



Data notes

The indicators presented and analyzed in *Doing Business* measure business regulation and the protection of property rights—and their effect on businesses, especially small and medium-size domestic firms. First, the indicators document the complexity of regulation, such as the number of procedures to start a business or to register a transfer of commercial property. Second, they gauge the time and cost to achieve a regulatory goal or comply with regulation, such as the time and cost to enforce a contract, go through bankruptcy or trade across borders. Third, they measure the extent

of legal protections of property, for example, the protections of minority investors against looting by company directors or the range of assets that can be used as collateral according to secured transactions laws. Fourth, a set of indicators documents the tax burden on businesses. Finally, a set of data covers different aspects of employment regulation. The 11 sets of indicators measured in *Doing Business* were added over time, and the sample of economies and cities expanded (table 14.1).

The data for all sets of indicators in *Doing Business 2015* are for June 2014.¹

TABLE 14.1 Topics and economies covered by each *Doing Business* report

Topic	DB 2004	DB 2005	DB 2006	DB 2007	DB 2008	DB 2009	DB 2010	DB 2011	DB 2012	DB 2013	DB 2014	DB 2015
Getting electricity												
Dealing with construction permits												
Trading across borders												
Paying taxes												
Protecting minority investors												
Registering property												
Getting credit												
Resolving insolvency												
Enforcing contracts												
Labor market regulation												
Starting a business												
Number of economies	133	145	155	175	178	181	183	183	183	185	189	189

Note: Data for the economies added to the sample each year are back-calculated to the previous year. The exceptions are Kosovo and Montenegro, which were added to the sample after they became members of the World Bank Group. In *Doing Business 2015*, while the number of economies remains the same as in *Doing Business 2014*, 11 cities have been added.

METHODOLOGY

The *Doing Business* data are collected in a standardized way. To start, the *Doing Business* team, with academic advisers, designs a questionnaire. The questionnaire uses a simple business case to ensure comparability across economies and over time—with assumptions about the legal form of the business, its size, its location and the nature of its operations. Questionnaires are administered to more than 10,700 local experts, including lawyers, business consultants, accountants, freight forwarders, government officials and other professionals routinely administering or advising on legal and regulatory requirements (table 14.2). These experts have several rounds of interaction with the *Doing Business* team, involving conference calls, written correspondence and visits by the team. For *Doing Business 2015* team members visited 26 economies, including 10 new cities, to verify data and recruit respondents. The data from questionnaires are subjected to numerous rounds of verification, leading to revisions or expansions of the information collected.

The *Doing Business* methodology offers several advantages. It is transparent, using factual information about what

laws and regulations say and allowing multiple interactions with local respondents to clarify potential misinterpretations of questions. Having representative samples of respondents is not an issue; *Doing Business* is not

a statistical survey, and the texts of the relevant laws and regulations are collected and answers checked for accuracy. The methodology is inexpensive and easily replicable, so data can be collected in a large sample of economies. Because standard assumptions are used in the data collection, comparisons and benchmarks are valid across economies. Finally, the data not only highlight the extent of specific regulatory obstacles to business but also identify their source and point to what might be reformed.

Economy characteristics

Gross national income per capita

Doing Business 2015 reports 2013 income per capita as published in the World Bank's *World Development Indicators 2014*. Income is calculated using the Atlas method (current U.S. dollars). For cost indicators expressed as a percentage of income per capita, 2013 gross national income (GNI) in U.S. dollars is used as the denominator. GNI data based on the Atlas method were not available from the World Bank for Argentina, The Bahamas, Bahrain, Barbados, Brunei Darussalam, Djibouti, Kuwait, Libya, Myanmar, New Zealand, Oman, San Marino, the Syrian Arab Republic, and West Bank and Gaza. In these cases GDP or GNP per capita data and growth rates from other sources, such as the International Monetary Fund's World Economic Outlook database and the Economist Intelligence Unit, were used.

Region and income group

Doing Business uses the World Bank regional and income group classifications, available at <http://data.worldbank.org/about/country-classifications>. While the World Bank does not assign regional classifications to high-income economies, regional averages presented in figures and tables in the *Doing Business* report include economies from all income groups (low, lower middle, upper middle and high income). For the purpose of the report, high-income OECD economies are assigned the "regional" classification *OECD high income*.

Population

Doing Business 2015 reports midyear 2013 population statistics as published in *World Development Indicators 2014*.

TABLE 14.2 How many experts does *Doing Business* consult?

Indicator set	Respondents	Economies with given number of respondents (%)		
		1-2	3-5	5+
Starting a business	1,651	10	33	57
Dealing with construction permits	1,082	18	40	42
Getting electricity	967	22	45	33
Registering property	1,229	20	37	43
Getting credit	1,538	10	25	65
Protecting minority investors	1,117	25	37	38
Paying taxes	1,305	7	39	54
Trading across borders	1,184	22	46	33
Enforcing contracts	1,314	18	42	40
Resolving insolvency	1,051	25	40	35
Labor market regulation	1,134	23	40	37
Total	13,572	18	39	43

LIMITS TO WHAT IS MEASURED

The *Doing Business* methodology has 5 limitations that should be considered when interpreting the data. First, for most economies the collected data refer to businesses in the largest business city (which in some economies

differs from the capital) and may not be representative of regulation in other parts of the economy. (The exceptions are 11 economies that have a population of more than 100 million, where *Doing Business*, for the first time this year, also collected data for the second largest business city.)² To address this limitation, subnational *Doing Business* indicators were created (box 14.1). Second, the data often focus on a specific business form—generally a limited liability company (or its legal equivalent) of a specified size—and may not be representative of the regulation on other businesses, for example, sole proprietorships. Third, transactions described in a standardized case scenario refer to a specific set of issues and may not represent the full set of issues that a business encounters. Fourth, the measures of time involve an element of judgment by the expert respondents. When sources indicate different estimates, the time indicators reported in *Doing Business* represent the median values of several responses given under the assumptions of the standardized case.

Finally, the methodology assumes that a business has full information on what is required and does not waste time when completing procedures. In practice, completing a procedure may take longer if the business lacks information or is unable to follow up

promptly. Alternatively, the business may choose to disregard some burdensome procedures. For both reasons the time delays reported in *Doing Business 2015* would differ from the recollection of entrepreneurs reported in the World Bank Enterprise Surveys or other firm-level surveys.

CHANGES IN WHAT IS MEASURED

As part of a 2-year update in methodology, *Doing Business 2015* incorporates 7 important changes. First, the ease of doing business ranking as well as all topic-level rankings are now computed on the basis of distance to frontier scores (see the chapter on the distance to frontier and ease of doing business ranking). Second, for the 11 economies with a population of more than 100 million, data for a second city have been added to the data set and the ranking calculation. Third, for getting credit, the methodology has been revised for both the strength of legal rights index and the depth of credit information index. The number of points has been increased in both indices, from 10 to 12 for the strength of legal rights index and from 6 to 8 for the depth of credit information index. In addition, only credit bureaus and registries that cover at least 5% of the adult population can

receive a score on the depth of credit information index.

Fourth, the name of the protecting investors indicator set has been changed to protecting minority investors to better reflect its scope—and the scope of the indicator set has been expanded to include shareholders' rights in corporate governance beyond related-party transactions. Fifth, the resolving insolvency indicator set has been expanded to include an index measuring the strength of the legal framework for insolvency. Sixth, the calculation of the distance to frontier score for paying taxes has been changed. The total tax rate component now enters the score in a nonlinear fashion, in an approach different from that used for all other indicators (see the chapter on the distance to frontier and ease of doing business ranking).

Finally, the name of the employing workers indicator set has been changed to labor market regulation, and the scope of this indicator set has also been changed. The indicators now focus on labor market regulations applying to the retail sector rather than the manufacturing sector, and their coverage has been expanded to include regulations on labor disputes and on benefits provided to workers. The labor market regulation indicators continue to be excluded from the aggregate distance to frontier score and ranking on the ease of doing business.

BOX 14.1 Subnational *Doing Business* indicators

Subnational *Doing Business* studies point to differences in business regulation and its implementation—as well as in the pace of regulatory reform—across cities in the same economy or region. For several economies subnational studies are now periodically updated to measure change over time or to expand geographic coverage to additional cities.

This year subnational studies were completed in the Arab Republic of Egypt, Mexico and Nigeria. In addition, the geographic coverage was expanded for ongoing studies in the Dominican Republic, Poland, South Africa, Spain and 6 Central American countries. And for the first time subnational studies are incorporating a gender perspective, assessing practices at public registries in Nigeria and analyzing legal indicators from the World Bank Group's *Women, Business and the Law* report on Central America.

Beyond these changes there are 3 other updates in methodology. For paying taxes, the financial statement variables have been updated to be proportional to 2012 income per capita; previously they were proportional to 2005 income per capita. For enforcing contracts, the value of the claim is now set at twice the income per capita or \$5,000, whichever is greater. For dealing with construction permits, the cost of construction is now set at 50 times income per capita (before, the cost was assessed by the

Doing Business respondents). In addition, this indicator set no longer includes the procedures for obtaining a landline telephone connection.

DATA CHALLENGES AND REVISIONS

Most laws and regulations underlying the *Doing Business* data are available on the *Doing Business* website at <http://www.doingbusiness.org>. All the sample questionnaires and the details underlying the indicators are also published on the website. Questions on the methodology and challenges to data can be submitted through the website's "Ask a Question" function at <http://www.doingbusiness.org>.

Doing Business publishes 18,400 indicators (92 indicators per economy) each year. To create these indicators, the team measures more than 100,000 data points, each of which is made available on the *Doing Business* website. Historical data 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 and any revisions in data due to corrections. This year, however, the getting credit, paying taxes and labor market regulation indicators will be back-calculated for only one year because of the significant changes in methodology for these indicators. The website also makes available all original data sets used for background papers. The correction rate between *Doing Business* 2014 and *Doing Business* 2015 is 5.3%.³

Governments submit queries on the data and provide new information to *Doing Business*. During the *Doing Business* 2015 production cycle the team received 105 such queries from governments. In addition, the team

held videoconferences with government representatives in 27 economies and in-person meetings with government representatives in 13 economies.

STARTING A BUSINESS

Doing Business records all procedures officially required, or commonly done in practice, for an entrepreneur to start up and formally operate an industrial or commercial business, as well as the time and cost to complete these procedures and the paid-in minimum capital requirement (figure 14.1). These procedures include obtaining all necessary licenses and permits and completing any required notifications, verifications or inscriptions for the company and employees with relevant authorities. The ranking of economies on the ease of starting a business is determined by sorting their distance to frontier scores for starting a business. These scores are the simple average of the distance to frontier scores for each of the component indicators (figure 14.2). The distance to frontier measure illustrates the distance of an economy to the "frontier," which is derived from the most efficient practice or highest score achieved on each indicator.

After a study of laws, regulations and publicly available information on

business entry, a detailed list of procedures is developed, along with the time and cost to comply with each procedure under normal circumstances and the paid-in minimum capital requirement. Subsequently, local incorporation lawyers, notaries and government officials complete and verify the data.

Information is also collected on the sequence in which procedures are to be completed and whether procedures may be carried out simultaneously. It is assumed that any required information is readily available and that the entrepreneur will pay no bribes. If answers by local experts differ, inquiries continue until the data are reconciled.

To make the data comparable across economies, several assumptions about the business and the procedures are used.

Assumptions about the business

The business:

- Is a limited liability company (or its legal equivalent). If there is more than one type of limited liability company in the economy, the limited liability form most common among domestic firms is chosen. Information on the most common form is obtained from incorporation lawyers or the statistical office.

FIGURE 14.1 What are the time, cost, paid-in minimum capital and number of procedures to get a local limited liability company up and running?

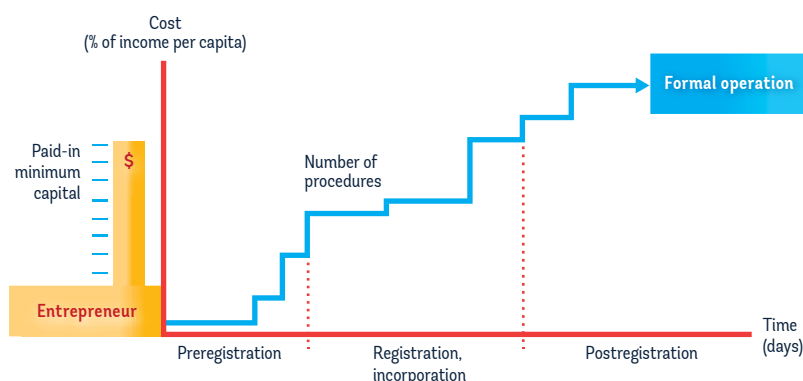
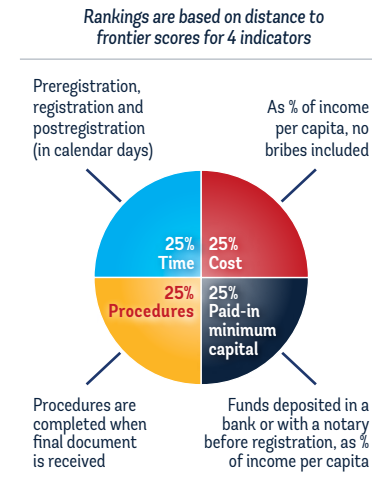


FIGURE 14.2 Starting a business: getting a local limited liability company up and running



- Operates in the economy's largest business city. For 11 economies the data are also collected for the second largest business city (see table 14A.1 at the end of the data notes).
- Is 100% domestically owned and has 5 owners, none of whom is a legal entity.
- Has start-up capital of 10 times income per capita, paid in cash.
- Performs general industrial or commercial activities, such as the production or sale to the public of products or services. The business does not perform foreign trade activities and does not handle products subject to a special tax regime, for example, liquor or tobacco. It is not using heavily polluting production processes.
- Leases the commercial plant or offices and is not a proprietor of real estate.
- Does not qualify for investment incentives or any special benefits.
- Has at least 10 and up to 50 employees 1 month after the commencement of operations, all of them domestic nationals.
- Has a turnover of at least 100 times income per capita.
- Has a company deed 10 pages long.

Procedures

A procedure is defined as any interaction of the company founders with external parties (for example, government agencies, lawyers, auditors or notaries). Interactions between company founders or company officers and employees are not counted as procedures. Procedures that must be completed in the same building but in different offices or at different counters are counted separately. If founders have to visit the same office several times for different sequential procedures, each is counted separately. The founders are assumed to complete all procedures themselves, without middlemen, facilitators, accountants or lawyers, unless the use of such a third party is mandated by law or solicited by the majority of entrepreneurs. If the services of professionals are required, procedures conducted by such professionals on behalf of the company are counted separately. Each electronic procedure is counted separately. If 2 procedures can be completed through the same website but require separate filings, they are counted as 2 separate procedures.

Both pre- and postincorporation procedures that are officially required for an entrepreneur to formally operate a business are recorded (table 14.3).

Procedures required for official correspondence or transactions with public agencies are also included. For example, if a company seal or stamp is required on official documents, such as tax declarations, obtaining the seal or stamp is counted. Similarly, if a company must open a bank account before registering for sales tax or value added tax, this transaction is included as a procedure. Shortcuts are counted only if they fulfill 4 criteria: they are legal, they are available to the general public, they are used by the majority of companies, and avoiding them causes substantial delays.

Only procedures required of all businesses are covered. Industry-specific

TABLE 14.3 What do the starting a business indicators measure?

