makers recognize the potential for achieving a regulatory performance far better than that suggested by the ranking captured in the global *Doing Business* report. This can prompt discussions of regulatory reform across different levels of government, providing opportunities for local governments and agencies to learn from one another.
- *Subnational Doing Business* indicators are actionable, because most of the areas measured are within governments' mandate. In addition, the reports provide policy recommendations and examples of good practice that are easy to replicate because of the shared legal traditions and institutions.

Since 2005 subnational reports have covered 355 cities in 55 economies, including Brazil, China, India, Kenya, Morocco, Pakistan and the Philippines.[a] This year subnational studies were completed in Colombia and Italy, and a report covering one data set was produced for Hargeisa (Somaliland). Studies are ongoing in 15 cities and 3 ports in the Arab Republic of Egypt, in 31 states and the Federal District in Mexico and in 36 states and the Federal Capital Territory in Nigeria. In addition, 2 regional reports were published this year:

- *Doing Business in the g7+*, comparing business regulations in economies of the g7+ group—Afghanistan, Burundi, the Central African Republic, Chad, the Comoros, the Democratic Republic of Congo, Côte d'Ivoire, Guinea, Guinea-Bissau, Haiti, Liberia, Papua New Guinea, Sierra Leone, the Solomon Islands, South Sudan, Timor-Leste and Togo.[b] The g7+ group is a country-owned and country-led global mechanism established in April 2010 to monitor, report and draw attention to the unique challenges faced by fragile states.
- *Doing Business in the East African Community*, covering Burundi, Kenya, Rwanda, Tanzania and Uganda.

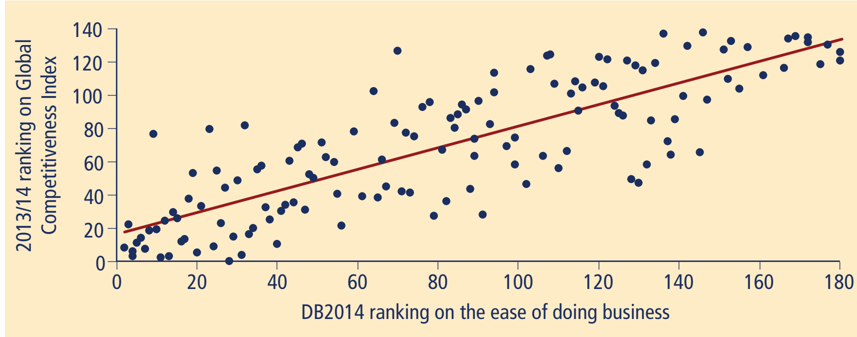
a. Subnational reports are available on the *Doing Business* website at http://www.doingbusiness.org/subnational.

b. *Doing Business* does not collect data for Somalia, also a member of the g7+ group.

In practice, entrepreneurs may not know what needs to be done or how to comply, and may lose considerable time in trying to find out. Or they may deliberately avoid compliance altogether—by not registering for social security, for example. Where regulation is particularly onerous, levels of informality tend to be higher.[9] Compared with their formal sector counterparts, firms in the informal sector typically grow more slowly, have poorer access to credit and employ fewer workers—and these workers remain outside the protections of labor law.[10] Firms in the informal sector are also less likely to pay taxes.

Doing Business measures one set of factors that help explain the occurrence of informality and give policy makers insights into potential areas of regulatory reform. Gaining a fuller understanding of the broader business environment, and a broader perspective on policy challenges, requires combining insights from *Doing Business* with data from other sources, such as the World Bank Enterprise Surveys.[11]

FIGURE 2.2 A strong correlation between *Doing Business* rankings and World Economic Forum rankings on global competitiveness



Note: Relationships are significant at the 1% level after controlling for income per capita.
Source: Doing Business database; WEF 2013.

WHY THIS FOCUS?

