

Indeed, regulation can overburden businesses, making it virtually impossible for them to operate. Consider business registration. If the process is too complex—as in Equatorial Guinea, where completing the formalities to start a business takes 18 procedures and 135 days—it can deter entrepreneurs from even starting a new business. And if resolving a commercial dispute takes too much time—such as the 1,402 days in Guatemala—it can reduce the number of potential clients and suppliers for a company. Where courts are inefficient, firms are more likely to do business only with people they know. How regulations and regulatory processes are designed makes all the difference.

By expanding the scope of the indicators—a process started in last year's report and continued in this year's—*Doing Business* provides further clarity on the differences between well-designed and badly designed regulation. New data on the quality of regulation make it easier to identify where regulation is enabling businesses to thrive and where it is enabling rent seeking.

WHAT DOES DOING BUSINESS MEASURE—AND HOW IS IT CHANGING?

Measuring the quality of regulation is not new for *Doing Business*; some indicator sets have always addressed aspects of regulatory quality, such as those on getting credit and protecting minority investors. But the improvements being introduced in *Doing Business* indicators are increasing the emphasis on the quality of regulation as a complement to the initial emphasis on its efficiency. Last year's report expanded the indicator sets for three topics to capture aspects of quality; this year's report introduces changes in the indicator sets for five others, in most cases also by expanding them to measure quality as well as efficiency (figure 1.1).

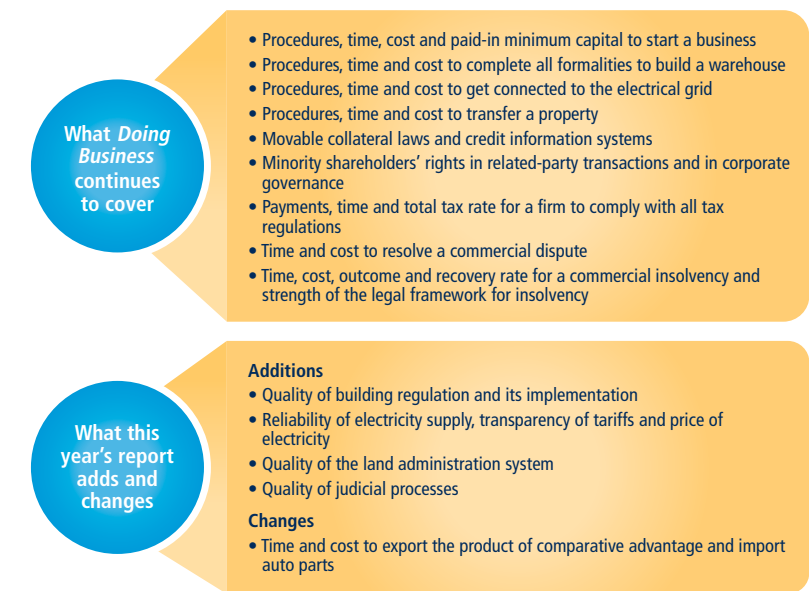
There are different ways to assess the quality of regulation. One way is to evaluate the process leading to the creation of new regulations, by looking at such aspects as whether consultations take place with stakeholders or whether regulatory impact assessments are carried out. Another is to analyze the perceptions of citizens or experts about a government's ability to formulate sound policies and regulations and implement them in a predictable fashion.

Doing Business uses a different approach to measuring the quality of regulation. It focuses on whether an economy has in place the rules and processes that can lead to good outcomes, linked in each case to *Doing Business* measures of efficiency. In the area of dealing with construction permits, for example, *Doing Business* now measures the quality of building regulations and the qualification requirements for the people reviewing building plans as well as the efficiency (as measured by time and cost) of the process for completing all the formalities to build a warehouse. *Doing Business* does not assess the process for designing

building regulations; instead, it gauges whether an economy has the kind of building regulations and quality controls that enable well-constructed buildings.

Doing Business continues to focus on regulation that affects domestic small and medium-size enterprises, operating in the largest business city of an economy, across 11 areas.¹ Ten of these areas—starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting minority investors, paying taxes, trading across borders, enforcing contracts and resolving insolvency—are included in the distance to frontier score and ease of doing business ranking. The distance to frontier score captures the gap between an economy's performance and a measure of best practice across the entire sample of 36 indicators, where 100 is the frontier and 0 is the furthest from the frontier. *Doing Business* also analyzes labor market regulation, which is not included in the distance to frontier score or ease of doing business ranking.²

FIGURE 1.1 What *Doing Business* continues to cover and what it is adding and changing



While *Doing Business* has always measured some aspects of regulatory quality, its original indicators have focused mainly on measuring regulatory efficiency, such as by recording the procedures, time and cost to start a business or to register a property transfer. These are important aspects to measure. Different research papers have shown the importance of these measures for economic outcomes.³ According to one study, for example, a reform that simplified business registration in Mexican municipalities increased registration by 5% and wage employment by 2.2%—and, as a result of increased competition, reduced the income of incumbent businesses by 3%.⁴ Other studies have analyzed the importance of trade logistics costs. Research using World Bank Enterprise Survey data shows that reductions over time in the cost of importing lead to an increase in the share of firms' material inputs that are of foreign origin.⁵

Other research papers show the importance of well-designed credit market regulations and well-functioning court systems for debt recovery. For example, mandatory credit reporting systems improve financial intermediation and access, particularly when used in conjunction with credit information systems.⁶ In India the establishment of debt recovery tribunals reduced nonperforming loans by 28% and lowered interest rates on larger loans, suggesting that faster processing of debt recovery cases cut the cost of credit.⁷ Research also shows that a badly designed tax system can be a big deterrent for businesses. After a tax reform in Brazil, business licensing among retail firms rose by 13%.⁸

But measuring quality in the same areas where *Doing Business* previously measured only efficiency is also important. To see why, we can compare data for the registering property indicators for two countries: Saudi Arabia, where the property transfer process is fast but opaque, and France, where the process is slow but

the land administration system is of high quality.

In Saudi Arabia transferring a commercial property from one company to another takes less than a week and costs nothing in fees. But new data collected by *Doing Business* this year on the quality of land administration systems show that the Saudi system lacks transparency and the mechanisms for resolving land disputes are complex. Information either is not accessible to everyone or can be obtained only in person. And resolving a land dispute over tenure rights between two local businesses in Riyadh takes more than three years.

France has the opposite situation. *Doing Business* data show that the property transfer process is long and costly: transferring a commercial property takes 49 days on average and costs 6.1% of the property value. But the new data collected by *Doing Business* show that the land administration system has strong standards of transparency and effective mechanisms for dispute resolution. Thanks to fully digital records at the mapping agency (cadastre), anyone can consult maps and verify boundaries. Information about documents and fees for property transfers can be found online and on public boards. And resolving a land dispute over tenure rights between two local businesses in Paris takes between one and two years.

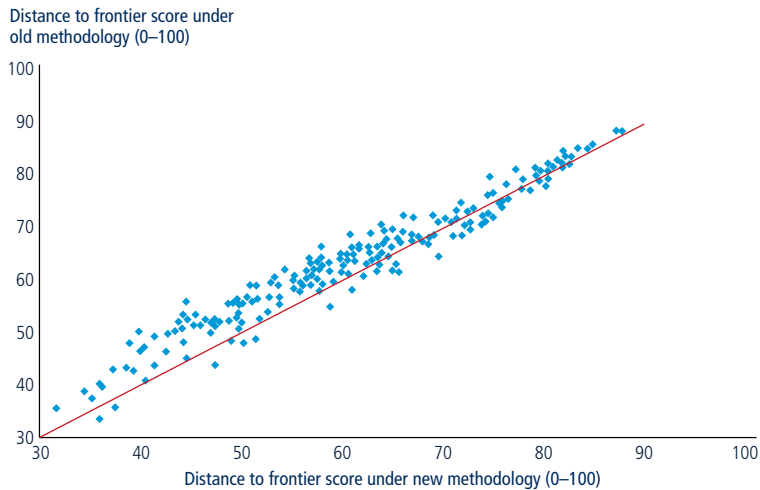
Besides expanding the scope of indicator sets to measure aspects of regulatory quality, this year *Doing Business* is changing the methodology for the trading across borders indicators to increase their policy relevance. The case study now reflects different assumptions about the traded product. For the export process *Doing Business* now focuses on the product of comparative advantage for each economy and its natural trading partner for that product. This allows consideration of a large range of products while before only six were possible. It also ensures that

the indicators measuring the time and cost to export focus on the product that is most relevant for each economy. For the import process *Doing Business* now analyzes the import of auto parts by each economy from its largest trading partner for that product—a change based in part on the premise that while economies export only products in which they have comparative advantage, every economy imports a little bit of everything. Auto parts were chosen for the import process because they are a commonly traded product that normally requires no special inspections or licenses—and therefore are typical of manufactured products. Another important change is that the mode of transport is no longer restricted to sea transport. Instead, the most common mode of transport for the product and partner is used.

The expectation is that the new *Doing Business* indicators will provide useful information for researchers and policy makers, just as the older indicators have done. According to one observer, “the main achievement of the *Doing Business* project has been to shed light and create a more informed debate on a range of differences in laws and regulations across countries in areas where little was known on a systematic basis before the project began.”⁹

While the changes being introduced this year are substantive, there is a strong correlation at the aggregate level between this year's data under the old methodology and the same data under the new one (figure 1.2). This is not surprising, since the changes are additions or modifications within existing indicator sets and there is a positive correlation between the old and new measures in *Doing Business*. But even with a high correlation there can still be relatively large shifts in ranking in some cases. This is particularly likely for economies in the middle of the distribution, in part because they are more closely bunched and small shifts in their distance to frontier scores

FIGURE 1.2 Distance to frontier scores remain similar under the new methodology



Source: *Doing Business* database.