Procedures to legally start and operate a company (number)

Preregistration (for example, name verification or reservation, notarization)

Registration in the economy's largest business city^a

Postregistration (for example, social security registration, company seal)

Time required to complete each procedure (calendar days)

Does not include time spent gathering information

Each procedure starts on a separate day (2 procedures cannot start on the same day)—though procedures that can be fully completed online are an exception to this rule

Procedure considered completed once final incorporation document is received

No prior contact with officials

Cost required to complete each procedure (% of income per capita)

Official costs only, no bribes

No professional fees unless services required by law

Paid-in minimum capital (% of income per capita)

Funds deposited in a bank or with a notary before registration (or within 3 months)

a. For 11 economies the data are also collected for the second largest business city.

procedures are excluded. For example, procedures to comply with environmental regulations are included only when they apply to all businesses conducting general commercial or industrial activities. Procedures that the company undergoes to connect to electricity, water, gas and waste disposal services are not included.

Time

Time is recorded in calendar days. The measure captures the median duration that incorporation lawyers indicate is necessary in practice to complete a procedure with minimum follow-up with government agencies and no extra payments. It is assumed that the minimum time required for each procedure is 1 day, except for procedures that can be fully completed online, for which the time required is recorded as half a day.

Although procedures may take place simultaneously, they cannot start on the same day (that is, simultaneous procedures start on consecutive days), again with the exception of procedures that can be fully completed online. A procedure is considered completed once the company has received the final incorporation document, such as the company registration certificate or tax number. If a procedure can be accelerated for an additional cost, the fastest procedure is chosen if that option is more beneficial to the economy's ranking. It is assumed that the entrepreneur does not waste time and commits to completing each remaining procedure without delay. The time that the entrepreneur spends on gathering information is ignored. It is assumed that the entrepreneur is aware of all entry requirements and their sequence from the beginning but has had no prior contact with any of the officials.

Cost

Cost is recorded as a percentage of the economy's income per capita. It includes all official fees and fees for legal or professional services if such services are required by law. Fees for purchasing and legalizing company books are included if these transactions are required by law. Although value added tax registration can be counted as a separate procedure, value added tax is not part of the incorporation cost. The company law, the commercial code, and specific regulations and fee schedules are used as sources for calculating costs. In the absence of fee schedules, a government officer's estimate is taken as an official source. In the absence of a government officer's estimate, estimates by incorporation lawyers are used. If several incorporation lawyers provide different estimates, the median reported value is applied. In all cases the cost excludes bribes.

Paid-in minimum capital

The paid-in minimum capital requirement reflects the amount that the entrepreneur needs to deposit in a bank or

with a notary before registration and up to 3 months following incorporation and is recorded as a percentage of the economy's income per capita. The amount is typically specified in the commercial code or the company law. Many economies require minimum capital but allow businesses to pay only a part of it before registration, with the rest to be paid after the first year of operation. In Turkey in June 2014, for example, the minimum capital requirement was 10,000 Turkish liras, of which one-fourth needed to be paid before registration. The paid-in minimum capital recorded for Turkey is therefore 2,500 Turkish liras, or 12.14% of income per capita.

The data details on starting a business can be found for each economy at <http://www.doingbusiness.org>. This methodology was developed by Djankov and others (2002) and is adopted here with minor changes.

DEALING WITH CONSTRUCTION PERMITS

Doing Business records all procedures required for a business in the construction industry to build a warehouse (figure 14.3). These procedures include obtaining and submitting all relevant project-specific documents (for example, building plans, site maps and certificates of urbanism) to the

authorities; hiring external third-party supervisors, engineers or inspectors (if necessary); obtaining all necessary clearances, licenses, permits and certificates; submitting all required notifications; and requesting and receiving all necessary inspections (unless completed by a private, third-party inspector). *Doing Business* also records procedures for obtaining connections for water and sewerage. Procedures necessary to register the warehouse so that it can be used as collateral or transferred to another entity are also counted. The questionnaire divides the process of building a warehouse into distinct procedures and solicits data for calculating the time and cost to complete each procedure. The ranking of economies on the ease of dealing with construction permits is determined by sorting their distance to frontier scores for dealing with construction permits. These scores are the simple average of the distance to frontier scores for each of the component indicators (figure 14.4).

Information is collected from experts in construction licensing, including architects, civil engineers, construction lawyers, construction firms, utility service providers and public officials who deal with building regulations, including approvals, permit issuance and inspections. To make the data comparable

FIGURE 14.3 What are the time, cost and number of procedures to comply with formalities to build a warehouse?

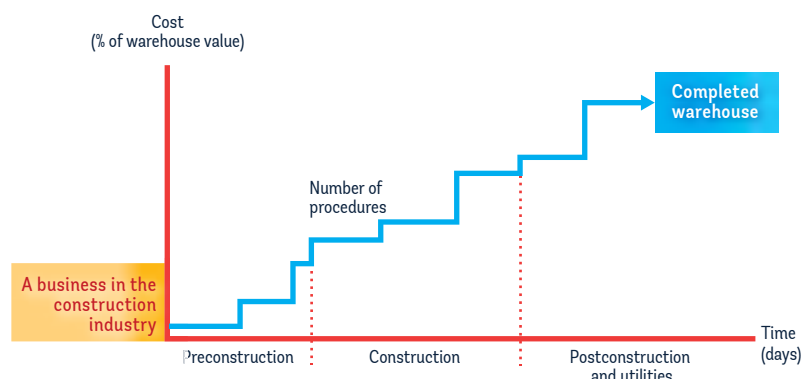
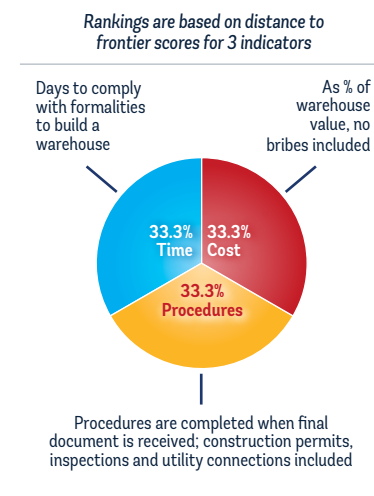


FIGURE 14.4 Dealing with construction permits: building a warehouse



across economies, several assumptions about the business, the warehouse project and the utility connections are used.

Assumptions about the construction company

The business (BuildCo):

- Is a limited liability company.
- Operates in the economy's largest business city. For 11 economies the data are also collected for the second largest business city (see table 14A.1).
- Is 100% domestically and privately owned.
- Has 5 owners, none of whom is a legal entity.
- Is fully licensed and insured to carry out construction projects, such as building warehouses.
- Has 60 builders and other employees, all of them nationals with the technical expertise and professional experience necessary to obtain construction permits and approvals.
- Has at least 1 employee who is a licensed architect or engineer and registered with the local association of architects or engineers.
- Has paid all taxes and taken out all necessary insurance applicable to its general business activity (for example, accidental insurance for construction workers and third-person liability).
- Owns the land on which the warehouse will be built.

Assumptions about the warehouse

The warehouse:

- Will be used for general storage activities, such as storage of books or stationery. The warehouse will not be used for any goods requiring special conditions, such as food, chemicals or pharmaceuticals.
- Will have 2 stories, both above ground, with a total constructed area of 1,300.6 square meters (14,000 square feet). Each floor will be 3 meters (9 feet, 10 inches) high.
- Will have road access and be located in the periurban area of the economy's largest business city (that is, on the fringes of the city but still within its official limits). For 11 economies the data are also collected for the second largest business city.
- Will not be located in a special economic or industrial zone.
- Will be located on a land plot of 929 square meters (10,000 square feet) that is 100% owned by BuildCo and is accurately registered in the cadastre and land registry.
- Is valued at 50 times income per capita.⁴
- Will be a new construction (there was no previous construction on the land).
- Will have complete architectural and technical plans prepared by a licensed architect. If preparation of the plans requires such steps as obtaining further documentation or getting prior approvals from external agencies, these are counted as procedures.
- Will include all technical equipment required to be fully operational.
- Will take 30 weeks to construct (excluding all delays due to administrative and regulatory requirements).

Assumptions about the utility connections

The water and sewerage connections:

- Will be 150 meters (492 feet) from the existing water source and sewer tap. If there is no water delivery infrastructure in the economy, a borehole will be dug. If there is no sewerage infrastructure, a septic tank in the smallest size available will be installed or built.
- Will not require water for fire protection reasons; a fire extinguishing system (dry system) will be used instead. If a wet fire protection system is required by law, it is assumed that the water demand specified below also covers the water needed for fire protection.
- Will have an average water use of 662 liters (175 gallons) a day and an average wastewater flow of 568 liters (150 gallons) a day.
- Will have a peak water use of 1,325 liters (350 gallons) a day and a peak wastewater flow of 1,136 liters (300 gallons) a day.
- Will have a constant level of water demand and wastewater flow throughout the year.
- Will be 1 inch in diameter for the water connection and 4 inches in diameter for the sewerage connection.

Procedures

A procedure is any interaction of the company's employees or managers, or any party acting on behalf of the company, with external parties, including government agencies, notaries, the land registry, the cadastre, utility companies and public inspectors—or the hiring of private inspectors and technical experts apart from in-house architects and engineers. Interactions between company employees, such as development of the warehouse plans and inspections conducted by employees, are not counted as procedures. But interactions necessary to obtain any plans, drawings or other documents from external parties (including any documentation required

TABLE 14.4 What do the dealing with construction permits indicators measure?

Procedures to legally build a warehouse (number)

Submitting all relevant documents and obtaining all necessary clearances, licenses, permits and certificates

Submitting all required notifications and receiving all necessary inspections

Obtaining utility connections for water and sewerage

Registering the warehouse after its completion (if required for use as collateral or for transfer of the warehouse)

Time required to complete each procedure (calendar days)

Does not include time spent gathering information

Each procedure starts on a separate day—though procedures that can be fully completed online are an exception to this rule

Procedure considered completed once final document is received

No prior contact with officials

Cost required to complete each procedure (% of warehouse value)

Official costs only, no bribes

for the architect to prepare the plans), or to have such documents approved or stamped by external parties, are counted as procedures. Procedures that the company undergoes to connect the warehouse to water and sewerage are included. All procedures that are legally required, or that are done in practice by the majority of companies, to build a warehouse are counted, even if they may be avoided in exceptional cases (table 14.4).

Time

Time is recorded in calendar days. The measure captures the median duration that local experts indicate is necessary to complete a procedure in practice. It is assumed that the minimum time required for each procedure is 1 day, except for procedures that can be fully completed online, for which the time required is recorded as half a day. Although procedures may take place simultaneously, they cannot start on

the same day (that is, simultaneous procedures start on consecutive days), again with the exception of procedures that can be fully completed online. If a procedure can be accelerated legally for an additional cost and the accelerated procedure is used by the majority of companies, the fastest procedure is chosen. It is assumed that BuildCo does not waste time and commits to completing each remaining procedure without delay. The time that BuildCo spends on gathering information is not taken into account. It is assumed that BuildCo is aware of all building requirements and their sequence from the beginning.

Cost

Cost is recorded as a percentage of the warehouse value (assumed to be 50 times income per capita). Only official costs are recorded. All the fees associated with completing the procedures to legally build a warehouse are recorded, including those associated with obtaining land use approvals and pre-construction design clearances; receiving inspections before, during and after construction; obtaining utility connections; and registering the warehouse property. Nonrecurring taxes required for the completion of the warehouse project are also recorded. Sales taxes (such as value added tax) or capital gains taxes are not recorded. Nor are

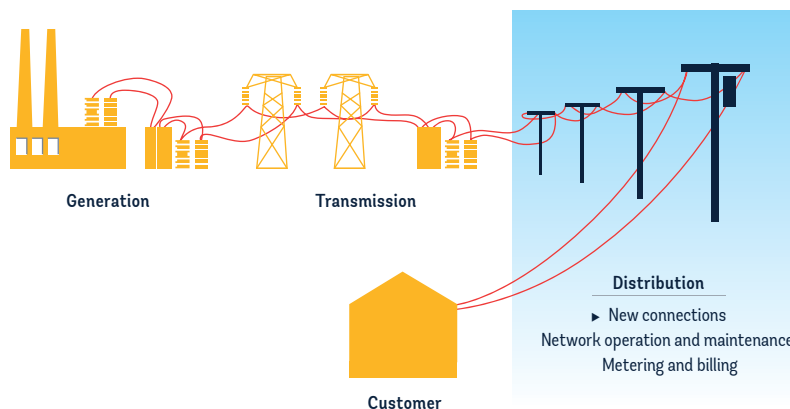
deposits that must be paid up front and are later refunded. The building code, information from local experts, and specific regulations and fee schedules are used as sources for costs. If several local partners provide different estimates, the median reported value is used.

The data details on dealing with construction permits can be found for each economy at <http://www.doingbusiness.org>.

GETTING ELECTRICITY

Doing Business records all procedures required for a business to obtain a permanent electricity connection and supply for a standardized warehouse (figure 14.5). These procedures include applications and contracts with electricity utilities, all necessary inspections and clearances from the utility and other agencies, and the external and final connection works. The questionnaire divides the process of getting an electricity connection into distinct procedures and solicits data for calculating the time and cost to complete each procedure. The ranking of economies on the ease of getting electricity is determined by sorting their distance to frontier scores for getting electricity. These scores are the simple average of the distance to

FIGURE 14.5 Doing Business measures the connection process at the level of distribution utilities



frontier scores for each of the component indicators (figure 14.6).

Data are collected from the electricity distribution utility, then completed and verified by electricity regulatory agencies and independent professionals such as electrical engineers, electrical contractors and construction companies. The electricity distribution utility consulted is the one serving the area (or areas) where warehouses are located. If there is a choice of distribution utilities, the one serving the largest number of customers is selected.

To make the data comparable across economies, several assumptions about the warehouse and the electricity connection are used.

Assumptions about the warehouse

The warehouse:

- Is owned by a local entrepreneur.
- Is located in the economy's largest business city. For 11 economies the data are also collected for the second largest business city (see table 14A.1).
- Is located in an area where similar warehouses are typically located. In this area a new electricity connection

is not eligible for a special investment promotion regime (offering special subsidization or faster service, for example).

- Is located in an area with no physical constraints. For example, the property is not near a railway.
- Is a new construction and is being connected to electricity for the first time.
- Has 2 stories, both above ground, with a total surface area of approximately 1,300.6 square meters (14,000 square feet). The plot of land on which it is built is 929 square meters (10,000 square feet).
- Is used for storage of refrigerated goods.

Assumptions about the electricity connection

The electricity connection:

- Is a permanent one.
- Is a 3-phase, 4-wire Y, 140-kilovolt-ampere (kVA) (subscribed capacity) connection (where the voltage is 120/208 V, the current would be 400 amperes; where it is 230/400 B, the current would be nearly 200 amperes).
- Is 150 meters long. The connection is to either the low-voltage or the medium-voltage distribution network and either overhead or underground, whichever is more common in the area where the warehouse is located.
- Requires works that involve the crossing of a 10-meter road (such as by excavation or overhead lines) but are all carried out on public land. There is no crossing of other owners' private property because the warehouse has access to a road.
- Includes only a negligible length in the customer's private domain.
- Will supply monthly electricity consumption of 0.07 gigawatt-hours (GWh).
- Does not involve work to install the internal electrical wiring. This has already been completed, up to and including the customer's service

TABLE 14.5 What do the getting electricity indicators measure?

Procedures to obtain an electricity connection (number)
Submitting all relevant documents and obtaining all necessary clearances and permits
Completing all required notifications and receiving all necessary inspections
Obtaining external installation works and possibly purchasing material for these works
Concluding any necessary supply contract and obtaining final supply
Time required to complete each procedure (calendar days)
Is at least 1 calendar day
Each procedure starts on a separate day
Does not include time spent gathering information
Reflects the time spent in practice, with little follow-up and no prior contact with officials
Cost required to complete each procedure (% of income per capita)
Official costs only, no bribes
Value added tax excluded

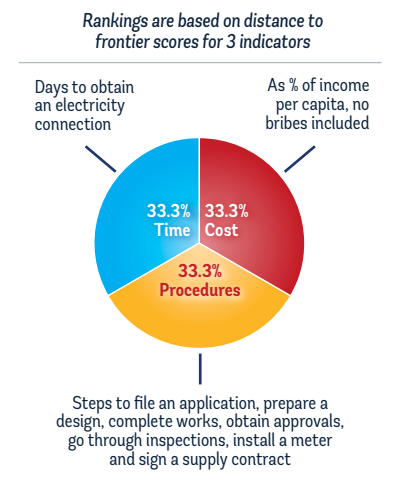
panel or switchboard and installation of the meter base.