Why does *Doing Business* focus on the regulatory environment for small and medium-size enterprises? These enterprises are key drivers of competition, growth and job creation, particularly in developing economies. But in these economies up to 65% of output is produced in the informal sector, often because of excessive bureaucracy and regulation—and in the informal sector firms lack access to the opportunities and protections that the law provides. Even firms operating in the formal sector might not all have equal access to these opportunities and protections.

Where regulation is burdensome and competition limited, success tends to depend on whom one knows. But where regulation is transparent, efficient and implemented in a simple way, it becomes easier for aspiring entrepreneurs to compete on an equal footing and to innovate and expand. In this sense *Doing Business* values good rules as a key to social inclusion. Enabling growth—and ensuring that all people, regardless of income level, can participate in its benefits—requires an environment where new entrants with drive and good ideas can get started in business and where good firms can invest and grow, thereby creating more jobs.

Doing Business functions as a barometer of the regulatory environment for domestic businesses. To use a medical analogy, *Doing Business* is similar to a cholesterol test. A cholesterol test does not tell us everything about our health. But our cholesterol level is easier to measure than our overall health, and the test provides us with important information, warning us when we need to adjust our behavior. Similarly, *Doing Business* does not tell us everything we need to know about the regulatory environment for domestic businesses. But its indicators cover aspects that are more easily measured than the entire regulatory environment, and they provide important information about where change is needed.

To test whether *Doing Business* serves as a proxy for the broader business environment and for competitiveness, one approach is to look at correlations between the *Doing Business* rankings and other major economic benchmarks. Closest to *Doing Business* in what it measures is the set of indicators on product market regulation compiled by the Organisation for Economic Co-operation and Development (OECD). These indicators are designed to help assess the extent to which the regulatory environment promotes or inhibits competition. They include measures of the extent of price controls, the licensing and permit system, the degree of simplification of rules and procedures, the administrative burdens and legal and regulatory barriers, the prevalence of discriminatory procedures and the degree of government control over business enterprises.[12] These indicators—for the 39 countries that are covered, several of them large emerging markets—are correlated with the *Doing Business* rankings (the correlation here is 0.49).

There is a high correlation (0.84) between the *Doing Business* rankings and the rankings on the World Economic Forum's Global Competitiveness Index, a much broader measure capturing such factors as macroeconomic stability, aspects of human capital, the soundness of public institutions and the sophistication of the business community (figure 2.2).[13] For several of these factors the Global Competitiveness Index uses data collected by other organizations. For others it uses primary data, collected through surveys of the business community's perceptions of the business environment.[14] Self-reported experiences with business regulations, such as those captured by the Global Competitiveness Index, often vary much more within economies (across respondents in the same economy) than across economies, suggesting that different firms experience the same regulatory environment in very different ways.[15]

DOING BUSINESS AS A BENCHMARKING EXERCISE

By capturing key dimensions of regulatory regimes, *Doing Business* provides a rich opportunity for benchmarking. Such a benchmarking exercise is necessarily incomplete, just as the *Doing Business* data are limited in scope. It is useful when it aids judgment, but not when it supplants judgment.

Since 2006 *Doing Business* has sought to provide 2 perspectives on the data that it collects: it presents "absolute" indicators for each economy for 10 of the 11 regulatory topics that it addresses, and it provides rankings of economies for these 10 topics, by topic and also in the aggregate. Judgment is required in interpreting these measures for any economy and in determining an economically sensible and politically feasible path for regulatory reform.

Reviewing the *Doing Business* rankings in isolation may reveal unexpected results. Some economies may rank unexpectedly high on some topics. And some economies that have had rapid growth or attracted a great deal of investment may rank lower than others that appear to be less dynamic. As economies develop, they may add to or improve on regulations that protect investor and property rights. Many also tend to streamline existing regulations and prune outdated ones. One finding of *Doing Business* is that dynamic and growing economies continually reform and update their business regulations and the implementation of those regulations, while many poor economies still work with regulatory systems dating to the late 1800s.