Note: The figure compares distance to frontier scores based on this year's data computed using the old (*Doing Business 2015*) methodology with scores based on the same data computed using the new methodology. The differences between the two series are in dealing with construction permits, getting electricity, registering property, protecting minority investors, trading across borders and enforcing contracts. The 45-degree line shows where the scores under the old and new methodologies are equal. The correlation between the two scores is 0.97.

will therefore tend to have a greater impact on their positions relative to other economies.

The *Doing Business* website presents comparable data for this year and last, making it possible to assess the extent to which there has been an improvement in business regulation in any economy. Moreover, because most of the changes in methodology involve adding new measures of quality within existing indicator sets rather than revising existing measures of efficiency, data for two-thirds of the current indicators (24 of 36) remain comparable over time. The full series are available on the website.

WHERE IS REGULATION MORE BUSINESS-FRIENDLY?

Singapore continues to be the economy with the most business-friendly regulation (table 1.1). And while there was some reordering of economies within the top 20 in the ease of doing business ranking, the list remains very similar to last year's: 18 economies stayed on the

list, while 2 entered this year (Lithuania and the former Yugoslav Republic of Macedonia) and 2 were nudged out (Georgia and Switzerland). Economies in the top 20 continued to improve their business regulatory environment in the past year. For example, Hong Kong SAR, China, made four regulatory reforms in the areas measured by *Doing Business*. One was implemented at the Companies Registry, which also serves as the main collateral registry for movable property. The registry launched a full-scale electronic filing service on March 3, 2015, and now security interests can be registered, amended, renewed and canceled online. New Zealand provides another example: Vector, the electricity distribution utility, cut six days from the time needed to provide external connection works to customers.

The 20 economies at the top of the ease of doing business ranking perform well not only on the *Doing Business* indicators but also in international data sets capturing other 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. Moreover, even outside the top 20 economies there is a strong association between performance in the ease of doing business ranking and performance on measures of competitiveness and of quality of government and governance. Economies that rank well on the ease of doing business also score well on such measures as the Global Competitiveness Index and Transparency International's Corruption Perceptions Index.¹⁰

The distance to frontier scores underlying the ease of doing business rankings reveal some regional patterns. OECD high-income economies have the highest distance to frontier scores on average, indicating that this regional group has the most business-friendly regulation overall (figure 1.3). But good practices in business regulation can be found in almost all regions. In six of the seven regions the highest distance to frontier score is above 70. The difference between the best and worst scores in a region can be substantial, however, especially in Sub-Saharan Africa, the Middle East and North Africa and East Asia and the Pacific.

WHAT IS THE RELATIONSHIP BETWEEN EFFICIENCY AND QUALITY?

While measuring aspects of the quality of regulation is not new for *Doing Business*, the two-year process of introducing improvements that was launched in last year's report represents a systematic effort to include measures of quality in most of the indicator sets. This year's report introduces new measures of regulatory quality in four indicator sets: dealing with construction permits, getting electricity, registering property and enforcing contracts. Last year's report added a measure of regulatory quality to the indicator set for resolving insolvency

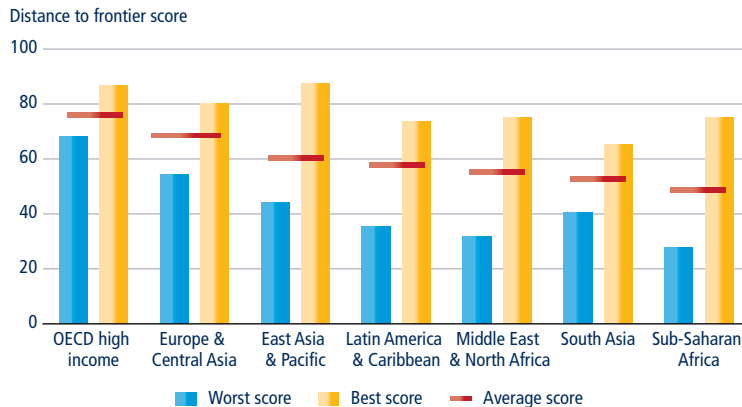
TABLE 1.1 Ease of doing business ranking

Rank	Economy	DTF score	Rank	Economy	DTF score	Rank	Economy	DTF score
1	Singapore	87.34	64	Jamaica	67.27 ↑	127	Cambodia	55.22 ↑
2	New Zealand	86.79 ↑	65	Bahrain	66.81 ↑	128	Maldives	55.04
3	Denmark	84.40 ↑	66	Kosovo	66.22 ↑	129	West Bank and Gaza	54.83 ↑
4	Korea, Rep.	83.88	67	Kyrgyz Republic	66.01 ↑	130	India	54.68 ↑
5	Hong Kong SAR, China	83.67 ↑	68	Qatar	65.97 ↑	131	Egypt, Arab Rep.	54.43 ↑
6	United Kingdom	82.46 ↑	69	Panama	65.74	132	Tajikistan	54.19 ↑
7	United States	82.15	70	Oman	65.40 ↑	133	Mozambique	53.98 ↑
8	Sweden	81.72 ↑	71	Bhutan	65.21 ↑	134	Lao PDR	53.77 ↑
9	Norway	81.61 ↑	72	Botswana	64.98 ↑	135	Grenada	53.46 ↑
10	Finland	81.05 ↑	73	South Africa	64.89	136	Palau	53.43
11	Taiwan, China	80.55 ↑	74	Tunisia	64.88 ↑	137	Guyana	51.83
12	Macedonia, FYR	80.18 ↑	75	Morocco	64.51 ↑	138	Pakistan	51.69 ↑
13	Australia	80.08	76	San Marino	64.21 ↑	139	Tanzania	51.62 ↑
14	Canada	80.07 ↑	77	St. Lucia	64.20 ↑	140	Marshall Islands	51.58
15	Germany	79.87 ↑	78	Tonga	64.13	141	Malawi	51.03 ↑
16	Estonia	79.49 ↑	79	Bosnia and Herzegovina	63.71 ↑	142	Côte d'Ivoire	50.93 ↑
17	Ireland	79.15 ↑	80	Malta	63.70 ↑	143	Burkina Faso	50.81 ↑
18	Malaysia	79.13 ↑	81	Guatemala	63.49 ↑	143	Mali	50.81 ↑
19	Iceland	78.93 ↑	82	Saudi Arabia	63.17 ↑	145	Papua New Guinea	50.74 ↑
20	Lithuania	78.88 ↑	83	Ukraine	63.04 ↑	146	Ethiopia	49.73 ↑
21	Austria	78.38 ↑	84	Brunei Darussalam	62.93 ↑	147	Sierra Leone	49.69 ↑
22	Latvia	78.06 ↑	84	China	62.93 ↑	148	Micronesia, Fed. Sts.	49.67
23	Portugal	77.57 ↑	86	El Salvador	62.76 ↑	149	Kiribati	49.50
24	Georgia	77.45 ↑	87	Uzbekistan	62.60 ↑	150	Togo	49.03 ↑
25	Poland	76.45 ↑	88	Fiji	62.58 ↑	151	Gambia, The	48.99 ↑
26	Switzerland	76.04 ↑	88	Trinidad and Tobago	62.58	152	Burundi	48.82 ↑
27	France	75.96 ↑	90	Vietnam	62.10 ↑	153	Senegal	48.57 ↑
28	Netherlands	75.94	91	Dominica	61.44 ↑	154	Comoros	48.22 ↑
29	Slovak Republic	75.62 ↑	92	Uruguay	61.21 ↑	155	Zimbabwe	48.17 ↑
29	Slovenia	75.62 ↑	93	Dominican Republic	61.16 ↑	156	Suriname	47.69 ↑
31	United Arab Emirates	75.10 ↑	94	Vanuatu	61.08 ↑	157	Bolivia	47.47 ↑
32	Mauritius	75.05 ↑	95	Seychelles	61.05 ↑	158	Benin	47.15 ↑
33	Spain	74.86 ↑	96	Samoa	60.70 ↑	159	Sudan	46.97 ↑
34	Japan	74.72	97	Albania	60.50	160	Niger	46.37 ↑
35	Armenia	74.22 ↑	97	Zambia	60.50	161	Iraq	46.06
36	Czech Republic	73.95 ↑	99	Nepal	60.41 ↑	162	Gabon	45.99
37	Romania	73.78 ↑	100	Paraguay	60.19	163	Algeria	45.72 ↑
38	Bulgaria	73.72 ↑	101	Kuwait	60.17 ↑	164	Madagascar	45.68 ↑
38	Mexico	73.72 ↑	101	Namibia	60.17 ↑	165	Guinea	45.54 ↑
40	Croatia	72.71 ↑	103	Philippines	60.07 ↑	166	São Tomé and Príncipe	45.50 ↑
41	Kazakhstan	72.68 ↑	104	Antigua and Barbuda	59.70	167	Myanmar	45.27 ↑
42	Hungary	72.57 ↑	105	Swaziland	59.10 ↑	168	Mauritania	44.74 ↑
43	Belgium	72.50 ↑	106	Bahamas, The	59.00 ↑	169	Nigeria	44.69 ↑
44	Belarus	72.33 ↑	107	Sri Lanka	58.96 ↑	170	Yemen, Rep.	44.54 ↑
45	Italy	72.07 ↑	108	Kenya	58.24 ↑	171	Djibouti	44.25 ↑
46	Montenegro	71.85 ↑	109	Indonesia	58.12 ↑	172	Cameroon	44.11 ↑
47	Cyprus	71.78 ↑	110	Honduras	58.06 ↑	173	Timor-Leste	44.02
48	Chile	71.49 ↑	111	St. Vincent and the Grenadines	57.91 ↑	174	Bangladesh	43.10 ↑
49	Thailand	71.42 ↑	112	Solomon Islands	57.86 ↑	175	Syrian Arab Republic	42.56
50	Peru	71.33	113	Jordan	57.84 ↑	176	Congo, Rep.	41.88 ↑
51	Russian Federation	70.99 ↑	114	Ghana	57.69 ↑	177	Afghanistan	40.58
52	Moldova	70.97 ↑	114	Lesotho	57.69 ↑	178	Guinea-Bissau	40.56 ↑
53	Israel	70.56	116	Brazil	57.67 ↑	179	Liberia	40.19 ↑
54	Colombia	70.43 ↑	117	Ecuador	57.47 ↑	180	Equatorial Guinea	40.03
55	Turkey	69.16	118	Iran, Islamic Rep.	57.44 ↑	181	Angola	39.64 ↑
56	Mongolia	68.83 ↑	119	Barbados	56.85	182	Haiti	39.56 ↑
57	Puerto Rico (U.S.)	68.73	120	Belize	56.83 ↑	183	Chad	38.22 ↑
58	Costa Rica	68.55 ↑	121	Argentina	56.78	184	Congo, Dem. Rep.	38.14 ↑
59	Serbia	68.41 ↑	122	Uganda	56.64 ↑	185	Central African Republic	36.26 ↑
60	Greece	68.38 ↑	123	Lebanon	56.39	186	Venezuela, RB	35.51
61	Luxembourg	68.31	124	St. Kitts and Nevis	55.83 ↑	187	South Sudan	34.78
62	Rwanda	68.12	125	Nicaragua	55.78 ↑	188	Libya	31.77
63	Azerbaijan	67.80 ↑	126	Cabo Verde	55.54 ↑	189	Eritrea	27.61 ↑

Source: Doing Business database.