Procedures

A procedure is defined as any interaction of the company's employees or its main electrician or electrical engineer (that is, the one who may have done the internal wiring) with external parties, such as the electricity distribution utility, electricity supply utilities, government agencies, electrical contractors and electrical firms. Interactions between company employees and steps related to the internal electrical wiring, such as the design and execution of the internal electrical installation plans, are not counted as procedures. Procedures that must be completed with the same utility but with different departments are counted as separate procedures (table 14.5).

The company's employees are assumed to complete all procedures themselves unless the use of a third party is mandated (for example, if only an electrician registered with the utility

FIGURE 14.6 Getting electricity: obtaining an electricity connection



is allowed to submit an application). If the company can, but is not required to, request the services of professionals (such as a private firm rather than the utility for the external works), these procedures are recorded if they are commonly done. For all procedures, only the most likely cases (for example, more than 50% of the time the utility has the material) and those followed in practice for connecting a warehouse to electricity are counted.

Time

Time is recorded in calendar days. The measure captures the median duration that the electricity utility and experts indicate is necessary in practice, rather than required by law, to complete a procedure with minimum follow-up and no extra payments. It is also assumed that the minimum time required for each procedure is 1 day. Although procedures may take place simultaneously, they cannot start on the same day (that is, simultaneous procedures start on consecutive days). It is assumed that the company does not waste time and commits to completing each remaining procedure without delay. The time that the company spends on gathering information is not taken into account. It is assumed that the company is aware of all electricity connection requirements and their sequence from the beginning.

Cost

Cost is recorded as a percentage of the economy's income per capita. Costs are recorded exclusive of value added tax. All the fees and costs associated with completing the procedures to connect a warehouse to electricity are recorded, including those related to obtaining clearances from government agencies, applying for the connection, receiving inspections of both the site and the internal wiring, purchasing material, getting the actual connection works and paying a security deposit. Information from local experts and specific regulations and fee schedules are used as sources for costs. If

several local partners provide different estimates, the median reported value is used. In all cases the cost excludes bribes.

Security deposit

Utilities require security deposits as a guarantee against the possible failure of customers to pay their consumption bills. For this reason the security deposit for a new customer is most often calculated as a function of the customer's estimated consumption.

Doing Business does not record the full amount of the security deposit. If the deposit is based on the customer's actual consumption, this basis is the one assumed in the case study. Rather than the full amount of the security deposit, *Doing Business* records the present value of the losses in interest earnings experienced by the customer because the utility holds the security deposit over a prolonged period, in most cases until the end of the contract (assumed to be after 5 years). In cases where the security deposit is used to cover the first monthly consumption bills, it is not recorded. To calculate the present value of the lost interest earnings, the end-2013 lending rates from the International Monetary Fund's *International Financial Statistics* are used. In cases where the security deposit is returned with interest, the difference between the lending rate and the interest paid by the utility is used to calculate the present value.

In some economies the security deposit can be put up in the form of a bond: the company can obtain from a bank or an insurance company a guarantee issued on the assets it holds with that financial institution. In contrast to the scenario in which the customer pays the deposit in cash to the utility, in this scenario the company does not lose ownership control over the full amount and can continue using it. In return the company will pay the bank a commission for obtaining the bond.

The commission charged may vary depending on the credit standing of the company. The best possible credit standing and thus the lowest possible commission are assumed. Where a bond can be put up, the value recorded for the deposit is the annual commission times the 5 years assumed to be the length of the contract. If both options exist, the cheaper alternative is recorded.

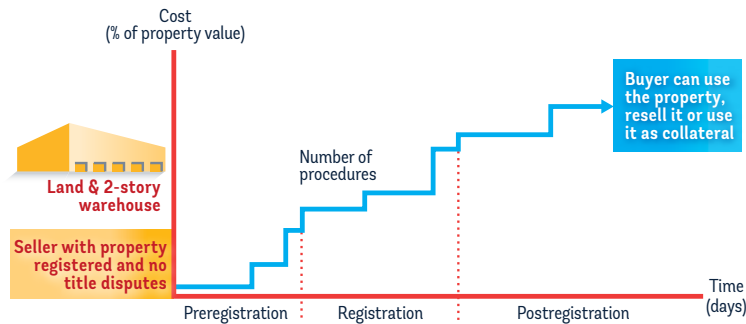
In Honduras in June 2014 a customer requesting a 140-kVA electricity connection would have had to put up a security deposit of 118,434 Honduran lempiras (L) in cash or check, and the deposit would have been returned only at the end of the contract. The customer could instead have invested this money at the prevailing lending rate of 20.08%. Over the 5 years of the contract this would imply a present value of lost interest earnings of L 70,998.58. In contrast, if the customer chose to settle the deposit with a bank guarantee at an annual rate of 2.5%, the amount lost over the 5 years would be just L 14,804.30.

The data details on getting electricity can be found for each economy at <http://www.doingbusiness.org>.

REGISTERING PROPERTY

Doing Business records the full sequence of procedures necessary for a business (the buyer) to purchase a property from another business (the seller) and to transfer the property title to the buyer's name so that the buyer can use the property for expanding its business, use the property as collateral in taking new loans or, if necessary, sell the property to another business. The process starts with obtaining the necessary documents, such as a copy of the seller's title if necessary, and conducting due diligence if required. The transaction is considered complete when it is opposable to third parties and when the buyer can use the

FIGURE 14.7 What are the time, cost and number of procedures required to transfer property between 2 local companies?



property, use it as collateral for a bank loan or resell it (figure 14.7). The ranking of economies on the ease of registering property is determined by sorting their distance to frontier scores for registering property. These scores are the simple average of the distance to frontier scores for each of the component indicators (figure 14.8).

Every procedure required by law or necessary in practice is included, whether it is the responsibility of the seller or the buyer or must be completed by a third party on their behalf. Local property lawyers, notaries and property registries provide information on procedures as well as the time and cost to complete each of them. The registering property indicators do not measure the accessibility of property registration systems, the legal security offered by formal registration, the use of informal property registration systems or the equity of land policies.

To make the data comparable across economies, several assumptions about the parties to the transaction, the property and the procedures are used.

Assumptions about the parties

The parties (buyer and seller):

- Are limited liability companies.
- Are located in the periurban area of the economy's largest business

city. For 11 economies the data are also collected for the second largest business city (see table 14A.1).

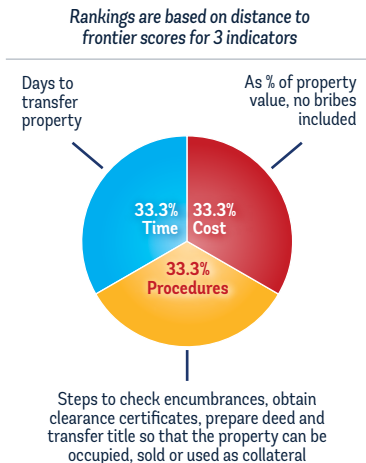
- Are 100% domestically and privately owned.
- Have 50 employees each, all of whom are nationals.
- Perform general commercial activities.

Assumptions about the property

The property:

- Has a value of 50 times income per capita. The sale price equals the value.
- Is fully owned by the seller.
- Has no mortgages attached and has been under the same ownership for the past 10 years.
- Is registered in the land registry or cadastre, or both, and is free of title disputes.
- Is located in a periurban commercial zone, and no rezoning is required.
- Consists of land and a building. The land area is 557.4 square meters (6,000 square feet). A 2-story warehouse of 929 square meters (10,000 square feet) is located on the land. The warehouse is 10 years old, is in good condition and complies with all safety standards, building codes and other legal requirements. It has no heating system. The property of land and building will be transferred in its entirety.

FIGURE 14.8 Registering property: transfer of property between 2 local companies



- Will not be subject to renovations or additional building following the purchase.
- Has no trees, natural water sources, natural reserves or historical monuments of any kind.
- Will not be used for special purposes, and no special permits, such as for residential use, industrial plants, waste storage or certain types of agricultural activities, are required.
- Has no occupants, and no other party holds a legal interest in it.

Procedures

A procedure is defined as any interaction of the buyer or the seller, their agents (if an agent is legally or in practice required) or the property with external parties, including government agencies, inspectors, notaries and lawyers. Interactions between company officers and employees are not considered. All procedures that are legally or in practice required for registering property are recorded, even if they may be avoided in exceptional cases (table 14.6). It is assumed that the buyer follows the fastest legal option available and used by the majority of property owners. Although the buyer may use lawyers or other professionals where

TABLE 14.6 What do the registering property indicators measure?

Procedures to legally transfer title on immovable property (number)
Preregistration procedures (for example, checking for liens, notarizing sales agreement, paying property transfer taxes)
Registration procedures in the economy's largest business city ^a
Postregistration procedures (for example, filing title with municipality)
Time required to complete each procedure (calendar days)
Does not include time spent gathering information
Each procedure starts on a separate day—though procedures that can be fully completed online are an exception to this rule
Procedure considered completed once final document is received
No prior contact with officials
Cost required to complete each procedure (% of property value)
Official costs only, no bribes
No value added or capital gains taxes included

a. For 11 economies the data are also collected for the second largest business city.

necessary in the registration process, it is assumed that the buyer does not employ an outside facilitator in the registration process unless legally or in practice required to do so.

Time

Time is recorded in calendar days. The measure captures the median duration that property lawyers, notaries or registry officials indicate is necessary to complete a procedure. It is assumed that the minimum time required for each procedure is 1 day, except for procedures that can be fully completed online, for which the time required is recorded as half a day. Although procedures may take place simultaneously, they cannot start on the same day, again with the exception of procedures that can be fully completed online. It is assumed that the buyer does not waste time and commits to completing each remaining procedure without delay. If a procedure can be accelerated for an additional cost, the fastest legal procedure

available and used by the majority of property owners is chosen. If procedures can be undertaken simultaneously, it is assumed that they are. It is assumed that the parties involved are aware of all requirements and their sequence from the beginning. Time spent on gathering information is not considered.

Cost

Cost is recorded as a percentage of the property value, assumed to be equivalent to 50 times income per capita. Only official costs required by law are recorded, including fees, transfer taxes, stamp duties and any other payment to the property registry, notaries, public agencies or lawyers. Other taxes, such as capital gains tax or value added tax, are excluded from the cost measure. Both costs borne by the buyer and those borne by the seller are included. If cost estimates differ among sources, the median reported value is used.

The data details on registering property can be found for each economy at <http://www.doingbusiness.org>.

GETTING CREDIT

Doing Business measures the legal rights of borrowers and lenders with respect to secured transactions through one set of indicators and the sharing

of credit information through another. The first set of indicators measures whether certain features that facilitate lending exist within the applicable collateral and bankruptcy laws. The second set measures the coverage, scope and accessibility of credit information available through credit reporting service providers such as credit bureaus or credit registries (figure 14.9). The ranking of economies on the ease of getting credit is determined by sorting their distance to frontier scores for getting credit. These scores are the distance to frontier score for the sum of the strength of legal rights index and the depth of credit information index (figure 14.10).

Legal rights

The data on the legal rights of borrowers and lenders are gathered through a questionnaire administered to financial lawyers and verified through analysis of laws and regulations as well as public sources of information on collateral and bankruptcy laws. Questionnaire responses are verified through several rounds of follow-up communication with respondents as well as by contacting third parties and consulting public sources. The questionnaire data are confirmed through teleconference calls or on-site visits in all economies.

FIGURE 14.9 Do lenders have credit information on entrepreneurs seeking credit? Is the law favorable to borrowers and lenders using movable assets as collateral?

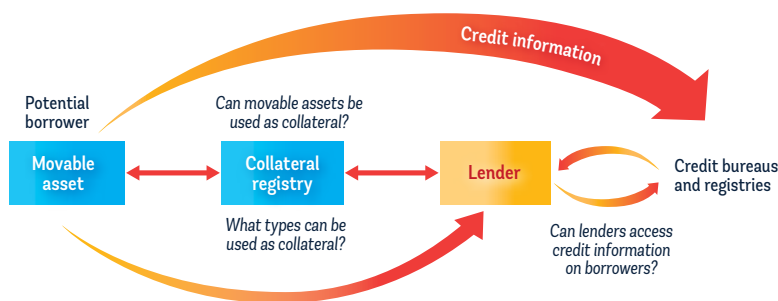
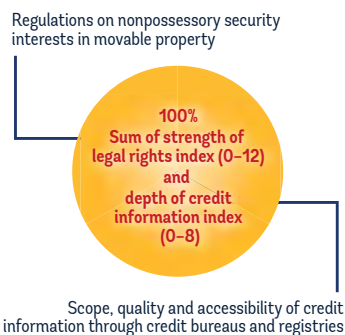


FIGURE 14.10 Getting credit: collateral rules and credit information

Rankings are based on distance to frontier scores for the sum of 2 indicators



Note: Credit bureau coverage and credit registry coverage are measured but do not count for the rankings.

Strength of legal rights index

The strength of legal rights index measures the degree to which collateral and bankruptcy laws protect the rights of borrowers and lenders and thus facilitate lending (table 14.7). The index for the first time this year includes 12 components rather than 10. For each economy it is first assessed whether a unitary secured transactions system exists. Then 2 case scenarios, case A and case B, are used to determine how a nonpossessory security interest is created, publicized and enforced according to the law. Special emphasis is given to how the collateral registry operates (if registration of security interests is possible). The case scenarios involve a secured borrower, the company ABC, and a secured lender, BizBank.

In some economies the legal framework for secured transactions will allow only case A or case B (not both) to apply. Both cases examine the same set of legal provisions relating to the use of movable collateral.

Several assumptions about the secured borrower (ABC) and lender (BizBank) are used:

- ABC is a domestic limited liability company.

TABLE 14.7 What do the getting credit indicators measure?

Strength of legal rights index (0-12)

Protection of rights of borrowers and lenders through collateral laws

Protection of secured creditors' rights through bankruptcy laws

Depth of credit information index (0-8)

Scope and accessibility of credit information distributed by credit registries and credit bureaus

Credit bureau coverage (% of adults)

Number of individuals and firms listed in the largest credit bureau as percentage of adult population

Credit registry coverage (% of adults)

Number of individuals and firms listed in a credit registry as percentage of adult population

- ABC has up to 50 employees.
- ABC has its headquarters and only base of operations in the economy's largest business city. For 11 economies the data are also collected for the second largest business city (see table 14A.1).
- Both ABC and BizBank are 100% domestically owned.

The case scenarios also involve assumptions. In case A, as collateral for the loan, ABC grants BizBank a nonpossessory security interest in one category of movable assets, for example, its machinery or its inventory. ABC wants to keep both possession and ownership of the collateral. In economies where the law does not allow nonpossessory security interests in movable property, ABC and BizBank use a fiduciary transfer-of-title arrangement (or a similar substitute for nonpossessory security interests).

In case B, ABC grants BizBank a business charge, enterprise charge, floating charge or any charge that gives BizBank a security interest over ABC's combined movable assets (or as much of ABC's movable assets as possible). ABC keeps ownership and possession of the assets.

The strength of legal rights index covers functional equivalents to security over movable assets (for example, leasing or reservation of title) only in its first component, to assess how integrated or unified the economy's legal framework for secured transactions is.

