

Doing Business 2016

Measuring Regulatory Quality and Efficiency

Regional Profile 2016

The g7+



COMPARING BUSINESS REGULATION FOR DOMESTIC FIRMS IN 189 ECONOMIES

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INTRODUCTION

Doing Business sheds light on how easy or difficult it is for a local entrepreneur to open and run a small to medium-size business when complying with relevant regulations. It measures and tracks changes in regulations affecting 11 areas in the life cycle of a business: starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting minority investors, paying taxes, trading across borders, enforcing contracts, resolving insolvency and labor market regulation. *Doing Business 2016* presents the data for the labor market regulation indicators in an annex. The report does not present rankings of economies on labor market regulation indicators or include the topic in the aggregate distance to frontier score or ranking on the ease of doing business.

In a series of annual reports *Doing Business* presents quantitative indicators on business regulations and the protection of property rights that can be compared across 189 economies, from Afghanistan to Zimbabwe, over time. The data set covers 47 economies in Sub-Saharan Africa, 32 in Latin America and the Caribbean, 25 in East Asia and the Pacific, 25 in Eastern Europe and Central Asia, 20 in the Middle East and North Africa and 8 in South Asia, as well as 32 OECD high-income economies. The indicators are used to analyze economic outcomes and identify what reforms have worked, where and why.

This regional profile presents the *Doing Business* indicators for economies in The G7+. It also shows the

regional average, the best performance globally for each indicator and data for the following comparator regions: . The data in this report are current as of June 1, 2015 (except for the paying taxes indicators, which cover the period January–December 2014).

The *Doing Business* methodology has limitations. Other areas important to business—such as an economy's proximity to large markets, the quality of its infrastructure services (other than those related to trading across borders and getting electricity), the security of property from theft and looting, the transparency of government procurement, macroeconomic conditions or the underlying strength of institutions—are not directly studied by *Doing Business*. The indicators refer to a specific type of business, generally a local limited liability company operating in the largest business city. Because standard assumptions are used in the data collection, comparisons and benchmarks are valid across economies. The data not only highlight the extent of obstacles to doing business; they also help identify the source of those obstacles, supporting policy makers in designing regulatory reform.

More information is available in the full report. *Doing Business 2016* presents the indicators, analyzes their relationship with economic outcomes and recommends regulatory reforms. The data, along with information on ordering the *Doing Business 2016* report, are available on the *Doing Business* website at <http://www.doingbusiness.org>.

THE BUSINESS ENVIRONMENT

CHANGES IN *DOING BUSINESS 2016*

As part of a two-year update in methodology, *Doing Business 2016* expands the focus of five indicator sets (dealing with construction permits, getting electricity, registering property, enforcing contracts and labor market regulation), substantially revises the methodology for one indicator set (trading across borders) and implements small updates to the methodology for another (protecting minority investors).

The indicators on dealing with construction permits now include an index of the quality of building regulation and its implementation. The getting electricity indicators now include a measure of the price of electricity consumption and an index of the reliability of electricity supply and transparency of tariffs. Starting this year, the registering property indicators include an index of the quality of the land administration system in each economy in addition to the indicators on the number of procedures and the time and cost to transfer property. And for enforcing contracts an index of the quality and efficiency of judicial processes has been added while the indicator on the number of procedures to enforce a contract has been dropped.

The scope of the labor market regulation indicator set has also been expanded, to include more areas capturing aspects of job quality. The labor market regulation indicators continue to be excluded from the aggregate distance to frontier score and ranking on the ease of doing business.

The case study underlying the trading across borders indicators has been changed to increase its relevance. For each economy the export product and partner are now determined on the basis of the economy's comparative advantage, the import product is auto parts, and the import partner is selected on the basis of which economy has the highest trade value in that product. The indicators continue to measure the time and cost to export and import.

Beyond these changes there is one other update in methodology, for the protecting minority investors indicators. A few points for the extent of shareholder governance index have been fine-tuned, and the index now also measures aspects of the regulations applicable to limited companies rather than privately held joint stock companies.

For more details on the changes, see the "What is changing in *Doing Business*?" chapter starting on page 27 of the *Doing Business 2016* report. For more details on the data and methodology, please see the "Data Notes" chapter starting on page 119 of the *Doing Business 2016* report. For more details on the distance to frontier metric, please see the "Distance to frontier and ease of doing business ranking" chapter in this profile.