Note: The rankings are benchmarked to June 2015 and based on the average of each economy's distance to frontier (DTF) scores for the 10 topics included in this year's aggregate ranking. For the economies for which the data cover two cities, scores are a population-weighted average for the two cities. An arrow indicates an improvement in the score between 2014 and 2015 (and therefore an improvement in the overall business environment as measured by *Doing Business*), while the absence of one indicates either no improvement or a deterioration in the score. The score for both years is based on the new methodology.

FIGURE 1.3 Big gaps between the highest and lowest distance to frontier scores in some regions



Source: *Doing Business* database.

and expanded those in the indicator sets for getting credit and protecting minority investors.

Doing Business measures the quality of regulation by analyzing whether the regulatory infrastructure needed for a transaction to be successfully completed is in place. *Doing Business* does not measure the quality of the outcome related to that regulation. For example, *Doing Business* measures the quality of building regulations and controls by assessing whether building plans are approved by staff with the right qualifications and whether the necessary inspections take place. It does not assess whether the warehouse that gets constructed in the end is of good quality. The following discussion looks at the relationship between efficiency and quality through the lens of *Doing Business* data. *Doing Business* focuses on specific case studies and measures particular aspects of business regulation. The results should be interpreted with that framework in mind.

Efficiency and quality linked at the aggregate level

Analysis shows that efficiency and quality go hand in hand: economies that have efficient regulatory processes as measured by *Doing Business* also tend to

have good regulatory quality (figure 1.4). Economies can be broadly divided into four groups:

- Economies able to achieve both efficiency and quality in business regulation.
- Economies where both efficiency and quality are far from ideal—with regulatory transactions that are complex and expensive and that in the end do not accomplish their objectives. In these economies regulation is seen as a rent-seeking activity rather than as something that provides a useful service to citizens and the business community.
- Economies where regulatory processes are fast and inexpensive but lack quality. These are likely to be economies that started out in the second group and then improved regulatory efficiency but have yet to improve regulatory quality. Most economies are in this group and the first one.
- Economies where the quality of regulation is high but the processes for implementing it remain complex. Very few economies are currently in this group; those with low regulatory efficiency tend to also have low regulatory quality.

An example from Denmark illustrates how regulatory efficiency and quality go together and in fact reinforce each other

in a virtuous cycle. The country's state-of-the-art land registry provides both efficient registration of property transfers and valuable property titles, thanks to its transparent, accurate information and complete geographic coverage. Because the registration is so efficient (requiring only three procedures and four days), people are more likely to register property transfers—helping to maintain the accuracy of the registry's data and the quality of land administration. And because the registry is therefore so reliable, the process of registering a property transfer can be kept simple, fast and inexpensive.

By contrast, Greece exhibits a vicious cycle in its land administration system. To transfer property, a local buyer has to complete 10 different procedures—a process that takes 20 days and costs 4.9% of the property value. Beyond the efficiency issues, there are also quality issues. For example, there are no official cadastral maps for the municipality of Athens, and very little of the privately owned land across the country is mapped in the cadastre. Transparency is poor, with no separate mechanism for filing a complaint at the property registry and no up-to-date statistics about the number of land transactions in Athens. And there is no specific compensation mechanism to cover for losses incurred by someone who engaged in good faith in a property transaction based on erroneous information from the registry.

So the advantages of using the registry are low and the costs (in both time and money) are high—a big deterrent to formally registering property transfers. And lack of formal registration reinforces the poor quality of the information maintained at the registry, making it difficult to complete property transfers simply, quickly and inexpensively. But there are prospects for breaking the vicious cycle: cadastral maps are being developed by the National Cadastre and Mapping Agency and should cover Athens by 2020. These may strengthen the

FIGURE 1.4 Regulatory efficiency and regulatory quality go hand in hand



Source: *Doing Business* database.

Note: The distance to frontier score for regulatory efficiency is the aggregate score for the procedures (where applicable), time and cost indicators from the following indicator sets: starting a business (also including the minimum capital requirement indicator), dealing with construction permits, getting electricity, registering property, paying taxes, trading across borders, enforcing contracts and resolving insolvency. The distance to frontier score for regulatory quality is the aggregate score for getting credit and protecting minority investors as well as the regulatory quality indices from the indicator sets on dealing with construction permits, getting electricity, registering property, enforcing contracts and resolving insolvency. The correlation between the two scores is 0.82.

certainty of property rights, benefiting investors and citizens alike.

Registering property is not the only area where Greece lags; enforcing contracts is another. Resolving a commercial dispute through the courts takes longer in Greece than in any other European country—about 1,580 days, or more than four years, through the Athens First-Instance Single-Member Court. Worldwide, only three economies have a longer process: Guinea-Bissau, Suriname and Afghanistan. In Greece litigants spend much of that time simply waiting for the first hearing. In fact, a case filed before the competent court in October 2015 would not be heard by a judge until 2018. Yet there has been an effort to improve the quality of judicial processes (such as by introducing electronic filing, as reported in last year's report). Indeed, new data show that case management techniques are widely used in Greece; the country receives 4.5 of 6 possible points on the case management index, one of the components of the new quality of judicial processes index. But adjournments remain common, leading

to considerable delays. The improvement in quality has yet to show results in measures of efficiency.

Greece faces similar challenges in resolving insolvency, where the efficiency of regulation has yet to catch up with the quality. Greece receives 12 of 16 possible points on the strength of insolvency framework index, indicating that its insolvency law complies with most internationally recognized good practices. Nevertheless, creditors can expect to recover only 34.9% of the estate value of an insolvent firm, and the process takes three and half years.

On average, economies perform better on measures of efficiency than on measures of quality. Less than 10% of the economies covered have a lower distance to frontier score for efficiency than for quality. Most of these economies are in Europe and Central Asia, which has the smallest average gap between efficiency and quality. The largest gaps are in the Middle East and North Africa, where the average gap is more than 20

points and the difference between the two measures is as large as 39 points for Iraq and 30 for the Republic of Yemen (figure 1.5). This evidence that regulatory quality lags behind regulatory efficiency is important—because both a higher level of regulatory efficiency and a higher level of regulatory quality are associated separately with a lower level of corruption.¹¹

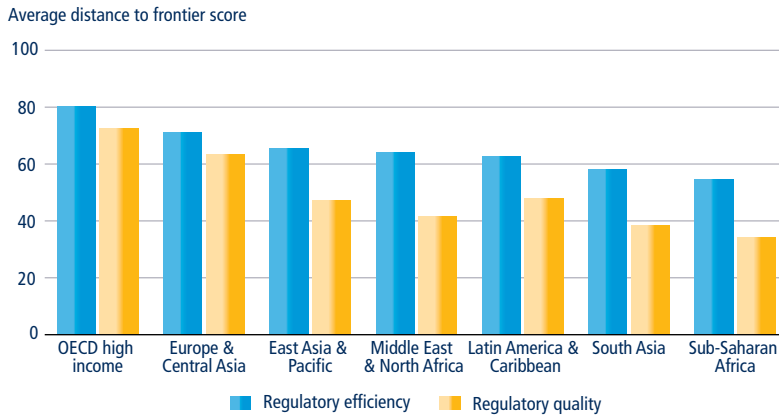
Patterns across indicator sets

While the efficiency and quality of regulation go hand in hand at the aggregate level, analyzing the data for individual *Doing Business* topics reveals clearer patterns. Three case studies in this year's report (on dealing with construction permits, getting electricity and enforcing contracts) and two in last year's report (on registering property and resolving insolvency) discuss in detail the link between efficiency and quality in mixed indicator sets—those including both efficiency measures and quality measures.

In getting electricity the main pattern is clear: economies with a simpler, faster and less costly process for connecting to the electrical grid also tend to have a more reliable electricity supply. The Republic of Korea, for example, has the simplest and fastest process worldwide for getting a new electricity connection, and it is one of the few economies with the highest possible score on the new reliability of supply and transparency of tariffs index. Businesses in Seoul typically have less than an hour of power outages a year, and they can receive compensation if power isn't restored within a certain amount of time. The utility uses automated systems for monitoring outages and restoring service. And an independent regulator oversees the sector and makes sure that changes in electricity tariffs are communicated ahead of time.

At the opposite end of the spectrum is Liberia, which has the longest process for getting a new connection. Once connected, customers in Liberia typically experience more than an hour of power outages each week. In addition, the utility still uses

FIGURE 1.5 The biggest gaps between regulatory efficiency and regulatory quality are in the Middle East and North Africa



Source: *Doing Business* database.