The strength of legal rights index includes 10 aspects related to legal rights in collateral law and 2 aspects in bankruptcy law. A score of 1 is assigned for each of the following features of the laws:

- The economy has an integrated or unified legal framework for secured transactions that extends to the creation, publicity and enforcement of 4 functional equivalents to security interests in movable assets: fiduciary transfer of title; financial leases; assignment or transfer of receivables; and sales with retention of title.
- The law allows a business to grant a nonpossessory security right in a single category of movable assets (such as machinery or inventory), without requiring a specific description of the collateral.
- The law allows a business to grant a nonpossessory security right in substantially all its movable assets, without requiring a specific description of the collateral.
- A security right can be given over future or after-acquired assets and extends automatically to the products, proceeds or replacements of the original assets.
- A general description of debts and obligations is permitted in the collateral agreement and in registration documents, all types of debts and obligations can be secured between the parties, and the collateral agreement can include a maximum amount for which the assets are encumbered.
- A collateral registry or registration institution for security interests granted over movable property by incorporated and nonincorporated

entities is in operation, unified geographically and with an electronic database indexed by debtors' names.

- The collateral registry is a notice-based registry—a registry that files only a notice of the existence of a security interest (not the underlying documents) and does not perform a legal review of the transaction. The registry also publicizes functional equivalents to security interests.
- The collateral registry has modern features such as those that allow secured creditors (or their representatives) to register, search, amend or cancel security interests online.
- Secured creditors are paid first (for example, before tax claims and employee claims) when a debtor defaults outside an insolvency procedure.
- Secured creditors are paid first (for example, before tax claims and employee claims) when a business is liquidated.
- Secured creditors are subject to an automatic stay on enforcement procedures when a debtor enters a court-supervised reorganization procedure, but the law protects secured creditors' rights by providing clear grounds for relief from the automatic stay (for example, if the movable property is in danger) or setting a time limit for it.
- The law allows parties to agree in the collateral agreement that the lender may enforce its security right out of court; the law allows public and private auctions and also permits the secured creditor to take the asset in satisfaction of the debt.

As a result of changes introduced this year, the first component of the index replaces one relating to legal limitations on who can participate in a security agreement. Two components were added, on what type of collateral registry operates in the economy and on how it operates. The scoring now penalizes economies for not having an automatic stay on enforcement during

reorganization procedures so as to ensure that a viable business can continue to operate. And the index takes into account new elements relating to out-of-court enforcement procedures (such as the types of auctions allowed).

The index ranges from 0 to 12, with higher scores indicating that collateral and bankruptcy laws are better designed to expand access to credit.

Credit information

The data on the sharing of credit information are built in 2 stages. First, banking supervision authorities and public information sources are surveyed to confirm the presence of a credit reporting service provider, such as a credit bureau or credit registry. Second, when applicable, a detailed questionnaire on the credit bureau's or credit registry's structure, laws and associated rules is administered to the entity itself. Questionnaire responses are verified through several rounds of follow-up communication with respondents as well as by contacting third parties and consulting public sources. The questionnaire data are confirmed through teleconference calls or on-site visits in all economies.

Depth of credit information index

The depth of credit information index measures rules and practices affecting the coverage, scope and accessibility of credit information available through either a credit bureau or a credit registry. A score of 1 is assigned for each of the following 8 features of the credit bureau or credit registry (or both):

- Data on both firms and individuals are distributed.
- Both positive credit information (for example, original loan amounts, outstanding loan amounts and a pattern of on-time repayments) and negative information (for example, late payments and the number and amount of defaults) are distributed.

- Data from retailers and utility companies are distributed in addition to data from financial institutions.
- At least 2 years of historical data are distributed. Credit bureaus and registries that distribute more than 10 years of negative data or erase data on defaults as soon as they are repaid obtain a score of 0 for this component.⁵
- Data on loan amounts below 1% of income per capita are distributed.
- By law, borrowers have the right to access their data in the largest credit bureau or registry in the economy. Credit bureaus and registries that charge more than 1% of income per capita for borrowers to inspect their data obtain a score of 0 for this component.⁶
- Data users can access borrowers' credit information online (for example, through an online platform, a system-to-system connection or both).⁷
- Bureau or registry credit scores are offered as a value added service to help data users assess the credit-worthiness of borrowers.⁸

Previously the depth of credit information index covered only the first 6 features listed above. The index ranges from 0 to 8, with higher values indicating the availability of more credit information, from either a credit bureau or a credit registry, to facilitate lending decisions. If the credit bureau or registry is not operational or covers less than 5% of the adult population, the score on the depth of credit information index is 0.

In Lithuania, for example, both a credit bureau and a credit registry operate. Both distribute data on firms and individuals (a score of 1). Both distribute positive and negative information (a score of 1). Although the credit registry does not distribute data from retailers or utilities, the credit bureau does (a score of 1). Both distribute at least 2 years of historical data (a score of 1). Although the credit registry has

a threshold of 1,000 litai, the credit bureau distributes data on loans of any value (a score of 1). Borrowers have the right to access their data in both the credit bureau and the credit registry free of charge once a year (a score of 1). Both entities provide data users access to databases through an online platform (a score of 1). Although the credit registry does not provide credit scores, the credit bureau does (a score of 1). Adding these numbers gives Lithuania a score of 8 on the depth of credit information index.

Credit bureau coverage

Credit bureau coverage reports the number of individuals and firms listed in a credit bureau's database as of January 1, 2014, with information on their borrowing history from the past 5 years. The number is expressed as a percentage of the adult population (the population age 15 and above in 2013 according to the World Bank's *World Development Indicators*). A credit bureau is defined as a private firm or nonprofit organization that maintains a database on the creditworthiness of borrowers (individuals or firms) in the financial system and facilitates the exchange of credit information among creditors. (Many credit bureaus support banking and overall financial supervision activities in practice, though this is not their primary objective.) Credit investigative bureaus and credit reporting firms that do not directly facilitate information exchange among banks and other financial institutions are not considered. If no credit bureau operates, the coverage value is 0.0%.

Credit registry coverage

Credit registry coverage reports the number of individuals and firms listed in a credit registry's database as of January 1, 2014, with information on their borrowing history from the past 5 years. The number is expressed as a percentage of the adult population (the population age 15 and above in 2013 according to the World Bank's *World*

Development Indicators). A credit registry is defined as a database managed by the public sector, usually by the central bank or the superintendent of banks, that primarily assists banking supervision while at the same time facilitating the exchange of credit information among banks and other regulated financial institutions. If no registry operates, the coverage value is 0.0%.

The data details on getting credit can be found for each economy at <http://www.doingbusiness.org>. The initial methodology was developed by Djankov, McLiesh and Shleifer (2007) and is adopted here with minor changes.

PROTECTING MINORITY INVESTORS

Doing Business measures the protection of minority investors from conflicts of interest through one set of indicators and shareholders' rights in corporate governance through another (table 14.8). The data come from a questionnaire administered to corporate and

securities lawyers and are based on securities regulations, company laws, civil procedure codes and court rules of evidence. The ranking of economies on the strength of minority investor protections is determined by sorting their distance to frontier scores for protecting minority investors. These scores are the simple average of the distance to frontier scores for the extent of conflict of interest regulation index and the extent of shareholder governance index (figure 14.11).

Protection of shareholders from conflicts of interest

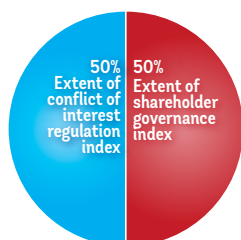
The extent of conflict of interest regulation index measures the protection of shareholders against directors' misuse of corporate assets for personal gain by distinguishing 3 dimensions of regulation that address conflicts of interest: transparency of related-party transactions (extent of disclosure index), shareholders' ability to sue and hold directors liable for self-dealing (extent of director liability index) and access to evidence and allocation of legal expenses in

TABLE 14.8 What do the protecting minority investors indicators measure?

Extent of disclosure index (0-10)	Extent of shareholder rights index (0-10.5)
Review and approval requirements for related-party transactions	Shareholders' rights and role in major corporate decisions
Internal, immediate and periodic disclosure requirements for related-party transactions	
Extent of director liability index (0-10)	Strength of governance structure index (0-10.5)
Minority shareholders' ability to sue and hold interested directors liable for prejudicial related-party transactions	Governance safeguards protecting shareholders from undue board control and entrenchment
Available legal remedies (damages, disgorgement of profits, fines, imprisonment, rescission of transactions)	
Ease of shareholder suits index (0-10)	Extent of corporate transparency index (0-9)
Access to internal corporate documents	Corporate transparency on ownership stakes, compensation, audits and financial prospects
Evidence obtainable during trial	
Allocation of legal expenses	
Extent of conflict of interest regulation index (0-10)	Extent of shareholder governance index (0-10)
Sum of the extent of disclosure, extent of director liability and ease of shareholder suits indices, divided by 3	Sum of the extent of shareholder rights, strength of governance structure and extent of corporate transparency indices, divided by 3
Strength of minority investor protection index (0-10)	
Simple average of the extent of conflict of interest regulation and extent of shareholder governance indices	

FIGURE 14.11 Protecting minority investors: shareholders' rights in conflicts of interest and corporate governance

Rankings are based on distance to frontier scores for 2 indicators



shareholder litigation (ease of shareholder suits index). To make the data comparable across economies, several assumptions about the business and the transaction are used (figure 14.12).

Assumptions about the business

The business (Buyer):

- Is a publicly traded corporation listed on the economy's most important stock exchange. If the number of publicly traded companies listed on that exchange is less than 10, or if there is no stock exchange in the economy, it is assumed that Buyer is a large private company with multiple shareholders.
- Has a board of directors and a chief executive officer (CEO) who may

legally act on behalf of Buyer where permitted, even if this is not specifically required by law.

- Has a supervisory board (applicable to economies with a 2-tier board system) on which 60% of the shareholder-elected members have been appointed by Mr. James, who is Buyer's controlling shareholder and a member of Buyer's board of directors.
- Is a manufacturing company.
- Has its own distribution network.

Assumptions about the transaction

- Mr. James owns 60% of Buyer and elected 2 directors to Buyer's 5-member board.
- Mr. James also owns 90% of Seller, a company that operates a chain of retail hardware stores. Seller recently closed a large number of its stores.
- Mr. James proposes that Buyer purchase Seller's unused fleet of trucks to expand Buyer's distribution of its food products, a proposal to which Buyer agrees. The price is equal to 10% of Buyer's assets and is higher than the market value.
- The proposed transaction is part of the company's ordinary course of business and is not outside the authority of the company.
- Buyer enters into the transaction. All required approvals are obtained, and all required disclosures made (that is, the transaction is not fraudulent).

- The transaction causes damages to Buyer. Shareholders sue Mr. James and the other parties that approved the transaction.

Extent of disclosure index

The extent of disclosure index has 5 components:

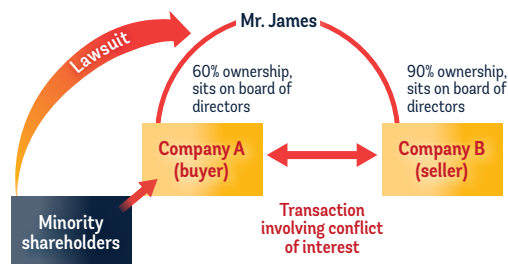
- Which corporate body can provide legally sufficient approval for the transaction. A score of 0 is assigned if it is the CEO or the managing director alone; 1 if the board of directors, the supervisory board or shareholders must vote and Mr. James is permitted to vote; 2 if the board of directors or the supervisory board must vote and Mr. James is not permitted to vote; 3 if shareholders must vote and Mr. James is not permitted to vote.
- Whether immediate disclosure of the transaction to the public, the regulator or the shareholders is required. A score of 0 is assigned if no disclosure is required; 1 if disclosure on the terms of the transaction is required but not on Mr. James's conflict of interest; 2 if disclosure on both the terms and Mr. James's conflict of interest is required.⁹
- Whether disclosure in the annual report is required. A score of 0 is assigned if no disclosure on the transaction is required; 1 if disclosure on the terms of the transaction is required but not on Mr. James's conflict of interest; 2 if disclosure on both the terms and Mr. James's conflict of interest is required.
- Whether disclosure by Mr. James to the board of directors or the supervisory board is required. A score of 0 is assigned if no disclosure is required; 1 if a general disclosure of the existence of a conflict of interest is required without any specifics; 2 if full disclosure of all material facts relating to Mr. James's interest in the Buyer-Seller transaction is required.
- Whether it is required that an external body, for example, an external auditor, review the transaction

FIGURE 14.12 How well are minority shareholders protected from conflicts of interest?

Extent of disclosure
Disclosure and approval requirements

Extent of director liability
Ability to sue directors for damages

Ease of shareholder suits
Access by shareholders to documents plus other evidence for trial



before it takes place. A score of 0 is assigned if no; 1 if yes.

The index ranges from 0 to 10, with higher values indicating greater disclosure. In Poland, for example, the board of directors must approve the transaction and Mr. James is not allowed to vote (a score of 2). Buyer is required to disclose immediately all information affecting the stock price, including the conflict of interest (a score of 2). In its annual report Buyer must also disclose the terms of the transaction and Mr. James's ownership in Buyer and Seller (a score of 2). Before the transaction Mr. James must disclose his conflict of interest to the other directors, but he is not required to provide specific information about it (a score of 1). Poland does not require an external body to review the transaction (a score of 0). Adding these numbers gives Poland a score of 7 on the extent of disclosure index.

Extent of director liability index

The extent of director liability index has 7 components:¹⁰

- Whether a shareholder plaintiff is able to hold Mr. James liable for the damage the Buyer-Seller transaction causes to the company. A score of 0 is assigned if Mr. James cannot be held liable or can be held liable only for fraud, bad faith or gross negligence; 1 if Mr. James can be held liable only if he influenced the approval of the transaction or was negligent; 2 if Mr. James can be held liable when the transaction is unfair or prejudicial to the other shareholders.
- Whether a shareholder plaintiff is able to hold the approving body (the CEO, members of the board of directors or members of the supervisory board) liable for the damage the transaction causes to the company. A score of 0 is assigned if the approving body cannot be held liable or can be held liable only for fraud, bad faith or gross negligence; 1 if the approving body can be held liable for negligence; 2 if the approving body can be held liable when the transaction is unfair or prejudicial to the other shareholders.
- Whether a court can void the transaction upon a successful claim by a shareholder plaintiff. A score of 0 is assigned if rescission is unavailable or is available only in case of fraud, bad faith or gross negligence; 1 if rescission is available when the transaction is oppressive or prejudicial to the other shareholders; 2 if rescission is available when the transaction is unfair or entails a conflict of interest.
- Whether Mr. James pays damages for the harm caused to the company upon a successful claim by the shareholder plaintiff. A score of 0 is assigned if no; 1 if yes.
- Whether Mr. James repays profits made from the transaction upon a successful claim by the shareholder plaintiff. A score of 0 is assigned if no; 1 if yes.
- Whether both fines and imprisonment can be applied against Mr. James. A score of 0 is assigned if no; 1 if yes.
- Whether shareholder plaintiffs are able to sue directly or derivatively for the damage the transaction causes to the company. A score of 0 is assigned if suits are unavailable or are available only for shareholders holding more than 10% of the company's share capital; 1 if direct or derivative suits are available for shareholders holding 10% of share capital.

The index ranges from 0 to 10, with higher values indicating greater liability of directors. Assuming that the prejudicial transaction was duly approved and disclosed, in order to hold Mr. James liable in Panama, for example, a plaintiff must prove that Mr. James influenced the approving body or acted negligently (a score of 1). To hold the other directors liable, a plaintiff must prove that they acted negligently (a score of 1). The prejudicial transaction cannot

be voided (a score of 0). If Mr. James is found liable, he must pay damages (a score of 1) but he is not required to disgorge his profits (a score of 0). Mr. James cannot be fined and imprisoned (a score of 0). Direct or derivative suits are available for shareholders holding 10% of share capital (a score of 1). Adding these numbers gives Panama a score of 4 on the extent of director liability index.