For reform-minded governments, how much the regulatory environment for local entrepreneurs improves in an absolute sense matters far more than their economy's ranking relative to other economies. To aid in assessing the absolute level of regulatory performance and how it improves over time, this year's report again presents the distance to frontier measure. This measure shows the distance of each economy to the "frontier," which represents the highest performance observed on each of the indicators across all economies included in *Doing Business* since 2003.

At any point in time the distance to frontier measure shows how far an economy is from the highest performance. And comparing an economy's score at 2 points in time allows users to assess the absolute change over time in the economy's regulatory environment as measured by *Doing Business*, rather than simply the change in the economy's performance relative to others. In this way the distance to frontier measure complements the yearly ease of doing business ranking, which compares economies with one another at a point in time.

Doing Business uses a simple averaging approach for weighting component indicators and calculating rankings and the distance to frontier measure. Other approaches were explored, including using principal components and unobserved components.[16] They turn out to yield results nearly identical to those of simple averaging. In the absence of a strong theoretical framework that assigns different weights to the topics covered for the 189 economies by *Doing Business*, the simplest method is used: weighting all topics equally and, within each topic, giving equal weight to each of the topic components.[17]

Each topic covered by *Doing Business* relates to a different aspect of the business regulatory environment. The rankings of each economy vary, often substantially, across topics, indicating that strong performance by an economy in one area of regulation can coexist with weak performance in another. A quick way to assess the variability of an economy's regulatory performance across the different areas is to look at the topic rankings (see the country tables). Guatemala, for example, stands at 79 in the overall ease of doing business ranking. Its ranking is 13 on the ease of getting credit, 23 on the ease of registering property and 34 on the ease of getting electricity. At the same time, it has a ranking of 116 on the ease of trading across borders, 145 on the ease of starting a business and 157 on the strength of investor protections (see figure 1.3 in the overview).

HOW GOVERNMENTS USE *DOING BUSINESS*

Doing Business offers policy makers a benchmarking tool useful in stimulating policy debate, both by exposing potential challenges and by identifying good practices and lessons learned. Despite the narrow focus of the indicators, the initial debate in an economy on the results they highlight typically turns into a deeper discussion on their relevance to the economy and on areas where business regulatory reform is needed, including areas well beyond those measured by *Doing Business*.

Part of a broad approach to policy reform

Many of the *Doing Business* indicators can be considered "actionable." For example, governments have direct control over the minimum capital requirement for new firms. They can invest in company and property registries to increase the efficiency of these public agencies. They can improve the efficiency of tax administration by adopting the latest technologies to facilitate the preparation, filing and payment of taxes by the business community. And they can undertake court reforms to shorten delays in the enforcement of contracts. But some *Doing Business* indicators capture procedures, time and costs that involve private sector participants, such as lawyers, notaries, architects, electricians or freight forwarders. Governments may have little influence in the short run over the fees these professions charge, though much can be achieved by strengthening professional licensing regimes and preventing anticompetitive behavior. And governments have no control over the geographic location of their economy, a factor that can adversely affect businesses.

While *Doing Business* indicators are actionable, this does not necessarily mean that they are all "action-worthy" in a particular context. Business regulatory reforms are one element of a strategy aimed at improving competitiveness and establishing a solid foundation for sustainable economic growth. There are many other important goals to pursue—such as effective management of public finances, adequate attention to education and training, adoption of the latest technologies to boost economic productivity and the quality of public services, and appropriate regard for air and water quality to safeguard people's health. Governments have to decide what set of priorities best fits the needs they face. To say that governments should work toward a sensible set of rules for private sector activity (as embodied, for example, in the *Doing Business* indicators) does not suggest that doing so should come at the expense of other worthy policy goals.

There is no evidence that *Doing Business* reforms are crowding out reforms in other areas, such as in fiscal policy or in health and education. Indeed, governments are increasingly recognizing that improving competitiveness and creating a better climate for private sector activity requires actions across a broad front, addressing factors and policies that extend well beyond those captured by the *Doing Business* indicators.