Note: The distance to frontier score for regulatory efficiency is the aggregate score for the procedures (where applicable), time and cost indicators from the following indicator sets: starting a business (also including the minimum capital requirement indicator), dealing with construction permits, getting electricity, registering property, paying taxes, trading across borders, enforcing contracts and resolving insolvency. The distance to frontier score for regulatory quality is the aggregate score for getting credit and protecting minority investors as well as the regulatory quality indices from the indicator sets on dealing with construction permits, getting electricity, registering property, enforcing contracts and resolving insolvency.

manual systems to monitor outages and restore service, there is no independent regulatory body, electricity tariffs are not published online, and there is no financial incentive for the utility to minimize power cuts. As a result, Liberia receives 0 of 8 possible points on the reliability of supply and transparency of tariffs index.

Another aspect is revealed by data on the price of electricity for commercial users—new data collected by *Doing Business* this year but not included in the distance to frontier score or the ease of doing business ranking. Electricity tariffs for commercial customers typically range from 10 to 30 cents per kilowatt-hour, but prices in some economies are much higher. Tariffs need to strike a balance—remaining affordable to customers while still enabling the utility to recover costs and make a profit. The data show that Korea has a relatively low electricity price, at 10 cents per kilowatt-hour (or 10% of annual income per capita as the monthly bill for the case study warehouse).¹² In Liberia, by contrast, electricity supply is not only unreliable; it is also very expensive—at 56 cents per kilowatt-hour (37 times

annual income per capita as the monthly bill for the case study warehouse). Indeed, Liberia's electricity price is the highest in Sub-Saharan Africa and among the highest in the world.

For the registering property topic, the data show that economies with simpler, faster and less costly processes for property transfers also have on average the highest-quality land administration systems. Along with Denmark, Lithuania is among those that combine high efficiency and high quality. A property transfer from one local entrepreneur to another can be completed in less than three days at a cost of 0.8% of the property value. Supporting this efficiency is a high-quality land administration system. Property records are fully digital and provide complete coverage of private land in Lithuania. Entrepreneurs interested in buying a property can use the electronic database to check for encumbrances and the geographic information system to verify the boundaries. They can also get information online about land ownership, fees for property transactions and statistics about land transactions. In addition,

the legal framework reflects good practices for preventing and resolving land disputes. For example, the law requires verification of the identity of the parties to a property transaction, and there is a national database that can be used for this purpose. The law also requires a review of the documents for a property transaction to verify that they are legally valid.

At the other extreme are land administration systems in which low efficiency is coupled with low quality. In Haiti, for example, completing a property transfer from one local entrepreneur to another takes more than 10 months and costs 7.1% of the property value. While projects are under way to modernize the land administration system, the country still lacks a geographic information system and a database to check for encumbrances. Databases on land ownership and maps are not linked, and there are no unique identifying numbers used for land plots. Most of the information at the land registry—such as on service standards and the fees and documents required in property transactions—is not publicly available or must be requested in person. Haiti lacks a national database to verify the identity of the parties to a land transaction. It also lacks a specific compensation mechanism to cover any losses incurred in a property transaction because of errors by the property registry.

For the enforcing contracts topic, data show that court systems that are efficient are also likely to have high-quality judicial processes. For example, resolving a commercial dispute through the Singapore District Court takes just 150 days, the shortest time recorded worldwide, and costs 25.8% of the value of the claim. Efficient dispute resolution is paired with good institutions (such as specialized courts), effective case management and sophisticated court automation tools. And litigants can submit their claim online, pay court fees online and serve the initial summons electronically. Singapore receives the highest score worldwide

on the new quality of judicial processes index, 15.5 of 18 possible points.

There are also examples of slow and costly dispute resolution paired with low-quality judicial processes. Myanmar is one such example. A local business trying to enforce a contract through the courts in Myanmar would spend more than three years doing so, and pay fees amounting to more than half the value in dispute. Moreover, the country's court system has no case management, no court automation and no specialized commercial courts or small claims courts—all aspects reflected in Myanmar's low score on the quality of judicial processes index (3). But alternative dispute resolution is being developed: arbitration and mediation are both recognized ways of resolving a commercial dispute, and arbitration in Myanmar is regulated through a dedicated law.

In resolving insolvency, quality and efficiency are again linked: where there is a good legal framework for insolvency, creditors recover a larger share of their credit at the end of the insolvency process. Finland is a good illustration. Resolving insolvency there takes 11 months on average and costs 4% of the debtor's estate, and the most likely outcome is that the company will be sold as a going concern. The average recovery rate for creditors is 90.1 cents on the dollar. This high recovery rate is paired with a high score on the strength of insolvency framework index. The Finnish insolvency law includes a range of good practices. For example, it allows debtors to avoid preferential and undervalued transactions; it permits post-commencement finance and grants such finance priority only over ordinary unsecured creditors; and it allows all creditors to vote in judicial reorganization proceedings.

In São Tomé and Príncipe, however, insolvent companies and their creditors confront both poor efficiency and low quality. The insolvency process takes 6.2 years on average, costs 22% of the

debtor's estate and is most likely to end with the company being sold piecemeal. The insolvency law lacks important good practices: there are no judicial reorganization proceedings, the legal framework does not establish the availability or priority of post-commencement finance, and creditors cannot participate in the appointment of the insolvency representative or the approval of asset sales.

For dealing with construction permits, data show the same pattern as for the other topics. Economies with a more efficient construction permitting system also have better quality control and safety mechanisms. Conversely, in some economies poor regulatory quality accompanies poor regulatory efficiency. One example is Gabon, which receives only 5 of 15 possible points on the new building quality control index. Its building regulations are not easily accessible, and they stipulate only the list of documents required for a building permit, not the fees or preapprovals needed. The country has adequate mechanisms for quality control before construction but not for quality control during and after construction. While building permit applications are reviewed by a qualified architect or engineer, no inspections are legally required during construction—and final inspections, while required, do not occur in practice. Moreover, none of the parties involved in a construction project are held legally liable for structural problems that come to light once the building is occupied, nor is anyone required to obtain insurance to cover potential problems. Data also show that Gabon has an inefficient construction permitting process: completing all the formalities to build a warehouse takes 329 days.

Some economies manage to achieve the best of both worlds, designing and implementing a construction permitting system that is both efficient and good quality. One of them is FYR Macedonia. Its administrative procedures for dealing with construction permits are very efficient: completing the formalities to build

a warehouse takes only 74 days. The country also has robust quality control and safety mechanisms, earning it 14 of 15 possible points on the building quality control index. All documents required in construction permitting are specified and accessible online—along with the list of agencies to visit, the fees to pay and the preapprovals to obtain. A certified architect reviews and approves building permit applications, and mandatory inspections are carried out both during and after construction. And clearly defined liability regimes and insurance requirements are in place.

BUSINESS REGULATION AND THE INTERNET

The proliferation of information and communication technologies has transformed how businesses operate and how they are regulated in every region of the world. The internet provides a new platform for delivering government information and services—and new opportunities for enhancing the efficiency and transparency of public administration. Indeed, the internet is a tool that governments can use to support businesses at every stage in their life cycle, whether applying for a business permit, registering property, paying taxes or trading internationally.

The potential of online regulatory solutions

By simplifying regulatory processes such as business incorporation, web-based resources can promote private sector development. Cross-country data analysis shows a strong positive association between new firm density and the availability of electronic platforms for incorporation.¹³

Beyond starting a business, the internet offers many opportunities for efficiency gains in other areas of business regulation measured by *Doing Business*. Among the 189 economies covered by *Doing Business*, more than 80% (152 in total) use web-based applications to process

export and import documents. Banks in more than 75% of economies with a credit registry or bureau use online platforms to access credit information. And in more than 40% of economies the tax authorities allow businesses to file taxes online—and the majority of businesses actually do it.

These uses of the internet make a difference for businesses. Where electronic platforms are widely used in regulatory processes, entrepreneurs spend less time on compliance. For example, there is a strong negative correlation between the time it takes to transfer property and the availability of online access to land information.¹⁴ With the changes in methodology introduced this year, the internet has become a more integral part of the good practices measured by *Doing Business*.

But use of the internet to streamline business regulation remains largely confined to more developed economies. Data for nine *Doing Business* topics show that OECD high-income economies and Europe and Central Asia make the greatest use of online systems in regulatory processes (figure 1.6). In Sub-Saharan Africa, by contrast, very few economies use electronic platforms in business regulation. Of the nine possible regulatory transactions included in the analysis, Australia, Denmark and Estonia enable entrepreneurs to complete eight or more online. The Central African Republic, the Republic of Congo and Equatorial Guinea are among the few economies where none of these transactions can be completed online.

Continued growth in electronic services

Given the potential economic opportunities from the use of electronic services, it is no surprise that many of the reforms captured by *Doing Business* in 2014/15 focused on introducing or enhancing electronic platforms and services. In the past year 18 economies established or improved online tax payment systems, 13 introduced or enhanced web-based

systems to streamline cross-border trade, and another 11 encouraged electronic business registration. In addition, 6 economies established or improved online tools for registering property, and 2 did the same for enforcing contracts.

Many governments use the internet for tax collection and payment—with the aim of reducing the scope for bureaucratic discretion and even corruption and increasing the tax system's transparency, efficiency and cost-effectiveness. Electronic tax collection also helps simplify tax compliance.¹⁵ After Rwanda made the use of its electronic filing and payment system compulsory in 2014/15, the time required for a business to prepare, file and pay taxes fell by 10 hours, from 119 hours a year to 109. Among other economies introducing or enhancing electronic systems in 2014/15, Costa Rica facilitated online payment of corporate income tax and Malaysia made electronic filing compulsory for contributions to the Employees Provident Fund by employers with 50 or more employees.