THE BUSINESS ENVIRONMENT

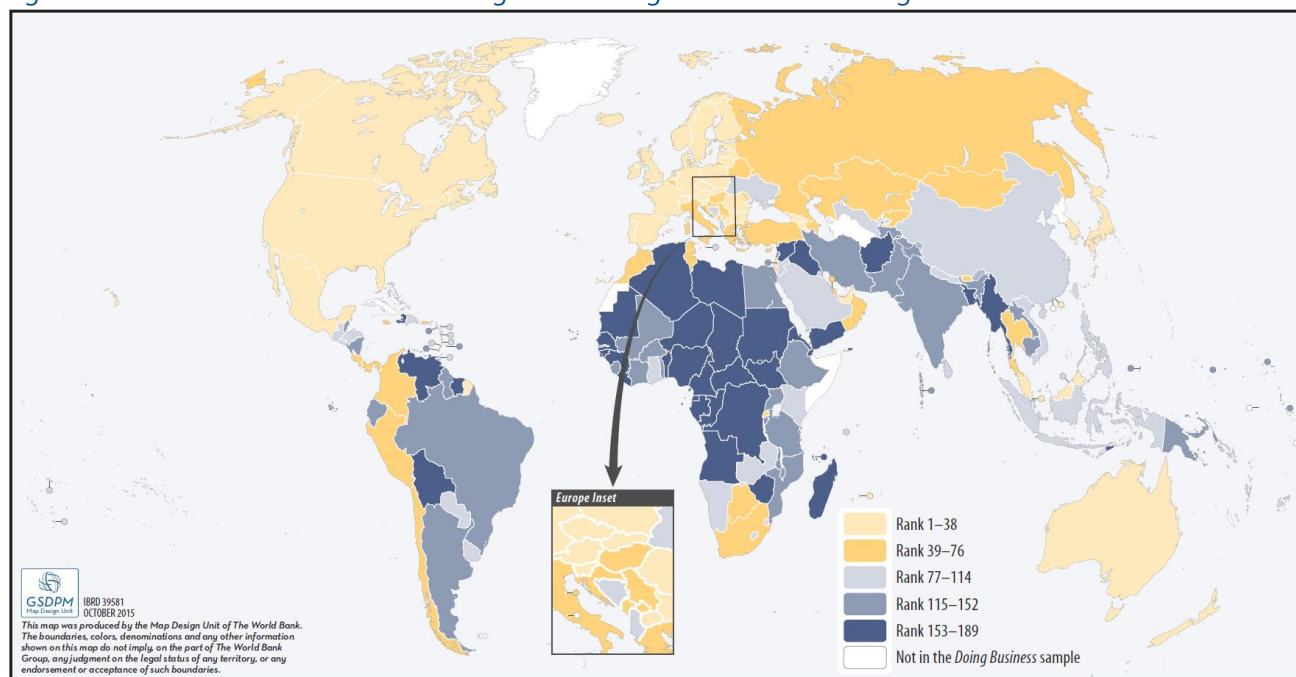
For policy makers trying to improve their economy's regulatory environment for business, a good place to start is to find out how it compares with the regulatory environment in other economies. Doing Business provides an aggregate ranking on the ease of doing business based on indicator sets that measure and benchmark regulations applying to domestic small to medium-size businesses through their life cycle. Economies are ranked from 1 to 189 by the ease of doing business ranking. Doing Business presents results for 2 aggregate measures: the distance to frontier score and the ease of doing business ranking. The ranking of economies is determined by sorting the aggregate distance to frontier scores, rounded to two decimals. An economy's distance to frontier score is indicated on a scale from 0 to 100, where 0 represents the worst performance and 100 the frontier. (See the chapter on the distance to frontier and ease of doing business).

The 10 topics included in the ranking in *Doing Business* 2016: starting a business, dealing with construction

permits, getting electricity, registering property, getting credit, protecting minority investors, paying taxes, trading across borders, enforcing contracts and resolving insolvency. The labor market regulation indicators are not included in this year's aggregate ease of doing business ranking, but the data are presented in the economy profile.