Over several years of engaging with authorities in a large number of economies, the *Doing Business* team has never seen a case where the binding constraint to, say, improvements in tax administration or contract enforcement was the feverish pace of reforms in other policy areas. Increasingly, the opposite seems to be the case, with governments recognizing the synergies of multifaceted reforms across a broad range of areas. Moreover, because the areas measured by *Doing Business* indicators encompass many government departments—typically including the ministries of justice, commerce, industry, finance, trade and energy, to name just a few—the administrative burden of regulatory reforms is more equitably shared.

Another factor has also helped sustain the interest of policy makers in the *Doing Business* data. Implementing coherent economic policies in the face of a rapidly changing global economy and an uncertain economic outlook is a great challenge. Many of the factors shaping the environment in which economic policies are formulated lie well outside the control of most policy makers, especially those in the developing world. But the rules and regulations that governments put in place to underpin private sector activity are largely homemade. Whether these rules are sensible or excessively burdensome, whether they create perverse incentives or help establish a level playing field, whether they safeguard transparency and encourage adequate competition—all this is largely within the control of governments.

Insights into good practices

As governments over the past decade have increasingly understood the importance of business regulation as a driving force of competitiveness, they have turned to *Doing Business* as a repository of actionable, objective data providing unique insights into good practices worldwide. Reform-minded governments seeking success stories in business regulation find examples in *Doing Business* (box 2.2). Saudi Arabia, for example, used the company law of France as a model for revising its own law. Many African governments may look to Mauritius—the region's strongest performer on *Doing Business* indicators—as a source of good practices to inspire regulatory reforms in their own countries. Governments shared knowledge of business regulations before the *Doing Business* project began. But *Doing Business* made it easier by creating a common language comparing business regulations around the world.

Over the past decade governments worldwide have been actively improving the regulatory environment for domestic companies. Most reforms relating to *Doing Business* topics have been nested in broader reform programs aimed at enhancing economic competitiveness, as in Colombia, Kenya, Liberia and the Russian Federation. In structuring reform programs for the business environment, governments use multiple data sources and indicators. This recognizes the reality that the *Doing Business* data on their own provide an incomplete roadmap for successful business regulatory reforms.[18] It also reflects the need to respond to many stakeholders

BOX 2.2 How economies have used *Doing Business* in regulatory reform programs

To ensure the coordination of efforts across agencies, such economies as Brunei Darussalam, Colombia and Rwanda have formed regulatory reform committees, reporting directly to the president. These committees use the *Doing Business* indicators as one input to inform their programs for improving the business environment. More than 45 other economies have formed such committees at the interministerial level. In East and South Asia they include the Republic of Korea; Malaysia; the Philippines; Taiwan, China; and Vietnam. In the Middle East and North Africa: Morocco, Saudi Arabia and the United Arab Emirates. In Europe and Central Asia: Croatia, Georgia, Kazakhstan, Kosovo, the Kyrgyz Republic, the former Yugoslav Republic of Macedonia, Moldova, Montenegro, Poland, the Russian Federation, Tajikistan, Ukraine and Uzbekistan. In Sub-Saharan Africa: Botswana, Burundi, the Central African Republic, the Comoros, the Democratic Republic of Congo, the Republic of Congo, Côte d'Ivoire, Guinea, Kenya, Liberia, Malawi, Mali, Nigeria, Sierra Leone, Togo and Zambia. And in Latin America: Chile, Costa Rica, the Dominican Republic, Guatemala, Mexico, Panama and Peru.