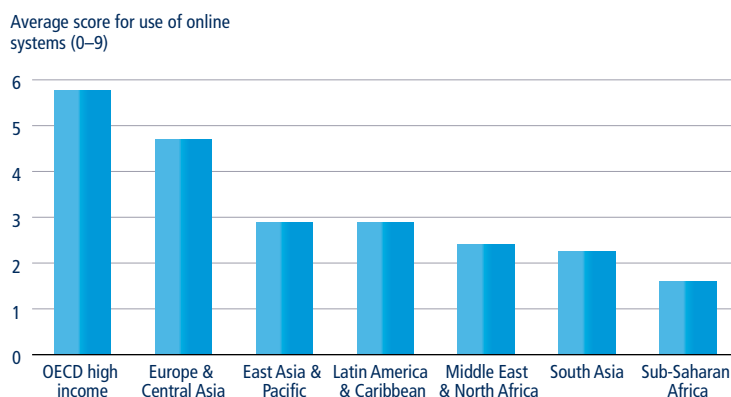
Since 2006 the use of electronic tax filing and payment systems has increased substantially in several regions of the world, with the most remarkable progress

in Europe and Central Asia. Sub-Saharan Africa remains the region with the smallest share of economies using electronic filing or payment (figure 1.7). Worldwide, less than 15 economies introduced or enhanced electronic systems for filing or paying taxes between 2008 and 2011. But an average of 15 economies a year have introduced such changes since 2012—with 19 doing so in 2013.

Introducing or enhancing web-based systems was a common feature of reforms making it easier to start a business in 2014/15. Uganda introduced an online system for obtaining a trading license. Belarus improved online services and expanded the geographic coverage of online registration.

Several economies digitized procedures for trading across borders in 2014/15. Suriname implemented an automated customs data management system—fully operational by July 2015—that allows the electronic submission of customs declarations and supporting documents for exports and imports. Other economies also introduced or improved systems allowing electronic submission and processing of trade-related documents (for exports, imports or both), including The Bahamas, Benin, Brazil, Côte

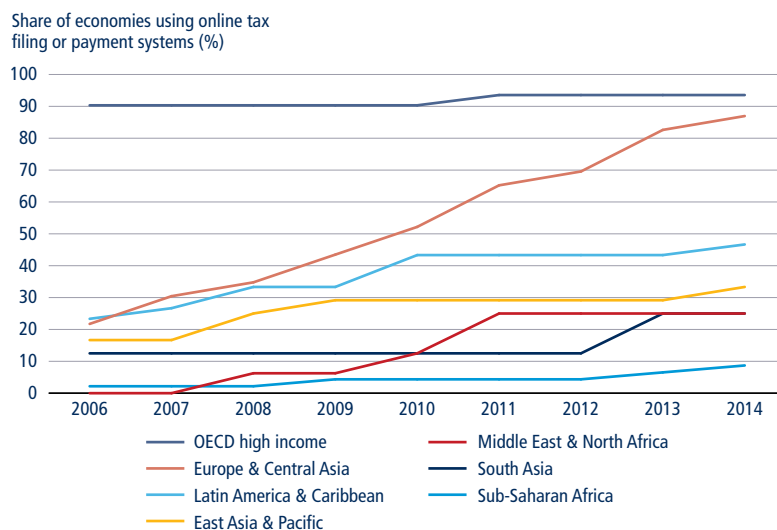
FIGURE 1.6 OECD high-income economies and Europe and Central Asia make the greatest use of online systems in regulatory processes



Source: *Doing Business* database.

Note: The score shows the average number of areas in which online systems are in use, out of a possible total of nine areas: online business registration, online submission of construction plans, online submission of applications for an electricity connection, online information on land, online access to credit information for banks, electronic movable collateral registries, online tax payment, electronic submission of trade documents and electronic filing of court cases.

FIGURE 1.7 Economies in Europe and Central Asia show the most progress in adopting electronic tax filing and payment



Source: *Doing Business* database.

d'Ivoire, Ghana, Guatemala, Madagascar, Mauritania, Suriname, Tajikistan, Tanzania and Togo.

Some economies explored the use of web-based resources to make registering property easier in 2014/15. Bhutan introduced a computerized land information system connecting each municipality to the cadastre. Georgia and Italy used online technology to improve contract enforcement. Both economies introduced an electronic filing system for commercial cases, making it possible for attorneys to submit the initial summons online.

A broader role in governance

Beyond the applications in regulatory processes, the internet serves as an important tool for more participatory democratic practices and inclusive development. The internet has made it easier for the general public to monitor government budgets, projects and activities as well as to access different kinds of regulatory information. It can be used to promote more direct interactions between governments and citizens as well as to empower citizens to influence local governance in their community. And

as a new platform for public disclosure of regulatory reforms (and for soliciting feedback on these reforms), the internet has also transformed the process of crafting business regulations (box 1.1).¹⁶

Yet while the internet has the potential to promote inclusiveness, reduce corruption and improve regulatory efficiency, its impact on the quality of domestic governance is subject to political, infrastructural, social and economic factors. For example, the success of online solutions depends on an enabling political environment that supports and protects free speech. Most importantly, the vast majority of the world's population still lacks access to the internet and is thus cut off from these tools and innovations.

WHERE DID BUSINESS REGULATION IMPROVE THE MOST IN 2014/15?

In 2014/15, 122 economies implemented at least one regulatory reform in the areas measured by *Doing Business*—231 reforms in total (figure 1.8). Europe and Central Asia again had the largest share

of economies implementing at least one reform—and it accounts for 3 of the 10 top improvers. The region with the second largest share of economies with at least one reform has typically been Sub-Saharan Africa. But in the past year, for the first time, it was South Asia. Nevertheless, Sub-Saharan Africa is still home to 5 of the 10 top improvers. These 10—the economies showing the most notable improvement in performance on the *Doing Business* indicators in 2014/15—are Costa Rica, Uganda, Kenya, Cyprus, Mauritania, Uzbekistan, Kazakhstan, Jamaica, Senegal and Benin.

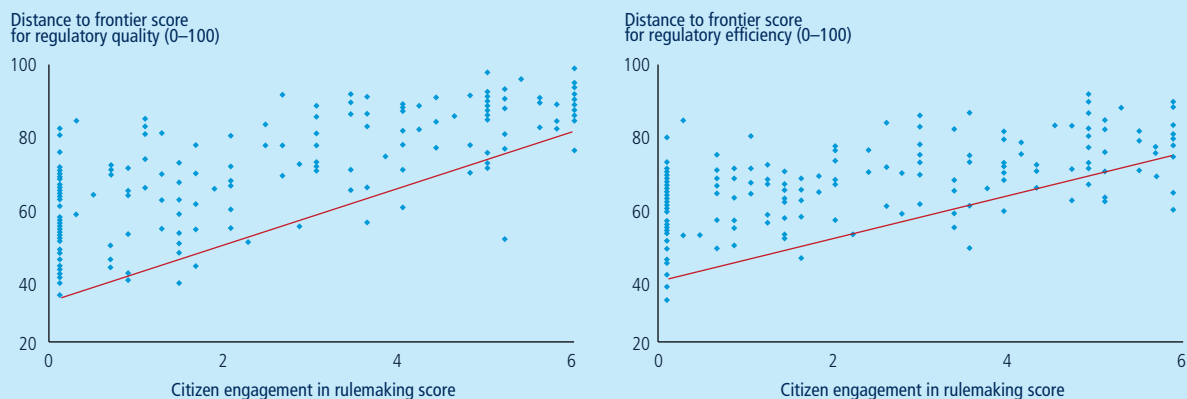
The new data on the quality of regulation make it possible to analyze whether the regulatory reforms implemented in the past year are more likely to improve regulatory efficiency, regulatory quality or both (table 1.2). Analysis shows that in the areas where *Doing Business* indicators have traditionally measured the complexity and cost of regulatory processes, reforms implemented in the past year continued to focus on increasing efficiency. *Doing Business* registered no reform improving regulatory quality in the area of dealing with construction permits. Only 2 of 22 economies with a reform in the area of registering property improved regulatory quality: Switzerland introduced a national electronic land information system, while Vanuatu introduced a specific and separate complaint mechanism for customers of the Land Registry and Surveyor's Office by appointing a land ombudsman. And only 2 of 22 economies with a reform in the area of getting electricity had an improvement in quality: the utility in Oman started fully recording the duration and frequency of outages, while Cambodia increased power generation capacity.

In the areas where *Doing Business* indicators have traditionally measured the strength of legal institutions, reforms were more likely to be aimed at improving regulatory quality. This was the case for the majority of reforms making it easier to enforce contracts or resolve

BOX 1.1 Business regulation and transparency in rulemaking

The quality and efficiency of business regulation are linked to the level of consultation around new regulations and the extent to which their possible impacts—economic, social and environmental—are considered before their adoption. A new global database, *Citizen Engagement in Rulemaking*, tracks the extent to which governments publicize proposed regulations and invite input on their scope and language from a wide range of stakeholders. The database also tracks how governments analyze possible impacts of new regulations and whether they consider alternatives to regulation. Analysis of the data shows that greater transparency during the rulemaking process and stronger consultation practices are highly and significantly associated with greater regulatory quality and efficiency as measured by *Doing Business* (see figure).

Good regulatory practices go hand in hand with regulatory quality and efficiency



Sources: *Doing Business* database; *Citizen Engagement in Rulemaking* database (<http://rulemaking.worldbank.org>), World Bank Group.

Note: The citizen engagement in rulemaking score is based on the following components: whether governments publish the text of proposed regulations publicly before their enactment; whether policy makers allow the general public to provide comments on proposed regulation; whether policy makers report publicly on the results of this consultation; whether governments conduct an impact assessment of proposed regulations; whether a specialized body is tasked with reviewing regulatory impact assessments conducted by other agencies; and whether regulatory impact assessments are made public. The correlation between the citizen engagement in rulemaking score and the distance to frontier score for regulatory quality is 0.60. The correlation between the citizen engagement in rulemaking score and the distance to frontier score for regulatory efficiency is 0.70. Relationships are significant at the 1% level after controlling for income per capita.