The ease of doing business ranking compares economies with one another; the distance to frontier score benchmarks economies with respect to regulatory best practice, showing the absolute distance to the best performance on each Doing Business indicator. When compared across years, the distance to frontier score shows how much the regulatory environment for local entrepreneurs in an economy has changed over time in absolute terms, while the ease of doing business ranking can show only how much the regulatory environment has changed relative to that in other economies.

Figure 1.1 Where economies stand in the global ranking on the ease of doing business

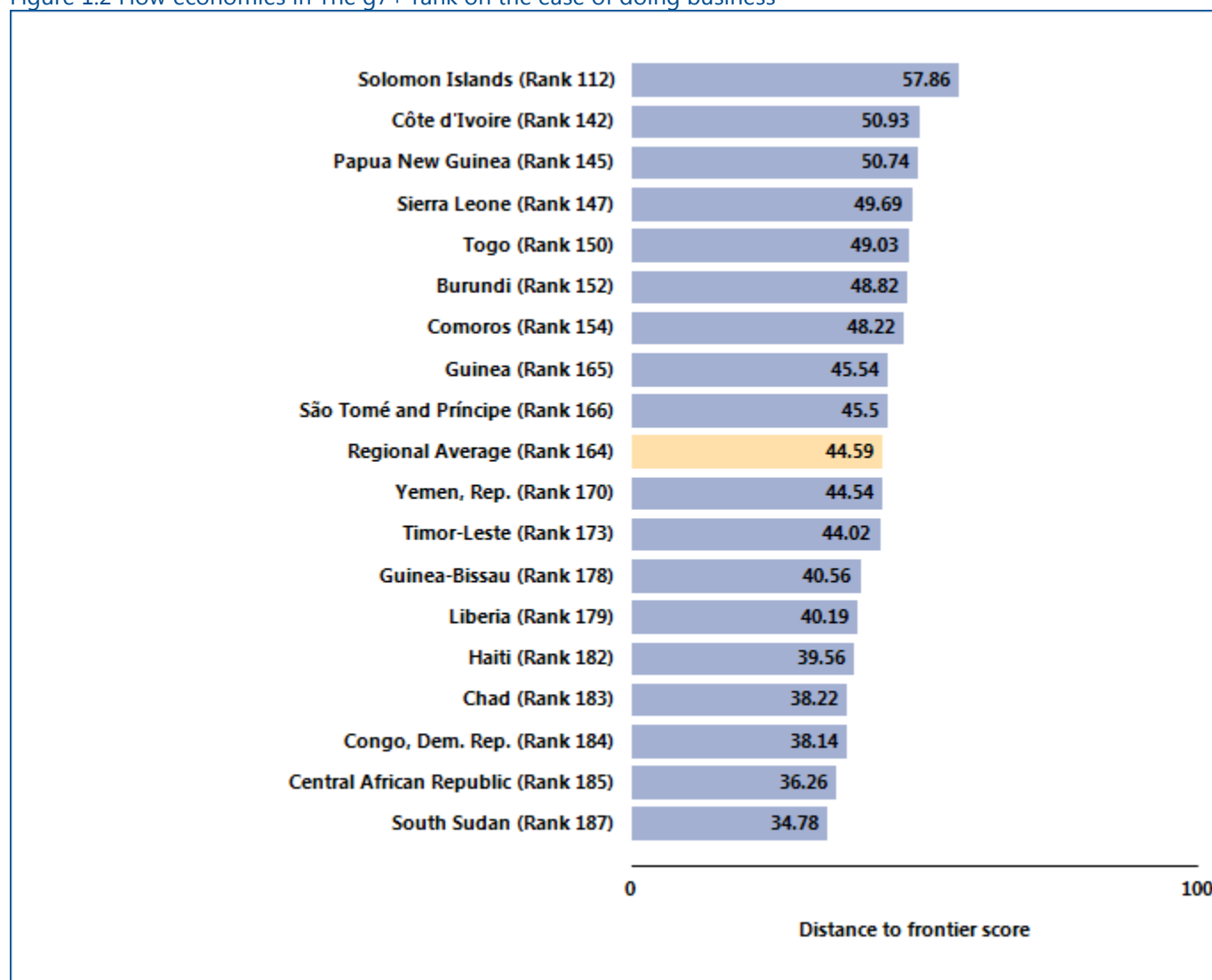


Source: *Doing Business* database.