Since 2003 governments have reported more than 530 regulatory reforms that have been informed by *Doing Business*.[a] Many economies share knowledge on the regulatory reform process related to the areas measured by *Doing Business*. Among the most common venues for this knowledge sharing are peer-to-peer learning events—workshops where officials from different governments across a region or even across the globe meet to discuss the challenges of regulatory reform and to share their experiences. In recent years such events have taken place in Panama and Colombia (for Latin America and the Caribbean), in South Africa (for Sub-Saharan Africa), in Georgia (for Europe and Central Asia), in Malaysia (for East Asia and the Pacific) and in Morocco (for the Middle East and North Africa).

a. These are reforms for which *Doing Business* is aware that information provided by the *Doing Business* report was used in shaping the reform agenda.

and interest groups, all of whom bring important issues and concerns to the reform debate.

When the World Bank Group engages with governments on the subject of improving the investment climate, the dialogue aims to encourage the critical use of the *Doing Business* data—to sharpen judgment and promote broad-based reforms that enhance the investment climate rather than a narrow focus on improving the *Doing Business* rankings. The World Bank Group uses a vast range of indicators and analytics in this policy dialogue, including its Global Poverty Monitoring Indicators, World Development Indicators, Logistics Performance Indicators and many others. The open data initiative has made data for many such indicators conveniently available to the public at http://data.worldbank.org.

METHODOLOGY AND DATA

The *Doing Business* data are based on domestic laws and regulations as well as administrative requirements. The data cover 189 economies—including small economies and some of the poorest economies, for which little or no data are available in other data sets. (For a detailed explanation of the *Doing Business* methodology, see the data notes.) *Doing Business* uses 4 main sources of information: *Doing Business* respondents, the relevant laws and regulations, the governments of the economies covered and the World Bank Group regional staff.

Doing Business respondents

Over the past 11 years more than 25,000 professionals in 189 economies have assisted in providing the data that inform the *Doing Business* indicators. This year's report draws on the inputs of more than 10,200 professionals.[19] Table 21.2 in the data notes lists the number of respondents for each indicator set. The *Doing Business* website shows the number of respondents for each economy and each indicator. Respondents are professionals who routinely administer or advise on the legal and regulatory requirements covered in each *Doing Business* topic. They are selected on the basis of their expertise in the specific areas covered by *Doing Business*. Because of the focus on legal and regulatory arrangements, most of the respondents are legal professionals such as lawyers, judges or notaries. The credit information questionnaire is completed by officials of the credit registry or bureau. Freight forwarders, accountants, architects, engineers and other professionals answer the questionnaires related to trading across borders, taxes and construction permits. Certain public officials (such as registrars from the commercial or property registry) also provide information that is incorporated into the indicators.

Doing Business does not survey firms for 2 main reasons. The first relates to the frequency with which firms engage in the transactions captured by the indicators, which is generally low. For example, a firm goes through the start-up process once in its existence, while an incorporation lawyer may carry out several dozen such transactions in a year. The incorporation lawyers and other experts providing information to *Doing Business* are therefore better able to assess the process of starting a business than are individual firms. The second reason is that the *Doing Business* questionnaires mostly gather legal information, which firms are unlikely to be fully familiar with. For example, few firms will know about all the many legal procedures involved in resolving a commercial dispute through the courts, even if they have gone through the process themselves. But a litigation lawyer would have no difficulty in identifying all the necessary steps.

The annual data collection exercise is an update of the database. The *Doing Business* team and the contributors examine the extent to which the regulatory framework has changed in ways relevant for the features captured by the indicators. The data collection process should therefore be seen as adding each year to an existing stock of knowledge reflected in the previous year's report, not as creating an entirely new data set. Here is an example: In *Doing Business 2012* and *Doing Business 2013* there were an average of 13 economies for which changes in legislation affected the scores embedded in the protecting investors indicators. For all other economies the protecting investors data remained unchanged.