The transparency of rulemaking varies across regions and income levels. In 96% of OECD high-income economies the government publishes proposed regulations, conducts thorough consultations on the draft text and provides assessments of potential impacts before the regulations are adopted. In Poland, for example, all proposed regulations are published on the same website and consultations are held on the draft text. After the consultation process, rulemaking bodies provide a public report with responses to the comments received. Regulatory agencies and ministries assess the potential impacts of proposed regulations—including the economic, social and environmental impacts. The assessment is distributed with the proposed text of regulations and forms part of the consultation process.

By contrast, only a third of low-income economies conduct public consultations on proposed regulations, and they typically use less technologically advanced methods to do so. In Mozambique, for example, government officials publish proposed regulations in a federal journal and distribute drafts directly to specific stakeholders. In Afghanistan, Ethiopia and Niger policy makers hold public meetings to discuss proposed regulatory changes. Very few low- or lower-middle-income economies have a dedicated website for public engagement on proposed regulations, and those that do have newly implemented systems, such as in Kenya, Myanmar and Vietnam.

Among regions, the Middle East and North Africa has the lowest average level of transparency and engagement around rulemaking, with Morocco being a notable exception. In Latin America and the Caribbean there is a clear divide between two groups: while Caribbean and Central American economies tend to consult only targeted stakeholders, larger economies such as Brazil, Colombia and Mexico have more open and systematic consultation processes.

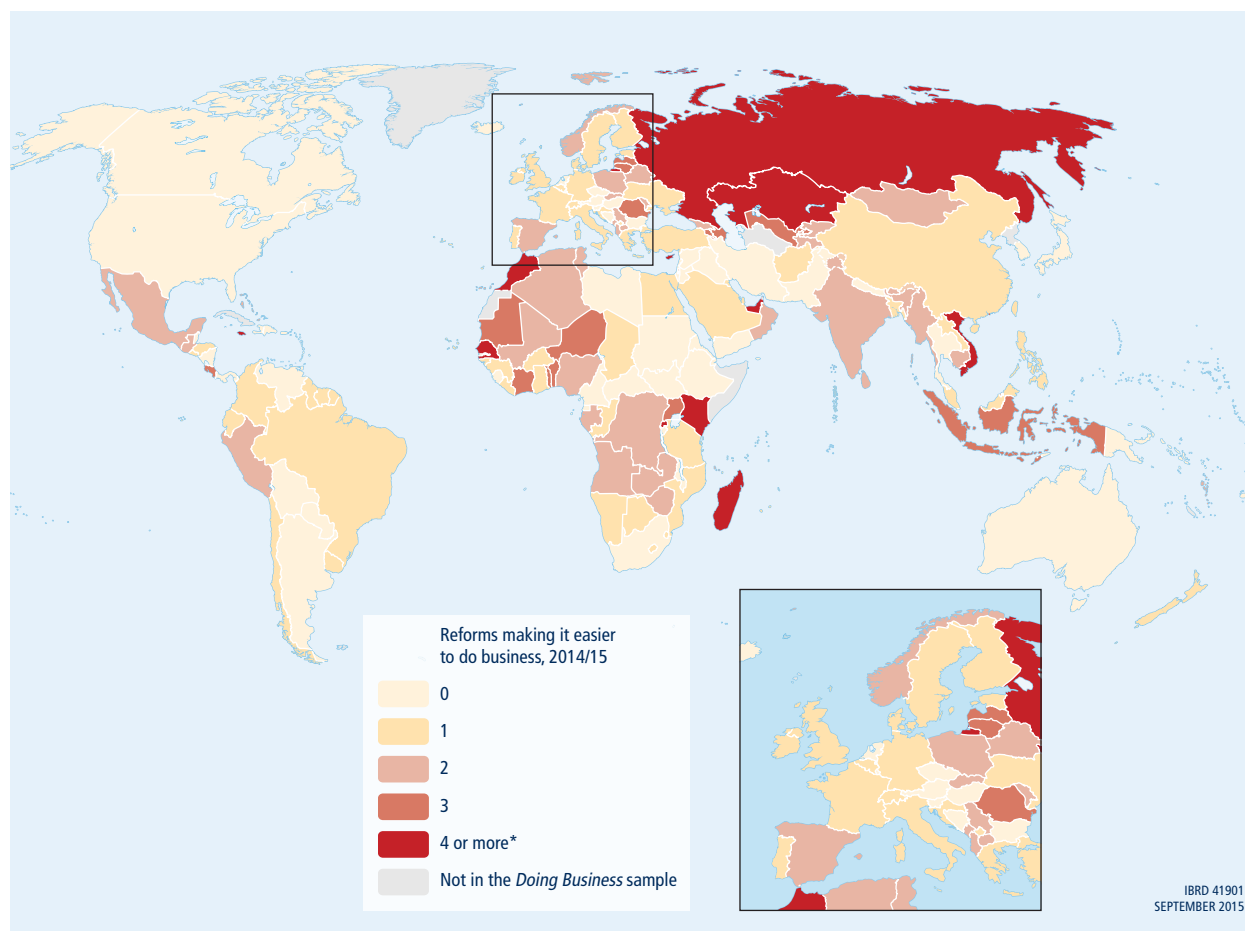
Source: *Citizen Engagement in Rulemaking* database (<http://rulemaking.worldbank.org>), World Bank Group.

insolvency. In Côte d'Ivoire, for example, a new law that entered into force on June 20, 2014, introduced substantial

changes in alternative dispute resolution. Before the new law, the only form of alternative dispute resolution available

was mandatory conciliation, regulated by a law dating to 1993. The new law made

FIGURE 1.8 Again in the past year, Europe and Central Asia had the largest share of economies making it easier to do business



Source: *Doing Business* database.

* Only 12 economies implemented 4 or more reforms: Kazakhstan (7); Rwanda (6); Cyprus (5); the Russian Federation (5); Vietnam (5); Hong Kong SAR, China (4); Jamaica (4); Kenya (4); Madagascar (4); Morocco (4); Senegal (4); and the United Arab Emirates (4).

voluntary mediation available in both commercial and civil cases.

In Chile a new insolvency act that came into force on October 9, 2014, established specialized courts with exclusive

jurisdiction over insolvency cases. The new act also clarified and streamlined all provisions related to reorganization and liquidation. In addition, it emphasized the reorganization of viable businesses as a preferred alternative to liquidation. Beyond these changes, Chile created a public office responsible for the general administration of insolvency proceedings. The Superintendence of Insolvency supervises all activities by insolvency representatives and auctioneers during insolvency proceedings and informs the creditors and the court of any irregularities observed during the proceedings.

TABLE 1.2 More reforms recorded by *Doing Business* in 2014/15 were aimed at improving regulatory efficiency than regulatory quality

Topic	Reforms improving regulatory efficiency	Reforms improving regulatory quality
Dealing with construction permits	17	0
Getting electricity	20	2
Registering property	20	2
Enforcing contracts	2	9
Resolving insolvency	2	7
Total	61	20

Source: *Doing Business* database.

Note: The analysis covers only the *Doing Business* topics for which there are indicators of both regulatory quality and regulatory efficiency.

For a full discussion of the reform patterns and top improvers this year, see

the chapter on reforming the business environment.

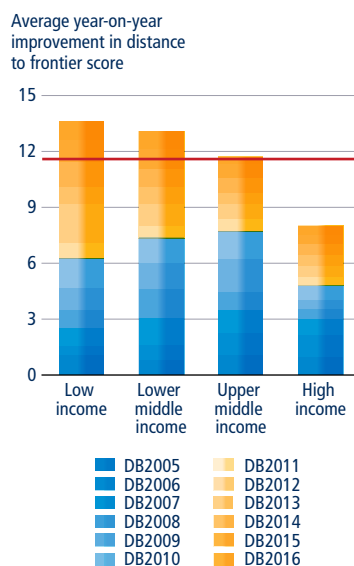
HOW HAS BUSINESS REGULATION CHANGED OVER THE PAST 12 YEARS?

Among the trends revealed by *Doing Business* data, one of the more encouraging ones is the steady improvement in the areas tracked by the indicators. Economies in all income groups and in all regions have improved the quality and efficiency of business regulation. But lower-income economies have improved more in the areas measured by *Doing Business* than high-income economies have—there is convergence (figure 1.9).

There is a similar story of convergence among regions. OECD high-income economies had the smallest average improvement in the distance to frontier score over the past 12 years because their scores were already quite high in 2004. Europe and Central Asia had the biggest improvement, followed by Sub-Saharan Africa (figure 1.10). The Middle East and North Africa had the third biggest improvement. Most of the improvement in that region took place before 2010, however, while in recent years the pace has been fairly slow.

Some areas of business regulation measured by *Doing Business* saw more improvement than others. Starting a business clearly stands out as the area with the biggest improvement (figure 1.11). In the past 12 years more economies implemented regulatory reforms in this area than in any other measured by *Doing Business*. The second biggest improvement was in getting credit. Reforms in this area are not common, but when they do occur they are likely to introduce overarching changes, such as establishing a new credit registry or bureau or developing a new secured transactions system. The smallest improvement was in the area of enforcing contracts, where reforms are relatively uncommon

FIGURE 1.9 Lower-income economies have made bigger improvements over time in the quality and efficiency of business regulation



Source: *Doing Business* database.

Note: The red line shows the average global improvement in the distance to frontier score since 2004. The measure is normalized to range from 0 to 100, with 100 representing the frontier. Because of changes over the years in methodology and in the economies and indicators included, the improvements are measured year on year using pairs of consecutive years with comparable data.

because reforming a judicial system can be a long and complicated task.

Who improved the most overall?

Globally, Georgia improved the most in the areas measured by *Doing Business* over the past 12 years, followed closely by Rwanda. During this period output per capita in Georgia increased by 66% and business density more than tripled.¹⁷ Many factors contributed to this improvement in economic outcomes, and the effort to make it easier for local entrepreneurs to do business may have been one of them. Georgia made improvements in all 10 areas included in the aggregate distance to frontier score, through 39 regulatory reforms.