Ease of shareholder suits index

The ease of shareholder suits index has 6 components:

- What range of documents is available to the shareholder plaintiff from the defendant and witnesses during trial. A score of 1 is assigned for each of the following types of documents available: information that the defendant has indicated he intends to rely on for his defense; information that directly proves specific facts in the plaintiff's claim; and any information relevant to the subject matter of the claim.
- Whether the plaintiff can directly examine the defendant and witnesses during trial. A score of 0 is assigned if no; 1 if yes, with prior approval of the questions by the judge; 2 if yes, without prior approval.
- Whether the plaintiff can obtain categories of relevant documents from the defendant without identifying each document specifically. A score of 0 is assigned if no; 1 if yes.
- Whether shareholders owning 10% of the company's share capital have the right to inspect the transaction documents before filing suit or request that a government inspector investigate the Buyer-Seller transaction without filing suit. A score of 0 is assigned if no; 1 if yes.¹¹
- Whether the standard of proof for civil suits is lower than that for a criminal case. A score of 0 is assigned if no; 1 if yes.
- Whether shareholder plaintiffs can recover their legal expenses

from the company. A score of 0 is assigned if no; 1 if plaintiffs can recover their legal expenses from the company only upon a successful outcome of their legal action or if payment of their attorney fees is contingent on a successful outcome; 2 if plaintiffs can recover their legal expenses from the company regardless of the outcome of their legal action.¹²

The index ranges from 0 to 10, with higher values indicating greater powers of shareholders to challenge the transaction. In Croatia, for example, the plaintiff can access documents that the defendant intends to rely on for his defense (a score of 1). The plaintiff can examine the defendant and witnesses during trial, without prior approval of the questions by the court (a score of 2). The plaintiff must specifically identify the documents being sought (for example, the Buyer-Seller purchase agreement of July 15, 2006) and cannot simply request categories (for example, all documents related to the transaction) (a score of 0). A shareholder holding 10% of Buyer's shares can request that a government inspector review suspected mismanagement by Mr. James and the CEO without filing suit in court (a score of 1). The standard of proof for civil suits is the same as that for a criminal case (a score of 0). The plaintiff can recover legal expenses from the company only upon a successful outcome of the legal action (a score of 1). Adding these numbers gives Croatia a score of 5 on the ease of shareholder suits index.

Extent of conflict of interest regulation index

The extent of conflict of interest regulation index is the sum of the extent of disclosure index, the extent of director liability index and the ease of shareholder suits index. The index is divided by 3 so that it ranges from 0 to 10. Higher values indicate stronger regulation of conflicts of interest.

Shareholders' rights in corporate governance

The extent of shareholder governance index measures shareholders' rights in corporate governance by distinguishing 3 dimensions of good governance: shareholders' rights and role in major corporate decisions (extent of shareholder rights index), governance safeguards protecting shareholders from undue board control and entrenchment (strength of governance structure index) and corporate transparency on ownership stakes, compensation, audits and financial prospects (extent of corporate transparency index).¹³

Extent of shareholder rights index

For each component of the extent of shareholder rights index, a score of 0 is assigned if the answer is no; 1 if it is yes; and 1.5 if it would also apply if Buyer were a privately held joint stock company not listed on any stock exchange. The index has 7 components:

- Whether shareholders have the right to amend Buyer's bylaws or statutes with a simple majority.
- Whether shareholders owning 10% of Buyer's share capital have the right to call for an extraordinary meeting of shareholders.
- Whether shareholders have the right to remove members of Buyer's board of directors before the end of their term.
- Whether Buyer must obtain its shareholders' approval every time it issues new shares.
- Whether shareholders are automatically granted preemption or subscription rights every time Buyer issues new shares.
- Whether shareholders are required by law to approve the election and dismissal of the external auditor.
- Whether shareholders have the right to freely trade shares prior to a major corporate action or meeting of shareholders.

Strength of governance structure index

For each component of the strength of governance structure index, a score of 0 is assigned if the answer is no; 1 if it is yes; and 1.5 if it would also apply if Buyer were a privately held joint stock company not listed on any stock exchange. The index has 7 components:

- Whether the CEO is barred from also being chair of the board of directors.
- Whether the board of directors must include independent board members.
- Whether Buyer must have a separate audit committee.
- Whether changes to the voting rights of a series or class of shares must be approved only by the holders of the affected shares.
- Whether a potential acquirer must make a tender offer to all shareholders upon acquiring 50% of Buyer.
- Whether cross-shareholding between 2 independent companies is limited to 10% of outstanding shares.
- Whether a subsidiary is barred from acquiring shares issued by its parent company.

Extent of corporate transparency index

For each component of the extent of corporate transparency index, a score of 0 is assigned if the answer is no; 1 if it is yes; and 1.5 if it would also apply if Buyer were a privately held joint stock company not listed on any stock exchange. The index has 6 components:

- Whether Buyer must disclose ownership stakes representing 10%.
- Whether Buyer must disclose information about board members' other directorships as well as basic information on their primary employment.
- Whether Buyer must disclose the compensation of individual managers.
- Whether Buyer must have its annual financial statements audited by an external auditor.

- Whether financial statements must contain explanatory notes on significant accounting policies, trends, risks, uncertainties and other factors influencing the reporting.
- Whether audit reports must be disclosed to the public.

Extent of shareholder governance index

The extent of shareholder governance index is the sum of the extent of shareholder rights index, the strength of governance structure index and the extent of corporate transparency index. The index is divided by 3 so that it ranges from 0 to 10. Higher values indicate stronger rights of shareholders in corporate governance.

Strength of minority investor protection index

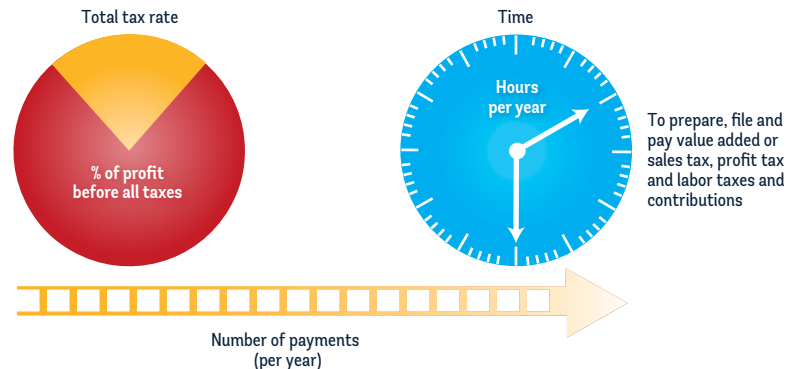
The strength of minority investor protection index is the average of the extent of conflict of interest regulation index and the extent of shareholder governance index. The index ranges from 0 to 10, rounded to the nearest decimal place, with higher values indicating stronger minority investor protections.

The data details on protecting minority investors can be found for each economy at <http://www.doingbusiness.org>. The initial methodology was developed by Djankov, La Porta and others (2008). The extent of shareholder governance index was introduced in Doing Business 2015.

PAYING TAXES

Doing Business records the taxes and mandatory contributions that a medium-size company must pay in a given year as well as measures of the administrative burden of paying taxes and contributions (figure 14.13). The project was developed and implemented in cooperation with PwC.¹⁴ Taxes and contributions measured include the profit or corporate income tax, social

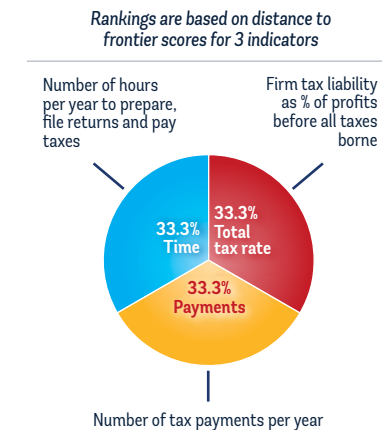
FIGURE 14.13 What are the time, total tax rate and number of payments necessary for a local medium-size company to pay all taxes?



contributions and labor taxes paid by the employer, property taxes, property transfer taxes, dividend tax, capital gains tax, financial transactions tax, waste collection taxes, vehicle and road taxes, and any other small taxes or fees.

The ranking of economies on the ease of paying taxes is determined by sorting their distance to frontier scores for paying taxes. These scores are the simple average of the distance to frontier scores for each of the component indicators (figure 14.14), with a threshold and a nonlinear transformation applied to one of the component indicators, the total tax rate.¹⁵ The threshold is defined as the highest total tax rate among the top 15% of economies in the ranking on the total tax rate. It is calculated and adjusted on a yearly basis. This year's threshold is 26.1%. All economies with a total tax rate below this threshold receive the same score as the economy at the threshold. The threshold is not based on any economic theory of an "optimal tax rate" that minimizes distortions or maximizes efficiency in an economy's overall tax system. Instead, it is mainly empirical in nature, set at the lower end of the distribution of tax rates levied on medium-size enterprises in the manufacturing sector as observed through the paying taxes indicators.

FIGURE 14.14 Paying taxes: tax compliance for a local manufacturing company



Note: All economies below the threshold receive the same score in the total tax rate component as the economies at the threshold.

This reduces the bias in the total tax rate indicator toward economies that do not need to levy significant taxes on companies like the *Doing Business* standardized case study company because they raise public revenue in other ways—for example, through taxes on foreign companies, through taxes on sectors other than manufacturing or from natural resources (all of which are outside the scope of the methodology).

Doing Business measures all taxes and contributions that are government

mandated (at any level—federal, state or local) and that apply to the standardized business and have an impact in its financial statements. In doing so, *Doing Business* goes beyond the traditional definition of a tax. As defined for the purposes of government national accounts, taxes include only compulsory, unrequited payments to general government. *Doing Business* departs from this definition because it measures imposed charges that affect business accounts, not government accounts. One main difference relates to labor contributions. The *Doing Business* measure includes government-mandated contributions paid by the employer to a required private pension fund or workers' insurance fund. It includes, for example, Australia's compulsory superannuation guarantee and workers' compensation insurance. For the purpose of calculating the total tax rate (defined below), only taxes borne are included. For example, value added taxes are generally excluded (provided that they are not irrecoverable) because they do not affect the accounting profits of the business—that is, they are not reflected in the income statement. They are, however, included for the purpose of the compliance measures (time and payments), as they add to the burden of complying with the tax system.

Doing Business uses a case scenario to measure the taxes and contributions paid by a standardized business and the complexity of an economy's tax compliance system. This case scenario uses a set of financial statements and assumptions about transactions made over the course of the year. In each economy tax experts from a number of different firms (in many economies these include PwC) compute the taxes and mandatory contributions due in their jurisdiction based on the standardized case study facts. Information is also compiled on the frequency of filing and payments as well as the time taken to comply with tax laws in an economy. To make the data

comparable across economies, several assumptions about the business and the taxes and contributions are used.

The methodology for the paying taxes indicators has benefited from discussion with members of the International Tax Dialogue and other stakeholders. This has led to a refinement of the questions on the time to pay taxes, the collection of additional data on the labor tax wedge for further research and the introduction of a threshold applied to the total tax rate for the purpose of calculating the ranking on the ease of paying taxes.

Assumptions about the business

The business:

- Is a limited liability, taxable company. If there is more than one type of limited liability company in the economy, the limited liability form most common among domestic firms is chosen. The most common form is reported by incorporation lawyers or the statistical office.
- Started operations on January 1, 2012. At that time the company purchased all the assets shown in its balance sheet and hired all its workers.
- Operates in the economy's largest business city. For 11 economies the data are also collected for the second largest business city (see table 14A.1).
- Is 100% domestically owned and has 5 owners, all of whom are natural persons.
- At the end of 2012, has a start-up capital of 102 times income per capita.
- Performs general industrial or commercial activities. Specifically, it produces ceramic flowerpots and sells them at retail. It does not participate in foreign trade (no import or export) and does not handle products subject to a special tax regime, for example, liquor or tobacco.
- At the beginning of 2013, owns 2 plots of land, 1 building, machinery, office equipment, computers and 1 truck and leases 1 truck.
- Does not qualify for investment incentives or any benefits apart from those related to the age or size of the company.
- Has 60 employees—4 managers, 8 assistants and 48 workers. All are nationals, and 1 manager is also an owner. The company pays for additional medical insurance for employees (not mandated by any law) as an additional benefit. In addition, in some economies reimbursable business travel and client entertainment expenses are considered fringe benefits. When applicable, it is assumed that the company pays the fringe benefit tax on this expense or that the benefit becomes taxable income for the employee. The case study assumes no additional salary additions for meals, transportation, education or others. Therefore, even when such benefits are frequent, they are not added to or removed from the taxable gross salaries to arrive at the labor tax or contribution calculation.
- Has a turnover of 1,050 times income per capita.
- Makes a loss in the first year of operation.
- Has a gross margin (pretax) of 20% (that is, sales are 120% of the cost of goods sold).
- Distributes 50% of its net profits as dividends to the owners at the end of the second year.
- Sells one of its plots of land at a profit at the beginning of the second year.
- Is subject to a series of detailed assumptions on expenses and transactions to further standardize the case. All financial statement variables are proportional to 2012 income per capita (this is an update from previous years, when the variables were proportional to 2005 income per capita). For example, the owner who is also a manager spends 10% of income per capita

on traveling for the company (20% of this owner’s expenses are purely private, 20% are for entertaining customers, and 60% are for business travel).

Assumptions about the taxes and contributions

- All the taxes and contributions recorded are those paid in the second year of operation (calendar year 2013). A tax or contribution is considered distinct if it has a different name or is collected by a different agency. Taxes and contributions with the same name and agency, but charged at different rates depending on the business, are counted as the same tax or contribution.
- The number of times the company pays taxes and contributions in a year is the number of different taxes or contributions multiplied by the frequency of payment (or withholding) for each tax. The frequency of payment includes advance payments (or withholding) as well as regular payments (or withholding).

Tax payments

The tax payments indicator reflects the total number of taxes and contributions paid, the method of payment, the frequency of payment, the frequency of filing and the number of agencies involved for the standardized case study company during the second year of operation (table 14.9). It includes taxes withheld by the company, such as sales tax, value added tax and employee-borne labor taxes. These taxes are traditionally collected by the company from the consumer or employee on behalf of the tax agencies. Although they do not affect the income statements of the company, they add to the administrative burden of complying with the tax system and so are included in the tax payments measure.

The number of payments takes into account electronic filing. Where full

electronic filing and payment is allowed and it is used by the majority of medium-size businesses, the tax is counted as paid once a year even if filings and payments are more frequent. For payments made through third parties, such as tax on interest paid by a financial institution or fuel tax paid by a fuel distributor, only one payment is included even if payments are more frequent.

Where 2 or more taxes or contributions are filed for and paid jointly using the same form, each of these joint payments is counted once. For example, if mandatory health insurance contributions and mandatory pension contributions are filed for and paid together, only one of these contributions would be included in the number of payments.

Time

Time is recorded in hours per year. The indicator measures the time taken to prepare, file and pay 3 major types of taxes and contributions: the corporate income tax, value added or sales tax,

and labor taxes, including payroll taxes and social contributions. Preparation time includes the time to collect all information necessary to compute the tax payable and to calculate the amount payable. If separate accounting books must be kept for tax purposes—or separate calculations made—the time associated with these processes is included. This extra time is included only if the regular accounting work is not enough to fulfill the tax accounting requirements. Filing time includes the time to complete all necessary tax return forms and file the relevant returns at the tax authority. Payment time considers the hours needed to make the payment online or in person. Where taxes and contributions are paid in person, the time includes delays while waiting.