Relevant laws and regulations

Most of the *Doing Business* indicators are based on laws and regulations. *Doing Business* respondents both fill out written questionnaires and provide references to the relevant laws, regulations and fee schedules, aiding data checking and quality assurance. Having representative samples of respondents is not an issue, as the texts of the relevant laws and regulations are collected and answers checked for accuracy. For example, the *Doing Business* team will examine the commercial code of Greece to confirm the paid-in minimum capital requirement, look at the banking law of Ghana to see whether borrowers have the right to access their data at the credit bureau and read the tax code of Guatemala to find applicable tax rates. Indeed, 72% of the data embedded in the *Doing Business* indicators are based on a reading of the law. In principle in these cases, as long as there are no issues of language, the role of the contributors is largely advisory—helping in the corroboration of the *Doing Business* team's understanding of the laws and regulations—and there are quickly diminishing returns to an expansion in their number.

For the other 28% of the data the team conducts extensive consultations with multiple contributors to minimize measurement error. For some indicators—for example, those on dealing with construction permits, enforcing contracts and resolving insolvency—the time component and part of the cost component (where fee schedules are lacking) are based on actual practice rather than the law on the books. This introduces a degree of judgment. The *Doing Business* approach has therefore been to work with legal practitioners or professionals who regularly undertake the transactions involved. Following the standard methodological approach for time-and-motion studies, *Doing Business* breaks down each process or transaction, such as starting a business or registering a building, into separate steps to ensure a better estimate of time. The time estimate for each step is given by practitioners with significant and routine experience in the transaction. When time estimates differ, further interactions with respondents are pursued to converge on one estimate or a narrow range that reflects the majority of applicable cases.

Governments and World Bank Group regional staff

After receiving the completed questionnaires from the *Doing Business* respondents, verifying the information against the law and conducting follow-up inquiries to ensure that all relevant information is captured, the *Doing Business* team shares the preliminary findings of the report with governments through the Board of Executive Directors and the regional staff of the World Bank Group (figure 2.3). Through this process government authorities and local World Bank Group staff in the 189 economies covered can alert the team about, for example, regulatory reforms not picked up by the respondents or additional achievements of regulatory reforms already captured in the database. In response to such feedback, the *Doing Business* team turns to the local private sector experts for further consultation and, as needed, corroboration. In addition, the team responds formally to the comments of governments or regional staff and provides explanations of the scoring decisions.

Improvements to the methodology

The methodology has undergone continual improvement over the years. For enforcing contracts, for example, the amount of the disputed claim in the case study was increased from 50% of income per capita to 200% after the first year of data collection, as it became clear that smaller claims were unlikely to go to court. Another change related to starting a business. The minimum capital requirement can be an obstacle for potential entrepreneurs. *Doing Business* measured the required minimum capital regardless of whether it had to be paid up front or not. In many economies only part of the minimum capital has to be paid up front. To reflect the relevant barrier to entry, the paid-in minimum capital has been used rather than the required minimum capital.