THE BUSINESS ENVIRONMENT

For policy makers, knowing where their economy stands in the aggregate ranking on the ease of doing business is useful. Also useful is to know how it ranks compared with other economies in the region and compared with the regional average (figure 1.2). Another perspective is provided by the regional average rankings on the topics included in the ease of doing business ranking (figure 1.3) and the distance to frontier scores (figures 1.4 and 1.5).

Figure 1.2 How economies in The g7+ rank on the ease of doing business



Note: The rankings are benchmarked to June 2015 and based on the average of each economy's distance to frontier (DTF) scores for the 10 topics included in this year's aggregate ranking. The distance to frontier score benchmarks economies with respect to regulatory practice, showing the absolute distance to the best performance in each *Doing Business* indicator. An economy's distance to frontier score is indicated on a scale from 0 to 100, where 0 represents the worst performance and 100 the frontier. For the economies for which the data cover 2 cities, scores are a population-weighted average for the 2 cities.

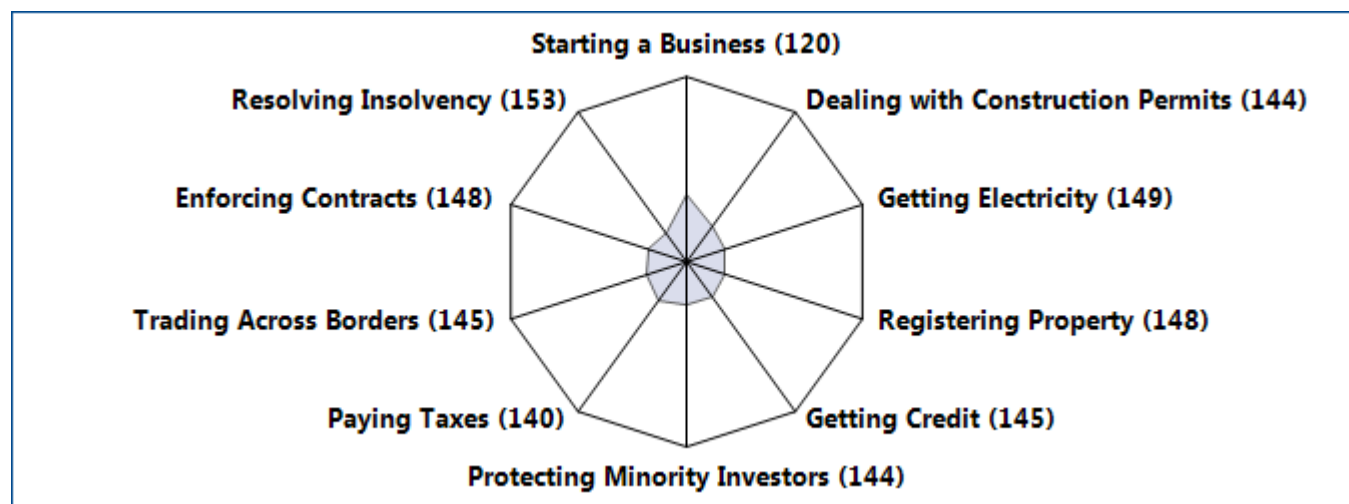
Source: *Doing Business* database.

THE BUSINESS ENVIRONMENT

Figure 1.3 Rankings on *Doing Business* topics - The g7+

(Scale: Rank 189 center, Rank 1 outer edge)