During this 12-year period Georgia eliminated the paid-in minimum capital requirement for starting a business,

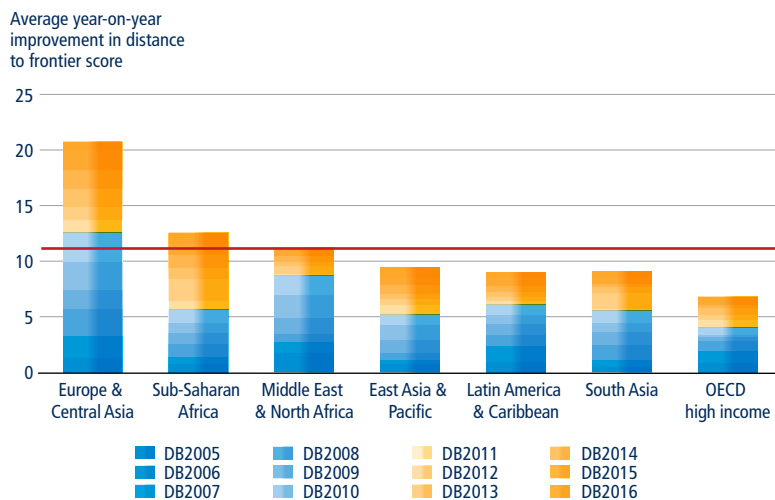
established a one-stop shop for construction permitting, reduced the fees for getting a new electricity connection, eliminated notarization requirements for registering property, improved its credit information system by implementing a new law on personal data protection, introduced electronic systems for paying taxes, modernized its dispute resolution system for enforcing contracts and adopted an insolvency law introducing both reorganization and liquidation proceedings—to name just a few of the important changes.

Among the most notable reforms are those strengthening minority investor protections. In June 2007 Georgia amended its securities law to enhance approval and disclosure requirements for related-party transactions. In 2009 it introduced provisions allowing shareholders greater access to corporate information during a trial. Finally, in 2011 Georgia introduced new requirements relating to the approval of related-party transactions. Georgia still has room to improve, however, as it performs less well on the new components of the protecting minority investors indicators (introduced in last year's report) than on the older ones.

Who improved the most in each region?

Just as Georgia stands out in Europe and Central Asia for having made big strides toward better and more efficient business regulation, at least one economy stands out in every other region for its improvement in the areas measured by *Doing Business*: Rwanda in Sub-Saharan Africa; Colombia in Latin America and the Caribbean; the Arab Republic of Egypt in the Middle East and North Africa; China in East Asia and the Pacific; India in South Asia; and Poland in the OECD high-income group (figure 1.12). Still, while reforming in the areas measured by *Doing Business* is important, doing so is not enough to guarantee sound economic policies or to ensure economic growth or development. While

FIGURE 1.10 Europe and Central Asia has made a substantially bigger improvement in business regulation over time than any other region



Source: *Doing Business* database.

Note: The red line shows the average global improvement in the distance to frontier score since 2004. The measure is normalized to range from 0 to 100, with 100 representing the frontier. Because of changes over the years in methodology and in the economies and indicators included, the improvements are measured year on year using pairs of consecutive years with comparable data.

Doing Business reforms have many potential positive effects, these effects can be undermined by such factors as political instability, macroeconomic instability and civil conflict. Being recognized as a regional top improver does not mean that these economies have exemplary business regulation; instead, it shows that thanks to serious efforts in regulatory reform over several years, they made the biggest advances toward the frontier in regulatory practice.

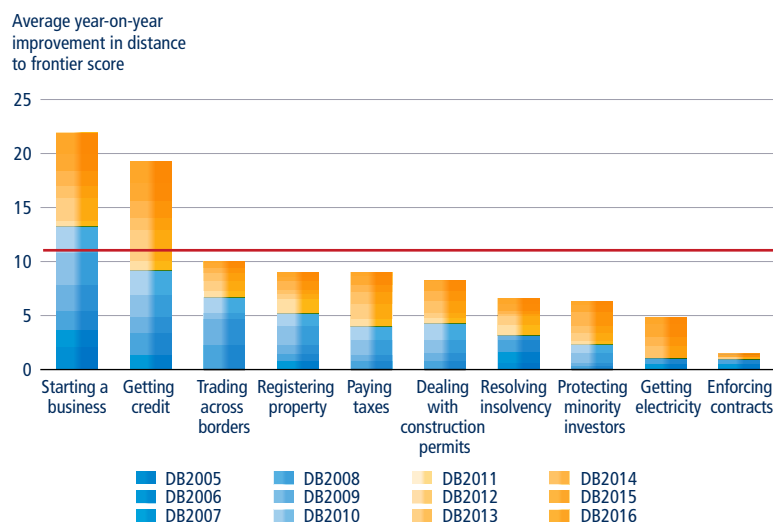
Rwanda made reforms in all areas measured by *Doing Business*. Two areas stand out: registering property and getting credit. Rwanda made registering a property transfer easier through three important steps. In January 2008 it reduced both the cost and the time for the process—by replacing the 6% registration fee with a flat rate, regardless of the property value, and by creating a centralized service in the tax authority to speed up the issuance of the certificate of good standing. In August 2008 Rwanda made further improvements in the registration process that again reduced the

time required to transfer property. Finally, in June 2012 Rwanda eliminated the requirement for a tax clearance certificate

and implemented the web-based Land Administration Information System for processing land transactions—an effort that also improved the quality of land administration.

Rwanda made getting credit easier by improving both its credit information system and its legal framework for secured transactions. The country started reforming its credit information system as early as 2004. That year it made a big investment in information technology systems to enable banks to transmit credit data electronically—essential so that the credit information system could actually exist. In addition, the credit registry started to include microfinance institutions as a source of information. In 2010 Rwanda granted borrowers the right to inspect their own credit report and began requiring loans of all sizes to be reported to the credit bureau and the central bank’s credit registry. In 2011 the credit bureau started to collect and distribute information from utility companies, and both the credit bureau and the credit registry also started to distribute more than two

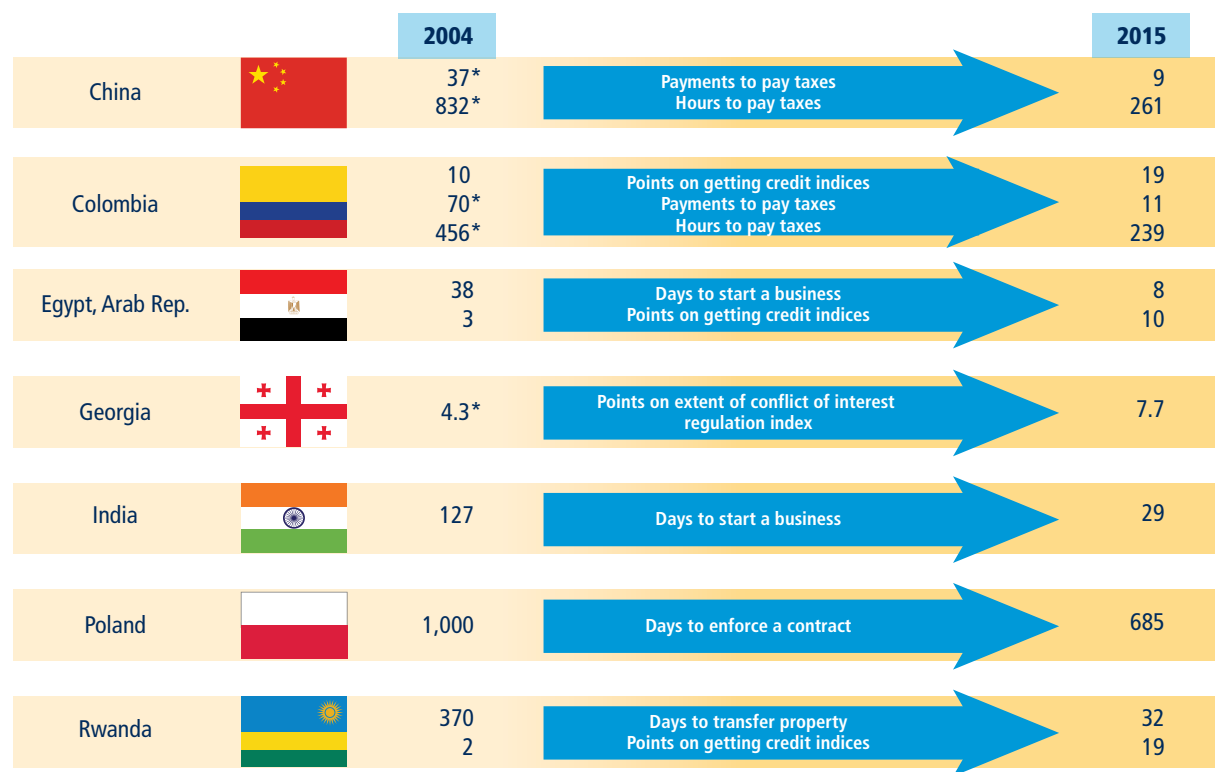
FIGURE 1.11 Worldwide, economies have improved regulatory processes the most in the area of starting a business



Source: *Doing Business* database.

Note: The red line shows the average global improvement in the distance to frontier score since 2004. The measure is normalized to range from 0 to 100, with 100 representing the frontier. Because of changes over the years in methodology and in the economies and indicators included, the improvements are measured year on year using pairs of consecutive years with comparable data.

FIGURE 1.12 Economies in every region have made big strides in business regulation



Source: *Doing Business* database.

Note: The getting credit indices are the strength of legal rights and depth of credit information indices. The scores for 2004 on these indices are of a possible 16 points; those for 2015 are of a possible 20 points.

* Data are for 2005.

years of historical information. And in the past year the credit bureau introduced a credit scoring service, further improving Rwanda's credit information system.

Rwanda began strengthening its secured transactions system in 2009, when it introduced provisions allowing a wider range of assets to be used as collateral, permitting a general description of debts and obligations in a security agreement, allowing out-of-court enforcement of collateral and granting secured creditors absolute priority within bankruptcy. It also created a new collateral registry. More recently, in 2013 Rwanda provided greater flexibility on the types of debts and obligations that can be secured through a collateral agreement.