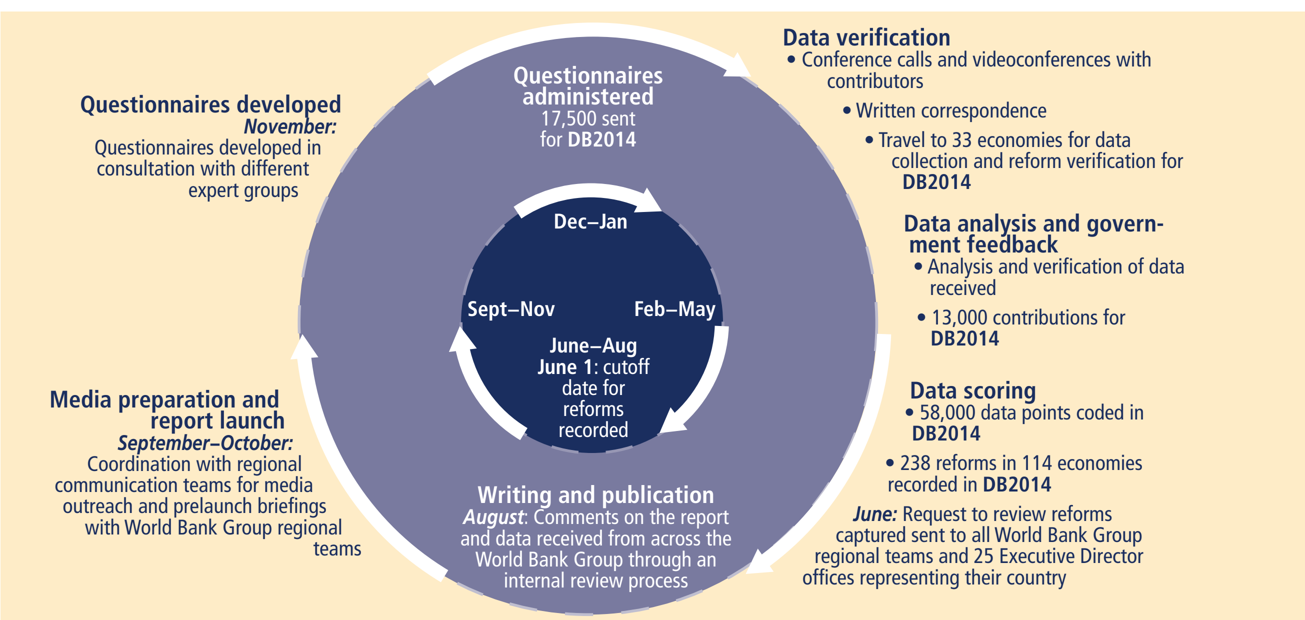
This year's report includes an update in the methodology for 2 indicator sets—paying taxes and trading across borders. For trading across borders, documents that are required purely for purposes of preferential treatment are no longer included in the list of documents (for example, a certificate of origin if the use is only to qualify for a preferential tariff rate under trade agreements). For paying taxes, the value of fuel taxes is no longer included in the total tax rate because of the difficulty of computing these small taxes. Fuel taxes continue to be counted in the number of payments.

In addition, the rule establishing that each procedure must take at least 1 day was removed for procedures that can be fully completed online in just a few hours. When the indicators were first developed in 2002, online procedures were not widespread globally. In the ensuing years there has been an impressive acceleration in the adoption by governments and the private sector of the latest information and communication technologies for the provision of various services. While at the time *Doing Business* did not see the need to create a separate rule to account for online procedures, the widespread use of the new technologies today suggests that such distinction is now justified and the *Doing Business* methodology was changed this year to reflect the practice. This change affects the time indicator for starting a business, dealing with construction permits and registering property.[20] For procedures that can be fully completed online, the duration is now set at half a day rather than a full day.

Data adjustments

All changes in methodology are explained in the data notes as well as on the *Doing Business* website. In addition, data time series for each indicator and economy are available on the website, beginning with the first year the indicator or economy was included in the report. To provide a comparable time series for research, the data set is back-calculated to adjust for changes in methodology, including those

FIGURE 2.3 The *Doing Business* data collection cycle



described in the previous section, and any revisions in data due to corrections. The data set is not back-calculated for year-to-year revisions in income per capita data (that is, when the income per capita data are revised by the original data sources, *Doing Business* does not update the cost measures for previous years). The website also makes available all original data sets used for background papers.

Information on data corrections is provided in the data notes and on the website. A transparent complaint procedure allows anyone to challenge the data. Over the past year the team received and responded to more than 140 queries on the data. These queries led to corrections of less than 8.5% of the data points. If errors are confirmed after a data verification process, they are expeditiously corrected.