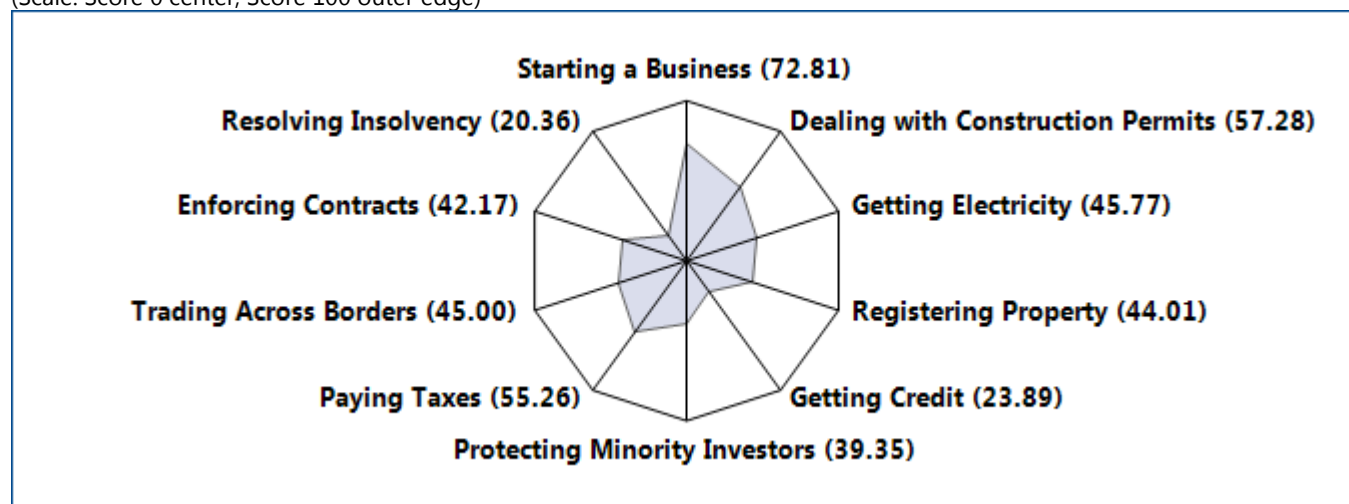
Regional average ranking



Source: *Doing Business* database.

Figure 1.4 Distance to frontier scores on *Doing Business* topics - The g7+

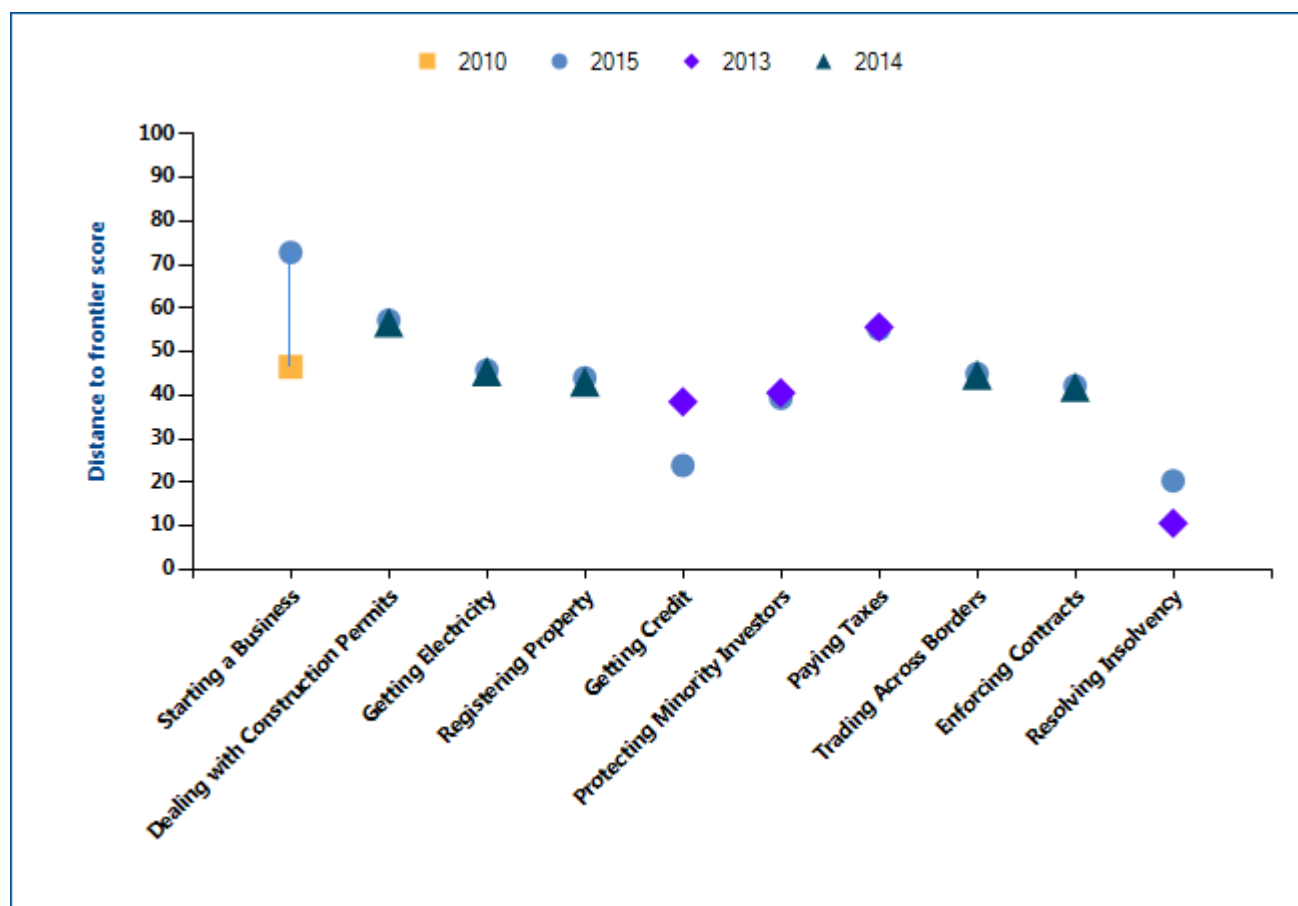
(Scale: Score 0 center, Score 100 outer edge)