Colombia made the biggest improvement in the distance to frontier score in Latin

America and the Caribbean over the past 12 years. It has reformed in all areas measured by *Doing Business*, most notably in the areas of paying taxes and getting credit. The milestone reforms making it easier to pay taxes centered on making electronic filing available and more useful to firms. In 2010, for example, Colombia established mandatory electronic filing and payment for some of the major taxes. Colombia improved access to credit last year by adopting a new secured transactions law that takes a functional approach to secured transactions and by establishing a centralized, notice-based collateral registry. The law broadens the range of assets that can be used as collateral, allows a general description of assets granted as collateral, establishes clear priority rules inside bankruptcy for secured creditors, sets out grounds for relief from a stay of enforcement actions

by secured creditors during reorganization procedures and allows out-of-court enforcement of collateral. Thanks to these changes, Colombia is now one of only three economies with a perfect score on the strength of legal rights index.

In the Middle East and North Africa, Egypt had the biggest increase in the distance to frontier score over the past 12 years, though most of the gains occurred in the first half of that period, before 2009. The most dramatic improvements were made in the area of starting a business. In 2004 Egypt introduced computerized company contract models for use in business incorporation and created a single access point for business registration with approval in 24 hours. In 2007 Egypt lowered registration fees, improved the process at the one-stop shop and reduced the minimum capital requirement. In 2009 Egypt

further reduced the minimum capital requirement in February, then abolished it in April. Finally, in 2010 it reduced the cost to start a business. Another area of big improvement is getting credit. The credit bureau I-score was established in 2007 and later improved. Borrowers' right to inspect their own data in the credit bureau was guaranteed in 2008, and the credit bureau added retailers to its database in 2009.

In East Asia and the Pacific, China stands out with the biggest improvement in the distance to frontier score over the past 12 years. Business tax reform contributed a great deal to that accomplishment. In 2008 China made paying taxes easier and less costly for companies by unifying the criteria and accounting methods for tax deductions and by reducing the corporate income tax rate. And in 2009 a new corporate income tax law unified the tax regimes for domestic and foreign enterprises and clarified the calculation of taxable income for corporate income tax purposes.

India is the South Asian economy recording the biggest increase in the distance to frontier score since 2004. One of the areas of greatest improvement has been starting a business. In 2004 India cut time from the process for obtaining a permanent account number (an identification number for firms), and in 2006 it speeded up the process for obtaining a tax registration number. In 2010 India established an online system for value added tax registration and replaced the physical stamp previously required with an online version. And in the past year India eliminated the paid-in minimum capital requirement and streamlined the process for starting a business. More reforms are ongoing—in starting a business and other areas measured by *Doing Business*—though the full effects have yet to be felt (box 1.2).

Among OECD high-income economies, Poland stands out as having made substantial improvements over the past 12 years in areas measured by *Doing Business*. The most notable ones relate

to the functioning of courts as reflected in the enforcing contracts and resolving insolvency indicators. In 2007 Poland improved its insolvency process by tightening professional requirements for administrators and introducing lower limits on trustees' pay. In 2009 an amendment to its bankruptcy law introduced the option of a prebankruptcy reorganization procedure for financially distressed companies. And in 2011 an amendment to its bankruptcy and reorganization law simplified court procedures and extended more rights to secured creditors. Poland started reforms making it easier to enforce contracts as early as 2005, by amending its civil procedure code. In 2007 it introduced stricter rules of procedure to increase the speed and efficiency of court proceedings. Finally, in 2012 Poland further amended its civil procedure code and appointed more judges to commercial courts.

BOX 1.2 Doing business in India—the path toward regulatory reform

In 2014 the government of India launched an ambitious program of regulatory reform aimed at making it easier to do business. Spanning a range of areas measured by *Doing Business*, the program represents a great deal of effort to create a more business-friendly environment, particularly in Delhi and Mumbai.

One important focus is to make starting a business easier. In May 2015 the government adopted amendments to the Companies Act that eliminated the minimum capital requirement. Now Indian entrepreneurs no longer need to deposit 100,000 Indian rupees (\$1,629)—equivalent to 111% of income per capita—in order to start a local limited liability company. The amendments also ended the requirement to obtain a certificate to commence business operations, saving business founders an unnecessary step and five days. Several other initiatives to simplify the start-up process were still ongoing on June 1, 2015, the cutoff date for this year's data collection. These include developing a single application form for new firms and introducing online registration for tax identification numbers.

Another focus is to make the process for getting a new electricity connection simpler and faster. Toward that end the utility in Delhi eliminated an internal wiring inspection by the Electrical Inspectorate—and now instead of two inspections for the same purpose, there is only one. The utility also combined the external connection works and the final switching on of electricity in one procedure. The utility in Mumbai reduced the procedures and time for connecting to electricity by improving internal work processes and coordination. It combined several steps into one procedure—the inspection and installation of the meter, the external connection works and the final connection. Now companies can get connected to the grid, and get on with their business, 14 days sooner than before.

Improvements have also been initiated in other areas measured by *Doing Business*. To make dealing with construction permits easier, for example, a single-window system for processing building permit applications is being started in Mumbai—with the promise of greatly reducing the associated bureaucratic burden once fully implemented. And online systems for filing and paying taxes are being further improved to simplify tax compliance.

Fostering an environment more supportive of private sector activity will take time. But if the efforts are sustained over the next several years, they could lead to substantial benefits for Indian entrepreneurs—along with potential gains in economic growth and job creation.

WHAT IS IN THIS YEAR'S REPORT?

This year's report presents seven case studies. Five focus on legal and regulatory features covered by new or expanded indicators being introduced this year—in the areas of dealing with construction permits, getting electricity, registering property, trading across borders and enforcing contracts. The other two analyze other areas of interest in the historical data set.

The case study on dealing with construction permits analyzes the new data for the building quality control index. The results show that high-income economies have on average better quality control and safety mechanisms. The case study also finds that economies with greater efficiency and quality in their construction permitting system tend to have a lower incidence of corruption.

The case study on getting electricity focuses on both the new reliability of electricity supply and transparency of tariffs index and the price of electricity consumption. It finds that economies that have a more reliable electricity supply also tend to have a more efficient process for getting a new electricity connection.

The registering property case study analyzes one of the features covered by the new quality of land administration index: the digital capabilities of the land registry and cadastre. The case study shows that property transfers have become more efficient in economies that introduced digital systems in their land registry, their cadastre or both.

The case study on trading across borders presents the new methodology for this indicator set. It analyzes the trade patterns captured in the indicators and discusses the main patterns in the data on the time and cost to export and import. The case study finds that economies in customs unions tend to have more streamlined trade processes. Finally, the

enforcing contracts case study presents the new data on the quality of judicial processes and discusses regional patterns and recent reforms in this area.

Beyond these five case studies covering new features, a case study on starting a business analyzes the involvement of third parties such as lawyers and notaries in company formation. It finds that where third parties are involved the cost is higher. A case study on resolving insolvency focuses on post-commencement finance—new funds obtained by a company after it enters an insolvency process, when an inflow of funds can be crucial in preserving the company's viability. Comparing legal provisions on post-commencement finance around the world, the case study finds that businesses are more likely to survive an insolvency process in economies where post-commencement finance is well regulated.

Finally, this year's report presents a summary of some of the research recently published in academic law journals that relates to the four sets of *Doing Business* indicators whose focus is essentially on the law—getting credit (legal rights of borrowers and lenders), protecting minority investors, enforcing contracts and resolving insolvency. There are close links between these indicators and the literature. For example, the literature emphasizes the importance of having effective mechanisms of alternative dispute resolution as a way to minimize the case backlog in courts—and this inspired the expansion of the enforcing contracts indicators to also cover arbitration and voluntary mediation this year. *Doing Business* will continue to monitor the literature in both law and economics to identify good practices and inform policy makers undertaking legal and regulatory reform efforts.

NOTES

1. For 11 economies the data are also collected for the second largest business city (see table 13A.1 at the end of the data notes).
2. This year's report also introduces an expanded methodology for the labor market regulation indicators, as discussed in the data notes.

3. The papers cited here are just a few examples of research done in the areas measured by *Doing Business*. Since 2003, when the *Doing Business* report was first published, 2,182 research articles discussing how regulation in the areas measured by *Doing Business* influences economic outcomes have been published in peer-reviewed academic journals. Another 6,296 working papers have been posted online.
4. Bruhn 2011.
5. Amin and Islam 2014.
6. Giannetti and Jentzsch 2013.
7. Visaria 2009.
8. Monteiro and Assunção 2012.
9. Besley 2015, p. 106.
10. Relationships are significant at the 1% level after controlling for income per capita. The correlation between the ease of doing business ranking and the Global Competitiveness Index is 0.84. The correlation between the ease of doing business ranking and the Corruption Perceptions Index is 0.75.
11. Relationships are significant at the 1% level after controlling for income per capita. The correlation between the distance to frontier score for regulatory efficiency and the Corruption Perceptions Index is 0.77. The correlation between the distance to frontier score for regulatory quality and the Corruption Perceptions Index is 0.66.
12. This corresponds to a monthly consumption of 26,880 kilowatt-hours.
13. The relationship is significant at the 1% level after controlling for income per capita. New firm density is the number of newly registered limited liability companies per 1,000 working-age people (ages 15–64).
14. The relationship is significant at the 1% level after controlling for income per capita.
15. UNPAN 2012.
16. UNPAN 2012.
17. According to the World Bank's World Development Indicators database, output per capita in Georgia increased from \$4,346 in 2004 to \$7,233 in 2014 (in constant 2011 international dollars) (<http://data.worldbank.org/indicator>). And according to the World Bank Group's Entrepreneurship Database, business density rose from 1.35 firms per 1,000 adults in 2005 to 4.86 in 2012 (<http://www.doingbusiness.org/data/exploretopics/entrepreneurship>).