Total tax rate

The total tax rate measures the amount of taxes and mandatory contributions borne by the business in the second year of operation, expressed as a share of commercial profit. *Doing Business 2015* reports the total tax rate for calendar year 2013. The total amount of taxes borne is the sum of all the different taxes and contributions payable after accounting for allowable deductions and exemptions. The taxes withheld (such as personal income tax) or collected by the company and remitted to the tax authorities (such as value added tax, sales tax or goods and service tax) but not borne by the company are excluded. The taxes included can be divided into 5 categories: profit or corporate income tax, social contributions and labor taxes paid by the employer (for which all mandatory contributions are included, even if paid to a private entity such as a required pension fund), property taxes, turnover taxes and other taxes (such as municipal fees and vehicle taxes). Fuel taxes are no longer included in the total tax rate because of the difficulty of computing these taxes in a consistent way for all economies covered. The fuel tax amounts are in

TABLE 14.9 What do the paying taxes indicators measure?

Tax payments for a manufacturing company in 2013 (number per year adjusted for electronic and joint filing and payment)
Total number of taxes and contributions paid, including consumption taxes (value added tax, sales tax or goods and service tax)
Method and frequency of filing and payment
Time required to comply with 3 major taxes (hours per year)
Collecting information and computing the tax payable
Completing tax return forms, filing with proper agencies
Arranging payment or withholding
Preparing separate mandatory tax accounting books, if required
Total tax rate (% of profit before all taxes)
Profit or corporate income tax
Social contributions and labor taxes paid by the employer
Property and property transfer taxes
Dividend, capital gains and financial transactions taxes
Waste collection, vehicle, road and other taxes

TABLE 14.10 Computing the total tax rate for Kiribati

Type of tax (tax base)	Statutory rate r (%)	Statutory tax base b (\$A)	Actual tax payable $a = r \times b$ (\$A)	Commercial profit* c (\$A)	Total tax rate $t = a/c$ (%)
Corporate income tax (taxable income)	20.0-35.0	109,381	33,283	137,156	24.3
Employer-paid social security contributions (taxable wages)	7.5	154,711	11,603	137,156	8.5
Total			44,886		32.7

* Profit before all taxes borne.

Note: Commercial profit is assumed to be 59.4 times income per capita. \$A is Australian dollar.

Source: *Doing Business* database.

most cases very small, and measuring these amounts is often complicated because they depend on fuel consumption. Fuel taxes continue to be counted in the number of payments.

The total tax rate is designed to provide a comprehensive measure of the cost of all the taxes a business bears. It differs from the statutory tax rate, which merely provides the factor to be applied to the tax base. In computing the total tax rate, the actual tax payable is divided by commercial profit. Data for Kiribati are provided as an example (table 14.10).

Commercial profit is essentially net profit before all taxes borne. It differs from the conventional profit before tax, reported in financial statements. In computing profit before tax, many of the taxes borne by a firm are deductible. In computing commercial profit, these taxes are not deductible. Commercial profit therefore presents a clear picture of the actual profit of a business before any of the taxes it bears in the course of the fiscal year.

Commercial profit is computed as sales minus cost of goods sold, minus gross salaries, minus administrative expenses, minus other expenses, minus provisions, plus capital gains (from the property sale) minus interest expense, plus interest income and minus commercial depreciation. To compute the

commercial depreciation, a straight-line depreciation method is applied, with the following rates: 0% for the land, 5% for the building, 10% for the machinery, 33% for the computers, 20% for the office equipment, 20% for the truck and 10% for business development expenses. Commercial profit amounts to 59.4 times income per capita.

The methodology for calculating the total tax rate is broadly consistent with the Total Tax Contribution framework developed by PwC and the calculation within this framework for taxes borne. But while the work undertaken by PwC is usually based on data received from the largest companies in the economy, *Doing Business* focuses on a case study for a standardized medium-size company.

The data details on paying taxes can be found for each economy at <http://www.doingbusiness.org>. This methodology was developed by Djankov and others (2010).

TRADING ACROSS BORDERS

Doing Business measures the time and cost (excluding tariffs) associated with exporting and importing a standardized cargo of goods by sea transport. The time and cost necessary to complete 4 predefined stages (document

preparation; customs clearance and inspections; inland transport and handling; and port and terminal handling) for exporting and importing the goods are recorded; however, the time and cost for sea transport are not included. All documents needed by the trader to export or import the goods across the border are also recorded. The process of exporting goods ranges from packing the goods into the container at the warehouse to their departure from the port of exit. The process of importing goods ranges from the vessel's arrival at the port of entry to the cargo's delivery at the warehouse. For landlocked economies, since the seaport is located in the transit economy, the time, cost and documents associated with the processes at the inland border are also included. It is assumed that the payment is made by letter of credit, and the time, cost and documents required for the issuance or advising of a letter of credit are taken into account (figure 14.15).

The ranking of economies on the ease of trading across borders is determined by sorting their distance to frontier scores for trading across borders. These scores are the simple average of the distance to frontier scores for each of the component indicators (figure 14.16).

Local freight forwarders, shipping lines, customs brokers, port officials and banks provide information on required documents, cost and time to export and import. To make the data comparable across economies, several assumptions about the business and the traded goods are used.

Assumptions about the traded goods

The traded product travels in a dry-cargo, 20-foot, full container load.¹⁶ It weighs 10 tons and is valued at \$20,000. The product:

- Is not hazardous nor does it include military items.
- Does not require refrigeration or any other special environment.

FIGURE 14.15 How much time, how many documents and what cost to export and import by sea transport?

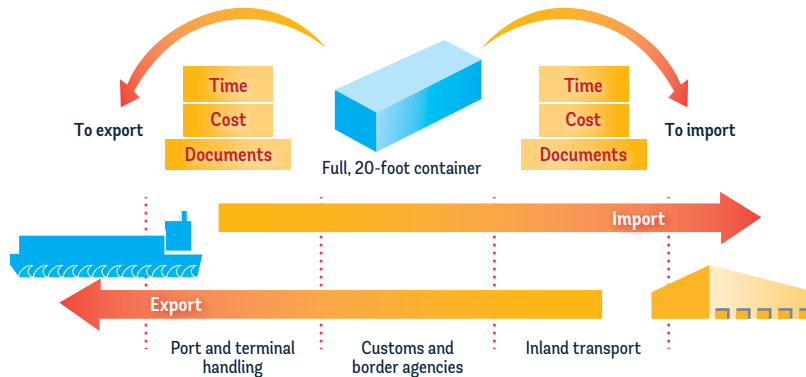
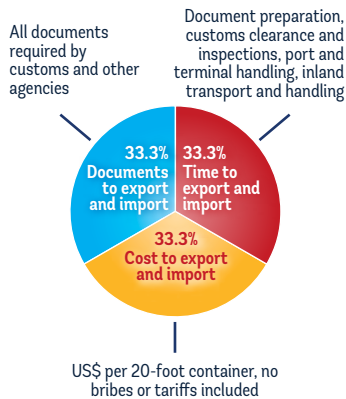


FIGURE 14.16 Trading across borders: exporting and importing by sea transport

Rankings are based on distance to frontier scores for 3 indicators



- Does not require any special phytosanitary or environmental safety standards other than accepted international standards.
- Is one of the economy's leading export or import products.

Assumptions about the business

The business:

- Is located in the economy's largest business city. For 11 economies the data are also collected for the second largest business city (see table 14A.1).

- Is a private, limited liability company.
- Does not operate in an export processing zone or an industrial estate with special export or import privileges.
- Conducts export and import activities but does not have any special accreditation, such as an authorized economic operator status.
- Is 100% domestically owned.

Documents

It is assumed that a new contract is drafted per shipment and that the contract has already been agreed upon and executed by both parties. All documents required by law or common practice by relevant agencies—including government ministries, customs authorities, port authorities and other control agencies—per export and import shipment are taken into account (table 14.11). For landlocked economies, documents required by authorities in the transit economy are also included. Since payment is by letter of credit, all documents required by banks for the issuance or securing of a letter of credit are also taken into account. Documents that are requested at the time of clearance but that are valid for a year or longer or do not require renewal per shipment (for example, an annual tax clearance certificate) are not included. Documents that are

required by customs authorities purely for purposes of preferential treatment but are not required for any other purpose by any of the authorities in the process of trading are not included. For example, if a certificate of origin is only presented to qualify for a preferential tariff rate under trade agreements, the document is not counted. It is assumed that the exporter will always obtain a certificate of origin for its trade partner, and the time and cost associated with obtaining this certificate are therefore included in the time and cost of document preparation to export.

Time

The time for exporting and importing is recorded in calendar days. The time calculation for each of the 4 predefined stages starts from the moment the stage is initiated and runs until it is completed. Fast-track procedures applying only to firms located in an export processing zone, or only to certain accredited firms under authorized economic operator programs, are not taken into account because they are not available to all trading companies. Sea transport time is not included. It is assumed that neither the exporter nor the importer wastes time and that each commits to completing the process without delay. It is assumed that document preparation, inland transport and handling, customs clearance and inspections, and port and terminal handling require a minimum time of 1 day each and cannot take place simultaneously. The waiting time that occurs in practice—for example, in queues to obtain a service or during the moving of the cargo at the seaport—is included in the measure.

Cost

Cost measures the fees levied on a 20-foot container in U.S. dollars. All fees charged by government agencies and the private sector to a trader in the process of exporting and importing the goods are taken into account. These include but are not limited to costs

TABLE 14.11 What do the trading across borders indicators measure?

Documents required to export and import (number)
Bank documents
Customs clearance documents
Port and terminal handling documents
Transport documents
Time required to export and import (days)
Obtaining, filling out and submitting all the documents
Inland transport and handling
Customs clearance and inspections
Port and terminal handling
Does not include sea transport time
Cost required to export and import (US\$ per container)
All documentation
Inland transport and handling
Customs clearance and inspections
Port and terminal handling
Official costs only, no bribes

for documents, administrative fees for customs clearance and inspections, customs broker fees, port-related charges and inland transport costs. The exporter is responsible for the incurred costs related to exporting the goods until they depart from the exporting economy, and the importer is responsible for the incurred costs related to importing from the moment the goods arrive at the seaport in the importing economy. The cost does not include customs tariffs and duties or costs related to sea transport. Only official costs are recorded.

The data details on trading across borders can be found for each economy at <http://www.doingbusiness.org>. This methodology was developed by Djankov, Freund and Pham (2010) and is adopted here with minor changes.

ENFORCING CONTRACTS

Indicators on enforcing contracts measure the efficiency of the judicial system in resolving a commercial dispute. The data are built by following the step-by-step evolution of a commercial sale dispute before local courts (figure 14.17). The data are collected through study of the codes of civil procedure and other court regulations as well as questionnaires completed by local litigation lawyers and judges. The ranking of economies on the ease of enforcing contracts is determined by sorting their distance to frontier scores for enforcing contracts. These scores are the simple average of the distance to frontier scores for each of the component indicators (figure 14.18).

The name of the relevant court in each economy—the court in the largest business city with jurisdiction over the standardized commercial dispute described below—is published at <http://www.doingbusiness.org/data/exploretopics/enforcing-contracts>. For 11 economies for which the data are also collected for the second largest business city, the name of the relevant court in that city is given as well.

Assumptions about the case

- The value of the claim is equal to 200% of the economy’s income per capita or \$5,000, whichever is greater.¹⁷
- The dispute concerns a lawful transaction between 2 businesses (Seller and Buyer), both located in the economy’s largest business city. For 11 economies the data are also collected for the second largest business city (see table 14A.1). Pursuant to a contract between the businesses, Seller sells some custom-made furniture to Buyer worth 200% of the economy’s income per capita or \$5,000, whichever is greater. After Seller delivers the goods to Buyer, Buyer refuses to pay the contract price, alleging

that the goods are not of adequate quality. Because they were custom-made, Seller is unable to sell them to anyone else.

- Seller (the plaintiff) sues Buyer (the defendant) to recover the amount under the sales agreement. The dispute is brought before the court located in the economy’s largest business city with jurisdiction over commercial cases worth 200% of income per capita or \$5,000, whichever is greater. As noted, for 11 economies the data are also

FIGURE 14.17 What are the time, cost and number of procedures to resolve a commercial dispute through the courts?

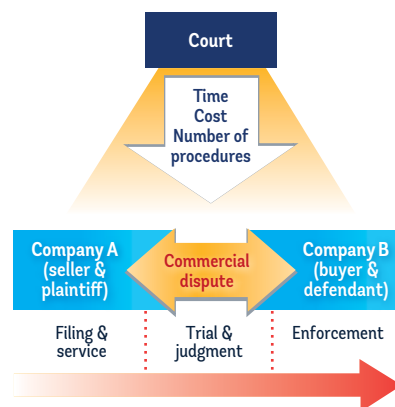
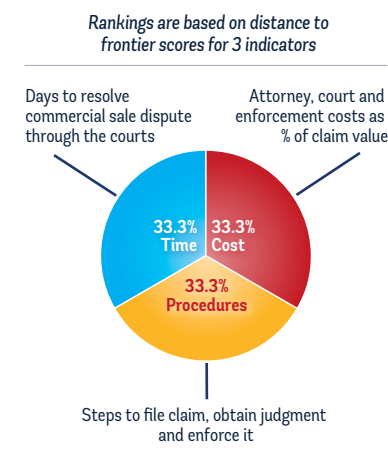


FIGURE 14.18 Enforcing contracts: resolving a commercial dispute through the courts



collected for the second largest business city (see table 14A.1).

- At the outset of the dispute, Seller decides to attach Buyer's movable assets (for example, office equipment and vehicles) because Seller fears that Buyer may hide its assets or otherwise become insolvent.
- The claim is disputed on the merits because of Buyer's allegation that the quality of the goods was not adequate. Because the court cannot decide the case on the basis of documentary evidence or legal title alone, an expert opinion is given on the quality of the goods. If it is standard practice in the economy for each party to call its own expert witness, the parties each call one expert witness. If it is standard practice for the judge to appoint an independent expert, the judge does so. In this case the judge does not allow opposing expert testimony.
- Following the expert opinion, the judge decides that the goods delivered by Seller were of adequate quality and that Buyer must pay the contract price. The judge thus renders a final judgment that is 100% in favor of Seller.
- Buyer does not appeal the judgment. Seller decides to start enforcing the judgment as soon as the

time allocated by law for appeal lapses.

- Seller takes all required steps for prompt enforcement of the judgment. The money is successfully collected through a public sale of Buyer's movable assets (for example, office equipment and vehicles).

Procedures

The list of procedural steps compiled for each economy traces the chronology of a commercial dispute before the relevant court. A procedure is defined as any interaction, required by law or commonly carried out in practice, between the parties or between them and the judge or court officer. Other procedural steps, internal to the court or between the parties and their counsel, may be counted as well. Procedural steps include steps to file and serve the case, steps to assign the case to a judge, steps for trial and judgment and steps necessary to enforce the judgment (table 14.12).

To indicate overall efficiency, 1 procedure is subtracted from the total number for economies that have specialized commercial courts or divisions, and 1 procedure for economies that allow electronic filing of the initial complaint. Some procedural steps that are part of others are not counted in the total number of procedures.

Time

Time is recorded in calendar days, counted from the moment the plaintiff decides to file the lawsuit in court until payment. This includes both the days when actions take place and the waiting periods in between. The average duration of 3 different stages of dispute resolution is recorded: the completion of service of process (time to file and serve the case), the issuance of judgment (time for trial and to obtain the judgment) and the recovery of the claim value through a public sale (time for enforcement of the judgment).

Cost

Cost is recorded as a percentage of the claim, assumed to be equivalent to 200% of income per capita or \$5,000, whichever is greater. Three types of costs are recorded: court costs, enforcement costs and average attorney fees.

Court costs include all costs that Seller (plaintiff) must advance to the court, regardless of the final cost borne by Seller. Enforcement costs are all costs that Seller (plaintiff) must advance to enforce the judgment through a public sale of Buyer's movable assets, regardless of the final cost borne by Seller. Average attorney fees are the fees that Seller (plaintiff) must advance to a local attorney to represent Seller in the standardized case. Bribes are not taken into account.