NOTES

1. World Bank 2005; Stampini and others 2011.
2. See, for example, Alesina and others (2005); Perotti and Volpin (2005); Fisman and Sarria-Allende (2010); Antunes and Cavalcanti (2007); Barseghyan (2008); Klapper, Lewin and Quesada Delgado (2009); Freund and Bolaky (2008); Chang, Kaltani and Loayza (2009); Helpman, Melitz and Rubinstein (2008); Klapper, Laeven and Rajan (2006); World Bank (2005); and Ardagna and Lusardi (2010).
3. Djankov, La Porta and others 2001.
4. These papers include Djankov and others (2002); Djankov and Shleifer (2007); Djankov and others (2008); Djankov and Pham (2010); Djankov and others (2003); Djankov and others (2008); Botero and others (2004); and Djankov and others (2010).
5. For more details on how the aggregate ranking is created, see the chapter on the ease of doing business and distance to frontier.
6. http://www.doingbusiness.org.
7. De Soto 2000.
8. Questionnaires are administered annually to local experts in 189 economies to collect and update the data. The local experts for each economy are listed on the *Doing Business* website (http://www.doingbusiness.org) and in the acknowledgments at the end of this report.
9. Kaplan, Piedra and Seira 2011; Cuñat and Melitz 2007; Micco and Pagés 2006; Cardenas and Rozo 2009; Dulleck, Frijters and Winter-Ebmer 2006; Ciccone and Papaioannou 2007; Klapper, Lewin and Quesada Delgado 2009; Branstetter and others 2013; Bruhn 2011, 2013; Sharma 2009.
10. Schneider 2005; La Porta and Shleifer 2008.
11. http://www.enterprisesurveys.org.
12. OECD, "Indicators of Product Market Regulation," http://www.oecd.org/. The measures are aggregated into 3 broad families that capture state control, barriers to entrepreneurship and barriers to international trade and investment. The 39 countries included in the OECD market regulation indicators are Australia, Austria, Belgium, Brazil, Canada, Chile, China, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, India, Ireland, Israel, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, Russia, the Slovak Republic, Slovenia, South Africa, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States.
13. The World Economic Forum's *Global Competitiveness Report* uses *Doing Business* data sets on starting a business, employing workers, protecting investors and getting credit (legal rights), representing 7 of a total of 113 different indicators (or 6.19%).
14. The World Economic Forum constructs much of the Global Competitiveness Index mainly from secondary data. For example, it uses macroeconomic data from the International Monetary Fund's World Economic Outlook database, penetration rates for various technologies from the International Telecommunication Union, school enrollment rates and public health indicators from the World Bank's World Development Indicators database and indicators from other such sources, including *Doing Business*. It also supplements the secondary data with some primary data, collected from relatively small-sample opinion surveys of enterprise managers (Executive Opinion Surveys), for components accounting for 64% of the indicators captured in the index. By contrast, the *Doing Business* indicators are based entirely on primary data.
15. Hallward-Driemeier, Khun-Jush and Pritchett (2010), analyzing data from World Bank Enterprise Surveys for Sub-Saharan Africa, show that de jure measures such as *Doing Business* indicators are virtually uncorrelated with ex post firm-level responses, providing evidence that deals rather than rules prevail in Africa. The authors find that the gap between de jure and de facto conditions grows with the formal regulatory burden. The evidence also shows that more burdensome processes open up more space for making deals and that firms may not incur the official costs of compliance but still pay to avoid them.
16. A technical note on the different aggregation and weighting methods is available on the *Doing Business* website (http://www.doingbusiness.org).
17. For more details, see the chapter on the ease of doing business and distance to frontier.
18. One study using *Doing Business* indicators illustrates the difficulties in using highly disaggregated indicators to identify reform priorities (Kraay and Tawara 2011).
19. While about 10,200 contributors provided data for this year's report, many of them completed a questionnaire for more than one *Doing Business* indicator set. Indeed, the total number of contributions received for this year's report is more than 13,000, which represents a true measure of the inputs received. The average number of contributions per indicator set and economy is just over 6. For more details, see http://www.doingbusiness.org/contributors/doing-business.
20. For getting electricity the rule that each procedure must take a minimum of 1 day still applies because in practice there are no cases in which procedures can be fully completed online in less than a day. For example, even though in some cases it is possible to apply for an electricity connection online, additional requirements mean that the process cannot be completed in less than 1 day.