Note: The rankings are benchmarked to June 2015 and based on the average of each economy's distance to frontier (DTF) scores for the 10 topics included in this year's aggregate ranking. The distance to frontier score benchmarks economies with respect to regulatory practice, showing the absolute distance to the best performance in each *Doing Business* indicator. An economy's distance to frontier score is indicated on a scale from 0 to 100, where 0 represents the worst performance and 100 the frontier. For the economies for which the data cover 2 cities, scores are a population-weighted average for the 2 cities.

Source: *Doing Business* database.

Figure 1.5 How far has The g7+ come in the areas measured by *Doing Business*?



Source: *Doing Business* database.

Note: The distance to frontier score shows how far on average an economy is from the best performance achieved by any economy on each *Doing Business* indicator. Starting a business is comparable to 2010. Getting credit, protecting minority investors, paying taxes and resolving insolvency had methodology changes in 2014 and thus are only comparable to 2013. Dealing with construction permits, registering property, trading across borders, enforcing contracts and getting electricity had methodology changes in 2015 and thus are only comparable to 2014. The measure is normalized to range between 0 and 100, with 100 representing the best performance (the frontier). See the data notes starting on page 119 of the *Doing Business 2016* report for more details on the distance to frontier score.

THE BUSINESS ENVIRONMENT

Just as the overall ranking on the ease of doing business tells only part of the story, so do changes in that ranking. Yearly movements in rankings can provide some indication of changes in an economy's regulatory environment for firms, but they are always relative. An economy's ranking might change because of developments in other economies. An economy that implemented business regulation reforms may fail to rise in the rankings (or may even drop) if it is passed by others whose business regulation reforms had a more significant impact as measured by *Doing Business*.

The absolute values of the indicators tell another part of the story (table 1.1). Policy makers can learn much by comparing the indicators for their economy with those for the lowest- and highest-scoring economies in the region as well as those for the best performers globally. These comparisons may reveal unexpected strengths in an area of business regulation—such as a regulatory process that can be completed with a small number of procedures in a few days and at a low cost.