The data details on enforcing contracts can be found for each economy at <http://www.doingbusiness.org>. This methodology was developed by Djankov and others (2003) and is adopted here with minor changes.

TABLE 14.12 What do the enforcing contracts indicators measure?

Procedures to enforce a contract through the courts (number)

Steps to file and serve the case

Steps for trial and judgment

Steps to enforce the judgment

Time required to complete procedures (calendar days)

Time to file and serve the case

Time for trial and to obtain the judgment

Time to enforce the judgment

Cost required to complete procedures (% of claim)

Average attorney fees

Court costs

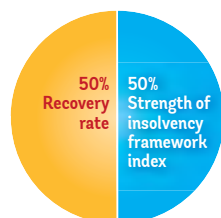
Enforcement costs

RESOLVING INSOLVENCY

Doing Business studies the time, cost and outcome of insolvency proceedings involving domestic entities. In addition, this year it introduces a new measure, the strength of insolvency framework index, evaluating the adequacy and integrity of the legal framework applicable to liquidation and reorganization proceedings. The data for the resolving insolvency indicators are derived from questionnaire responses by local insolvency practitioners and verified through a study of laws and regulations as well as public information on bankruptcy systems. The ranking of economies on the ease of resolving insolvency is determined by sorting their distance to frontier scores for resolving insolvency. These scores are the simple average of the distance to frontier scores for the recovery rate and the strength of insolvency framework index (figure 14.19).

FIGURE 14.19 Resolving insolvency: recovery rate and strength of insolvency framework

Rankings are based on distance to frontier scores for 2 indicators



Debt recovery in insolvency

To make the data on the time, cost and outcome of insolvency proceedings comparable across economies, several assumptions about the business and the case are used.

Assumptions about the business

The business:

- Is a limited liability company.
- Operates in the economy's largest business city. For 11 economies the data are also collected for the second largest business city (see table 14A.1).
- Is 100% domestically owned, with the founder, who is also chairman of the supervisory board, owning 51% (no other shareholder holds more than 5% of shares).
- Has downtown real estate, where it runs a hotel, as its major asset.
- Has a professional general manager.
- Has 201 employees and 50 suppliers, each of which is owed money for the last delivery.
- Has a 10-year loan agreement with a domestic bank secured by a mortgage over the hotel's real estate property. A universal business charge (an enterprise charge) is also assumed in economies where such collateral is recognized. If the laws of the economy do not specifically provide for an enterprise charge

but contracts commonly use some other provision to that effect, this provision is specified in the loan agreement.

- Has observed the payment schedule and all other conditions of the loan up to now.
- Has a market value, operating as a going concern, of 100 times income per capita or \$200,000, whichever is greater. The market value of the company's assets, if sold piecemeal, is 70% of the market value of the business.

Assumptions about the case

The business is experiencing liquidity problems. The company's loss in 2013 reduced its net worth to a negative figure. It is January 1, 2014. There is no cash to pay the bank interest or principal in full, due the next day, January 2. The business will therefore default on its loan. Management believes that losses will be incurred in 2014 and 2015 as well. But it expects 2014 cash flow to cover all operating expenses, including supplier payments, salaries, maintenance costs and taxes, though not principal or interest payments to the bank.

The amount outstanding under the loan agreement is exactly equal to the market value of the hotel business and represents 74% of the company's total debt. The other 26% of its debt is held by unsecured creditors (suppliers, employees, tax authorities).

The company has too many creditors to negotiate an informal out-of-court workout. The following options are available: a judicial procedure aimed at the rehabilitation or reorganization of the company to permit its continued operation; a judicial procedure aimed at the liquidation or winding-up of the company; or a debt enforcement procedure (foreclosure or receivership) against the company.

Assumptions about the parties

The bank wants to recover as much as possible of its loan, as quickly and cheaply as possible. The unsecured creditors will do everything permitted under the applicable laws to avoid a piecemeal sale of the assets. The majority shareholder wants to keep the company operating and under his control. Management wants to keep the company operating and preserve its employees' jobs. All the parties are local entities or citizens; no foreign parties are involved.

Time

Time for creditors to recover their credit is recorded in calendar years (table 14.13). The period of time measured by *Doing Business* is from the company's default until the payment of some or all of the money owed to the bank. Potential delay tactics by the

TABLE 14.13 What do the indicators on debt recovery in insolvency measure?

Time required to recover debt (years)

Measured in calendar years

Appeals and requests for extension are included

Cost required to recover debt (% of debtor's estate)

Measured as percentage of estate value

Court fees

Fees of insolvency administrators

Lawyers' fees

Assessors' and auctioneers' fees

Other related fees

Outcome

Whether the business continues operating as a going concern or whether its assets are sold piecemeal

Recovery rate for secured creditors (cents on the dollar)

Measures the cents on the dollar recovered by secured creditors

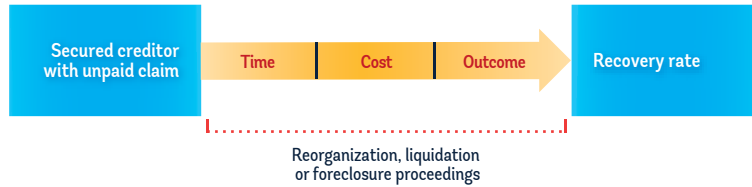
Present value of debt recovered

Official costs of the insolvency proceedings are deducted

Depreciation of furniture is taken into account

Outcome for the business (survival or not) affects the maximum value that can be recovered

FIGURE 14.20 Recovery rate is a function of the time, cost and outcome of insolvency proceedings against a local company



parties, such as the filing of dilatory appeals or requests for extension, are taken into consideration.

Cost

The cost of the proceedings is recorded as a percentage of the value of the debtor's estate. The cost is calculated on the basis of questionnaire responses and includes court fees and government levies; fees of insolvency administrators, auctioneers, assessors and lawyers; and all other fees and costs.

Outcome

Recovery by creditors depends on whether the hotel business emerges from the proceedings as a going concern or the company's assets are sold piecemeal. If the business keeps operating, 100% of the hotel value is preserved. If the assets are sold piecemeal, the maximum amount that can be recovered is 70% of the value of the hotel.

Recovery rate

The recovery rate is recorded as cents on the dollar recouped by secured creditors through reorganization, liquidation or debt enforcement (foreclosure or receivership) proceedings (figure 14.20). The calculation takes into account the outcome: whether the business emerges from the proceedings as a going concern or the assets are sold piecemeal. Then the costs of the proceedings are deducted (1 cent for each percentage point of the value of the debtor's estate). Finally, the value

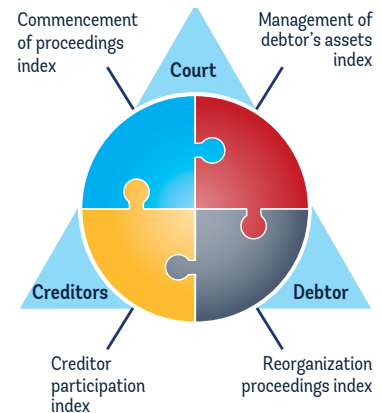
lost as a result of the time the money remains tied up in insolvency proceedings is taken into account, including the loss of value due to depreciation of the hotel furniture. Consistent with international accounting practice, the annual depreciation rate for furniture is taken to be 20%. The furniture is assumed to account for a quarter of the total value of assets. The recovery rate is the present value of the remaining proceeds, based on end-2013 lending rates from the International Monetary Fund's *International Financial Statistics*, supplemented with data from central banks and the Economist Intelligence Unit.

If an economy had zero cases a year over the past 5 years involving a judicial reorganization, judicial liquidation or debt enforcement procedure (foreclosure or receivership), the economy receives a "no practice" mark on the time, cost and outcome indicators. This means that creditors are unlikely to recover their money through a formal legal process. The recovery rate for "no practice" economies is zero. In addition, a "no practice" economy receives a score of 0 on the strength of insolvency framework index even if its legal framework includes provisions related to insolvency proceedings (liquidation or reorganization).

Strength of insolvency framework

The strength of insolvency framework index is based on 4 other indices:

FIGURE 14.21 Strength of insolvency framework index measures the quality of insolvency laws that govern relations between debtors, creditors and the court



commencement of proceedings index, management of debtor's assets index, reorganization proceedings index and creditor participation index (figure 14.21; table 14.14).

Commencement of proceedings index

The commencement of proceedings index has 3 components:

- Whether debtors can initiate both liquidation and reorganization proceedings. A score of 1 is assigned if debtors can initiate both types of proceedings; 0.5 if they can initiate only one of these types (either liquidation or reorganization); 0 if they cannot initiate insolvency proceedings.
- Whether creditors can initiate both liquidation and reorganization proceedings. A score of 1 is assigned if creditors can initiate both types of proceedings; 0.5 if they can initiate only one of these types (either liquidation or reorganization); 0 if they cannot initiate insolvency proceedings.
- What standard is used for commencement of insolvency proceedings. A score of 1 is assigned if a liquidity test (the debtor is generally unable to pay its debts as they

TABLE 14.14 What do the indicators on the strength of the insolvency framework measure?**Commencement of proceedings index (0–3)**

Availability of liquidation and reorganization to debtors and creditors

Standards for commencement of insolvency proceedings

Management of debtor's assets index (0–6)

Continuation and rejection of contracts during insolvency

Avoidance of preferential and undervalued transactions

Post-commencement credit

Reorganization proceedings index (0–3)

Approval and content of the reorganization plan

Creditor participation index (0–4)

Creditors' participation in and rights during liquidation and reorganization proceedings

Strength of insolvency framework index (0–16)

Sum of the commencement of proceedings, management of debtor's assets, reorganization proceedings and creditor participation indices

mature) is used; 0.5 if the balance sheet test (the liabilities of the debtor exceed its assets) is used; 1 if both the liquidity and balance sheet tests are available but only one is required to initiate insolvency proceedings; 0.5 if both tests are required; 0 if a different test is used.

The index ranges from 0 to 3, with higher values indicating greater access to insolvency proceedings. In Bulgaria, for example, debtors can initiate both liquidation and reorganization proceedings (a score of 1), as can creditors (a score of 1). The standard for commencing insolvency proceedings is that the debtor cannot pay its debts as they mature (a score of 1). Adding these numbers gives Bulgaria a score of 3 on the commencement of proceedings index.

Management of debtor's assets index

The management of debtor's assets index has 6 components:

- Whether the debtor (or an insolvency representative on its behalf) can continue performing contracts essential to the debtor's survival. A score of 1 is assigned if yes; 0 if continuation of contracts is not possible or if the law contains no provisions on this subject.
- Whether the debtor (or an insolvency representative on its behalf) can reject overly burdensome contracts. A score of 1 is assigned if yes; 0 if rejection of contracts is not possible.
- Whether transactions entered into before commencement of insolvency proceedings that give preference to one or several creditors can be avoided after proceedings are initiated. A score of 1 is assigned if yes; 0 if avoidance of such transactions is not possible.
- Whether undervalued transactions entered into before commencement of insolvency proceedings can be avoided after proceedings are initiated. A score of 1 is assigned if yes; 0 if avoidance of such transactions is not possible.
- Whether the insolvency framework includes specific provisions that allow the debtor (or an insolvency representative on its behalf), after commencement of insolvency proceedings, to obtain financing necessary to function during the proceedings. A score of 1 is assigned if yes; 0 if obtaining post-commencement financing is not possible or if the law contains no provisions on this subject.
- Whether post-commencement financing receives priority over ordinary unsecured creditors during distribution of assets. A score of 1 is assigned if yes; 0.5 if post-commencement financing is granted superpriority over all creditors, secured and unsecured; 0 if no priority is granted to post-commencement financing.

The index ranges from 0 to 6, with higher values indicating more advantageous treatment of the debtor's assets from the perspective of the company's stakeholders. In Rwanda, for example, debtors can continue essential contracts (a score of 1) and reject burdensome ones (a score of 1) during insolvency proceedings. But the insolvency framework contains no provisions on either preferential transactions (a score of 0) or undervalued ones (a score of 0). Post-commencement financing is available under the laws of Rwanda (a score of 1) and receives priority only over ordinary unsecured creditors (a score of 1). Adding these numbers gives Rwanda a score of 4 on the management of debtor's assets index.

Reorganization proceedings index

The reorganization proceedings index has 3 components:

- Whether the reorganization plan is voted on only by the creditors whose rights are modified or affected by the plan. A score of 1 is assigned if yes; 0.5 if all creditors vote on the plan, regardless of its impact on their interests; 0 if creditors do not vote on the plan or if reorganization is not available.
- Whether creditors entitled to vote on the plan are divided into classes, each class votes separately and the creditors within each class are treated equally. A score of 1 is assigned if the voting procedure has these 3 features; 0 if the voting procedure does not have these 3 features or if reorganization is not available.
- Whether the insolvency framework requires that dissenting creditors receive as much under the reorganization plan as they would have received in liquidation. A score of 1 is assigned if yes; 0 if no such provisions exist or if reorganization is not available.

The index ranges from 0 to 3, with higher values indicating greater compliance with internationally accepted

practices. Nicaragua, for example, has no judicial reorganization proceedings and therefore receives a score of 0 on the reorganization proceedings index. In Estonia, another example, only creditors whose rights are affected by the reorganization plan are allowed to vote (a score of 1). The reorganization plan divides creditors into classes, each class votes separately and creditors within the same class are treated equally (a score of 1). But there are no provisions requiring that the return to dissenting creditors be equal to what they would have received in liquidation (a score of 0). Adding these numbers gives Estonia a score of 2 on the reorganization proceedings index.

Creditor participation index

The creditor participation index has 4 components:

- Whether creditors participate in the selection of an insolvency representative. A score of 1 is assigned if yes; 0 if no.
- Whether creditors are required to approve the sale of substantial assets of the debtor in the course of insolvency proceedings. A score of 1 is assigned if yes; 0 if no.
- Whether an individual creditor has the right to access information about insolvency proceedings, either by requesting it from an insolvency representative or by reviewing the official records. A score of 1 is assigned if yes; 0 if no.
- Whether an individual creditor can object to a decision of the court or of the insolvency representative to approve or reject claims against the debtor brought by the creditor itself and by other creditors. A score of 1 is assigned if yes; 0 if no.

The index ranges from 0 to 4, with higher values indicating greater participation of creditors. In Iceland, for example, the court appoints the insolvency representative, without creditors' approval (a score of 0). The insolvency representative decides unilaterally on

the sale of the debtor's assets (a score of 0). Any creditor can inspect the records kept by the insolvency representative (a score of 1). And any creditor is allowed to challenge a decision of the insolvency representative to approve all claims if this decision affects the creditor's rights (a score of 1). Adding these numbers gives Iceland a score of 2 on the creditor participation index.

Strength of insolvency framework index

The strength of insolvency framework index is the sum of the scores on the commencement of proceedings index, management of debtor's assets index, reorganization proceedings index and creditor participation index. The index ranges from 0 to 16, with higher values indicating insolvency legislation that is better designed for rehabilitating viable firms and liquidating nonviable ones.

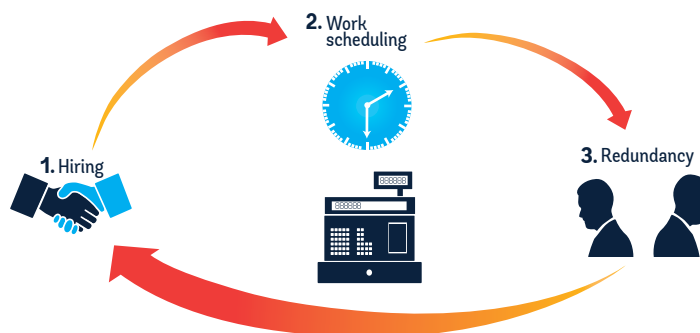
This methodology was developed by Djankov, Hart and others (2008) and is adopted here with several changes. The strength of insolvency framework index was introduced in Doing Business 2015. The best practices tested in this index were developed on the basis of the World Bank's Principles for Effective Insolvency and Creditor/Debtor Regimes and the United Nations Commission on International Trade Law's Legislative Guide on Insolvency Law.

LABOR MARKET REGULATION

Doing Business measures flexibility in the regulation of employment, specifically as it affects the hiring and redundancy of workers and the rigidity of working hours (figure 14.22). This year, for the first time, the indicators measuring flexibility in labor market regulations focus on those affecting the food retail industry, using a standardized case study of a cashier in a supermarket. Also new is that *Doing Business* collects data on regulations applying to employees hired through temporary-work agencies as well as on those applying to permanent employees or employees hired on fixed-term contracts. The indicators also cover additional areas of labor market regulation, including social protection schemes and benefits as well as labor disputes.

Over the period from 2007 to 2011 improvements were made to align the methodology for the labor market regulation indicators (formerly the employing workers indicators) with the letter and spirit of the International Labour Organization (ILO) conventions. Only 6 of the 188 ILO conventions cover areas measured by *Doing Business*: employee termination, weekend work, holiday with

FIGURE 14.22 How flexible are hiring, work scheduling and redundancy rules?



pay, night work, protection against unemployment and medical care and sickness benefits. The *Doing Business* methodology is fully consistent with these 6 conventions. The ILO conventions covering areas related to the labor market regulation indicators do not include the ILO core labor standards—8 conventions covering the right to collective bargaining, the elimination of forced labor, the abolition of child labor and equitable treatment in employment practices.

Between 2009 and 2011 the World Bank Group worked with a consultative group—including labor lawyers, employer and employee representatives, and experts from the ILO, the Organisation for Economic Co-operation and Development (OECD), civil society and the private sector—to review the methodology for the labor market regulation indicators and explore future areas of research.¹⁸ A full report with the conclusions of the consultative group, along with the methodology it proposed, is available at <http://www.doingbusiness.org/methodology/labor-market-regulation>.

Doing Business 2015 presents the data for the labor market regulation indicators in an annex. The report does not present rankings of economies on these indicators or include the topic in the aggregate distance to frontier score or ranking on the ease of doing business. Detailed data collected on labor market regulations are available on the *Doing Business* website (<http://www.doingbusiness.org>). The data on labor market regulations are based on a detailed questionnaire on employment regulations that is completed by local lawyers and public officials. Employment laws and regulations as well as secondary sources are reviewed to ensure accuracy.

To make the data comparable across economies, several assumptions about the worker and the business are used.

Assumptions about the worker

The worker:

- Is a cashier in a supermarket or grocery store.
- Is a full-time employee.
- Is not a member of the labor union, unless membership is mandatory.

Assumptions about the business

The business:

- Is a limited liability company (or the equivalent in the economy).
- Operates a supermarket or grocery store in the economy's largest business city. For 11 economies the data are also collected for the second largest business city (see table 14A.1).
- Has 60 employees.
- Is subject to collective bargaining agreements if such agreements cover more than 50% of the food retail sector and they apply even to firms that are not party to them.
- Abides by every law and regulation but does not grant workers more benefits than those mandated by law, regulation or (if applicable) collective bargaining agreements.

Rigidity of employment

Rigidity of employment covers 3 areas: difficulty of hiring, rigidity of hours and difficulty of redundancy (table 14.15).

Difficulty of hiring covers 4 areas: (i) whether fixed-term contracts are prohibited for permanent tasks; (ii) the maximum cumulative duration of fixed-term contracts; (iii) the minimum wage for a cashier, age 19, with 1 year of work experience; and (iv) the ratio of the minimum wage to the average value added per worker.¹⁹

Rigidity of hours covers 7 areas: (i) whether the workweek can extend to 50 hours or more (including overtime) 2 months in a year to respond to a seasonal increase in workload; (ii) the maximum number of days allowed in the workweek; (iii) the premium for

TABLE 14.15 What do the labor market regulation indicators include?

Rigidity of employment
Difficulty of hiring
Whether fixed-term contracts are prohibited for permanent tasks
Maximum duration of fixed-term contracts, including renewals
Minimum wage applicable to the worker assumed in the case study (US\$/month)
Ratio of minimum wage to value added per worker
Rigidity of hours
Whether 50-hour workweeks are permitted for 2 months in a year due to an increase in workload
Allowed maximum length of the workweek in days and hours, including overtime
Premium for night work (% of hourly pay)
Premium for work on a weekly rest day (% of hourly pay)
Whether there are restrictions on night work and weekly holiday work
Paid annual vacation days for workers with 1 year of tenure, 5 years of tenure and 10 years of tenure
Difficulty of redundancy
Length of the maximum probationary period (in months) for permanent employees
Whether redundancy is allowed as grounds for termination
Whether third-party notification is required for termination of a redundant worker or group of workers
Whether third-party approval is required for termination of a redundant worker or group of workers
Whether employer is obligated to reassign or retrain and to follow priority rules for redundancy and reemployment
Redundancy cost (weeks of salary)
Notice requirements, severance payments and penalties due when terminating a redundant worker, expressed in weeks of salary
Social protection schemes and benefits
Whether an unemployment protection scheme exists
Whether the law requires employers to provide health insurance for permanent employees
Labor disputes
Availability of courts or court sections specializing in labor disputes

night work (as a percentage of hourly pay); (iv) the premium for work on a weekly rest day (as a percentage of hourly pay); (v) whether there are

restrictions on night work; (vi) whether there are restrictions on weekly holiday work; and (vii) the average paid annual leave for workers with 1 year of tenure, 5 years of tenure and 10 years of tenure.

Difficulty of redundancy looks at 9 questions: (i) what the length is in months of the maximum probationary period; (ii) whether redundancy is disallowed as a basis for terminating workers; (iii) whether the employer needs to notify a third party (such as a government agency) to terminate 1 redundant worker; (iv) whether the employer needs to notify a third party to terminate a group of 9 redundant workers; (v) whether the employer needs approval from a third party to terminate 1 redundant worker; (vi) whether the employer needs approval from a third party to terminate a group of 9 redundant workers; (vii) whether the law requires the employer to reassign or retrain a worker before making the worker redundant; (viii) whether priority rules apply for redundancies; and (ix) whether priority rules apply for reemployment.

Redundancy cost

Redundancy cost measures the cost of advance notice requirements, severance payments and penalties due when terminating a redundant worker, expressed in weeks of salary. The average value of notice requirements and severance payments applicable to a worker with 1 year of tenure, a worker with 5 years and a worker with 10 years is considered. One month is recorded as 4 and 1/3 weeks.

Social protection schemes and benefits

Doing Business collects data on the existence of unemployment protection schemes as well as data on whether employers are legally required to provide health insurance for employees with permanent contracts.

Labor disputes

Doing Business assesses the mechanisms available to resolve labor disputes. More specifically, it collects data on what courts would be competent to hear labor disputes and whether the competent courts are specialized in resolving labor disputes.

*The data details on labor market regulation can be found for each economy at <http://www.doingbusiness.org>. The *Doing Business* website also provides historical data sets. The methodology was developed by Botero and others (2004). *Doing Business 2015* does not present rankings of economies on the labor market regulation indicators.*

NOTES

1. The data for paying taxes refer to January–December 2013.
2. These are Bangladesh, Brazil, China, India, Indonesia, Japan, Mexico, Nigeria, Pakistan, the Russian Federation and the United States.
3. This correction rate reflects changes that exceed 5% up or down.
4. This assumption is new in *Doing Business 2015*.
5. This component is revised in *Doing Business 2015*. The previous methodology assigned a point if more than 2 years of historical data were distributed. Similarly, credit bureaus and registries that erased data on defaults as soon as they were repaid obtained a score of 0.
6. This component is revised in *Doing Business 2015*. The previous methodology assigned a point if borrowers have the right by law to access their data in the largest credit bureau or registry in the economy.
7. This component is new in *Doing Business 2015*.
8. This component is new in *Doing Business 2015*.
9. This question is usually regulated by stock exchange or securities laws. Points are awarded only to economies with more than 10 listed firms in their most important stock exchange.
10. When evaluating the regime of liability for company directors for a prejudicial related-party transaction, *Doing Business* assumes that the transaction was duly disclosed and approved. *Doing Business* does not measure director liability in the event of fraud.
11. This component is revised in *Doing Business 2015*; it combines 2 previously separate components.
12. This component is new in *Doing Business 2015*.
13. This component is new in *Doing Business 2015*.
14. PwC refers to the network of member firms of PricewaterhouseCoopers International Limited (PwCIL) or, as the context requires, individual member firms of the PwC network. Each member firm is a separate legal entity and does not act as agent of PwCIL or any other member firm. PwCIL does not provide any services to clients. PwCIL is not responsible or liable for the acts or omissions of any of its member firms nor can it control the exercise of their professional judgment or bind them in any way. No member firm is responsible or liable for the acts or omissions of any other member firm nor can it control the exercise of another member firm's professional judgment or bind another member firm or PwCIL in any way.
15. The nonlinear distance to frontier for the total tax rate is equal to the distance to frontier for the total tax rate to the power of 0.8.
16. While different types of containers are used around the world, the 2 most important are 20-foot and 40-foot containers. Use of 40-foot containers is growing, but this year's research confirms that 20-foot containers are still common in the majority of economies. According to respondents questioned in each of the 189 economies covered by *Doing Business*, 20-foot and 40-foot containers are equally common in 49% of the economies, 20-foot containers are more common in 29%, and 40-foot containers are mostly relied on in only 10%. For the remaining 12% of economies no data on the use of the 2 types of containers were available. The trading across borders indicators will continue to be based on 20-foot containers because this size remains the most relevant for international trade across the globe.
17. This assumption is revised in *Doing Business 2015*.
18. For the terms of reference and composition of the consultative group, see World Bank, "Doing Business Employing Workers Indicator Consultative Group," <http://www.doingbusiness.org>.
19. The average value added per worker is the ratio of an economy's GNI per capita to the working-age population as a percentage of the total population.

TABLE 14A.1 Cities covered in each economy by the Doing Business report

Economy	City or cities	Economy	City or cities	Economy	City or cities
Afghanistan	Kabul	Greece	Athens	Pakistan	Karachi, Lahore
Albania	Tirana	Grenada	St. George's	Palau	Koror
Algeria	Algiers	Guatemala	Guatemala City	Panama	Panama City
Angola	Luanda	Guinea	Conakry	Papua New Guinea	Port Moresby
Antigua and Barbuda	St. John's	Guinea-Bissau	Bissau	Paraguay	Asunción
Argentina	Buenos Aires	Guyana	Georgetown	Peru	Lima
Armenia	Yerevan	Haiti	Port-au-Prince	Philippines	Quezon City
Australia	Sydney	Honduras	Tegucigalpa	Poland	Warsaw
Austria	Vienna	Hong Kong SAR, China	Hong Kong SAR	Portugal	Lisbon
Azerbaijan	Baku	Hungary	Budapest	Puerto Rico (U.S.)	San Juan
Bahamas, The	Nassau	Iceland	Reykjavik	Qatar	Doha
Bahrain	Manama	India	Mumbai, Delhi	Romania	Bucharest
Bangladesh	Dhaka, Chittagong	Indonesia	Jakarta, Surabaya	Russian Federation	Moscow, St. Petersburg
Barbados	Bridgetown	Iran, Islamic Rep.	Tehran	Rwanda	Kigali
Belarus	Minsk	Iraq	Baghdad	Samoa	Apia
Belgium	Brussels	Ireland	Dublin	San Marino	San Marino
Belize	Belize City	Israel	Tel Aviv	São Tomé and Príncipe	São Tomé
Benin	Cotonou	Italy	Rome	Saudi Arabia	Riyadh
Bhutan	Thimphu	Jamaica	Kingston	Senegal	Dakar
Bolivia	La Paz	Japan	Tokyo, Osaka	Serbia	Belgrade
Bosnia and Herzegovina	Sarajevo	Jordan	Amman	Seychelles	Victoria
Botswana	Gaborone	Kazakhstan	Almaty	Sierra Leone	Freetown
Brazil	São Paulo, Rio de Janeiro	Kenya	Nairobi	Singapore	Singapore
Brunei Darussalam	Bandar Seri Begawan	Kiribati	Tarawa	Slovak Republic	Bratislava
Bulgaria	Sofia	Korea, Rep.	Seoul	Slovenia	Ljubljana
Burkina Faso	Ouagadougou	Kosovo	Pristina	Solomon Islands	Honiara
Burundi	Bujumbura	Kuwait	Kuwait City	South Africa	Johannesburg
Cabo Verde	Praia	Kyrgyz Republic	Bishkek	South Sudan	Juba
Cambodia	Phnom Penh	Lao PDR	Vientiane	Spain	Madrid
Cameroon	Douala	Latvia	Riga	Sri Lanka	Colombo
Canada	Toronto	Lebanon	Beirut	St. Kitts and Nevis	Basseterre
Central African Republic	Bangui	Lesotho	Maseru	St. Lucia	Castries
Chad	N'Djamena	Liberia	Monrovia	St. Vincent and the Grenadines	Kingstown
Chile	Santiago	Libya	Tripoli	Sudan	Khartoum
China	Shanghai, Beijing	Lithuania	Vilnius	Suriname	Paramaribo
Colombia	Bogotá	Luxembourg	Luxembourg	Swaziland	Mbabane
Comoros	Moroni	Macedonia, FYR	Skopje	Sweden	Stockholm
Congo, Dem. Rep.	Kinshasa	Madagascar	Antananarivo	Switzerland	Zurich
Congo, Rep.	Brazzaville	Malawi	Blantyre	Syrian Arab Republic	Damascus
Costa Rica	San José	Malaysia	Kuala Lumpur	Taiwan, China	Taipei
Côte d'Ivoire	Abidjan	Maldives	Malé	Tajikistan	Dushanbe
Croatia	Zagreb	Mali	Bamako	Tanzania	Dar es Salaam
Cyprus	Nicosia	Malta	Valletta	Thailand	Bangkok
Czech Republic	Prague	Marshall Islands	Majuro	Timor-Leste	Dili
Denmark	Copenhagen	Mauritania	Nouakchott	Togo	Lomé
Djibouti	Djibouti Ville	Mauritius	Port Louis	Tonga	Nuku'alofa
Dominica	Roseau	Mexico	Mexico City, Monterrey	Trinidad and Tobago	Port of Spain
Dominican Republic	Santo Domingo	Micronesia, Fed. Sts.	Island of Pohnpei	Tunisia	Tunis
Ecuador	Quito	Moldova	Chişinău	Turkey	Istanbul
Egypt, Arab Rep.	Cairo	Mongolia	Ulaanbaatar	Uganda	Kampala
El Salvador	San Salvador	Montenegro	Podgorica	Ukraine	Kiev
Equatorial Guinea	Malabo	Morocco	Casablanca	United Arab Emirates	Dubai
Eritrea	Asmara	Mozambique	Maputo	United Kingdom	London
Estonia	Tallinn	Myanmar	Yangon	United States	New York City, Los Angeles
Ethiopia	Addis Ababa	Namibia	Windhoek	Uruguay	Montevideo
Fiji	Suva	Nepal	Kathmandu	Uzbekistan	Tashkent
Finland	Helsinki	Netherlands	Amsterdam	Vanuatu	Port-Vila
France	Paris	New Zealand	Auckland	Venezuela, RB	Caracas
Gabon	Libreville	Nicaragua	Managua	Vietnam	Ho Chi Minh City
Gambia, The	Banjul	Niger	Niamey	West Bank and Gaza	Ramallah
Georgia	Tbilisi	Nigeria	Lagos, Kano	Yemen, Rep.	Sana'a
Germany	Berlin	Norway	Oslo	Zambia	Lusaka
Ghana	Accra	Oman	Muscat	Zimbabwe	Harare