Table 1.1 Summary of *Doing Business* indicators for The g7+

Indicator	Lowest regional performance	Best regional performance	Regional average	Best global performance
Starting a Business (rank)	189 (Central African Republic)	19 (Burundi)	120	1 (New Zealand)
Starting a Business (DTF Score)	31.36 (Central African Republic)	94.51 (Burundi)	72.81	99.96 (New Zealand)
Procedures (number)	13.0 (South Sudan)	3.0 (Burundi*)	6.8	1.0 (New Zealand*)
Time (days)	97.0 (Haiti)	4.0 (Burundi)	21.5	0.5 (New Zealand)
Cost (% of income per capita)	330.1 (South Sudan)	0.3 (Timor-Leste)	83.0	0.0 (Slovenia)
Paid-in min. capital (% of income per capita)	540.1 (Central African Republic)	0.0 (8 Economies*)	75.2	0.0 (105 Economies*)
Dealing with Construction Permits (rank)	185 (Afghanistan)	58 (Solomon Islands)	144	1 (Singapore)
Dealing with Construction Permits (DTF Score)	22.94 (Afghanistan)	73.12 (Solomon Islands)	57.28	92.97 (Singapore)
Procedures (number)	27.0 (Guinea)	10.0 (Comoros*)	15.6	7.0 (5 Economies*)
Time (days)	347.0 (Côte d'Ivoire)	74.0 (Liberia)	157.4	26.0 (Singapore)
Cost (% of warehouse value)	15.7 (Haiti*)	0.3 (Timor-Leste)	5.9	0.0 (Qatar)
Building quality control index (0-15)	2.0 (Liberia*)	11.5 (Chad)	5.8	15.0 (New Zealand)
Getting Electricity (rank)	187 (South Sudan)	90 (Solomon Islands)	149	1 (Korea, Rep.)

Indicator	Lowest regional performance	Best regional performance	Regional average	Best global performance
Getting Electricity (DTF Score)	22.64 (South Sudan)	69.01 (Solomon Islands)	45.77	99.88 (Korea, Rep.)
Procedures (number)	8.0 (Sierra Leone*)	3.0 (3 Economies*)	5.0	3.0 (14 Economies*)
Time (days)	465.0 (Liberia)	51.0 (Togo)	141.3	18.0 (Korea, Rep.*)
Cost (% of income per capita)	16,315.4 (Burundi)	47.3 (Papua New Guinea)	5,369.6	0.0 (Japan)
Reliability of supply and transparency of tariff index (0-8)	0.0 (14 Economies*)	3.0 (Côte d'Ivoire*)	0.5	8.0 (18 Economies*)
Registering Property (rank)	189 (Timor-Leste)	83 (Yemen, Rep.)	148	1 (New Zealand)
Registering Property (DTF Score)	0.00 (Timor-Leste)	65.21 (Yemen, Rep.)	44.01	94.46 (New Zealand)
Procedures (number)	10.0 (Liberia*)	4.0 (Papua New Guinea*)	6.5	1.0 (4 Economies*)
Time (days)	312.0 (Haiti)	19.0 (Yemen, Rep.)	78.3	1.0 (3 Economies*)
Cost (% of property value)	16.0 (South Sudan)	1.8 (Yemen, Rep.)	8.6	0.0 (Saudi Arabia)
Quality of the land administration index (0-30)	0.0 (Timor-Leste)	11.5 (Côte d'Ivoire)	5.8	28.5 (3 Economies*)
Getting Credit (rank)	185 (Yemen, Rep.*)	79 (Solomon Islands)	145	1 (New Zealand)
Getting Credit (DTF Score)	0.00 (Yemen, Rep.*)	50.00 (Solomon Islands)	23.89	100.00 (New Zealand)
Strength of legal rights index (0-12)	0.0 (3 Economies*)	10.0 (Solomon Islands)	4.4	12.0 (3 Economies*)
Depth of credit information index (0-8)	0.0 (16 Economies*)	4.0 (Timor-Leste)	0.3	8.0 (26 Economies*)
Credit registry coverage (% of adults)	0.0 (Guinea)	7.4 (Comoros)	1.7	100.0 (Portugal)
Credit bureau coverage (% of adults)	3.5 (Papua New Guinea)	3.5 (Papua New Guinea)	0.2	100.0 (22 Economies*)
Protecting Minority Investors (rank)	189 (Afghanistan)	81 (Timor-Leste)	144	1 (3 Economies*)
Protecting Minority Investors (DTF Score)	10.00 (Afghanistan)	55.00 (Timor-Leste)	39.35	83.33 (3 Economies*)
Strength of minority investor protection	2.0 (Haiti)	5.5 (Timor-Leste)	3.9	8.3 (3 Economies*)

Indicator	Lowest regional performance	Best regional performance	Regional average	Best global performance
index (0-10)				
Extent of conflict of interest regulation index (0-10)	2.7 (South Sudan)	6.7 (Sierra Leone)	4.4	9.3 (Singapore*)
Extent of shareholder governance index (0-10)	1.0 (Haiti)	6.3 (Timor-Leste)	3.5	8.0 (4 Economies*)
Paying Taxes (rank)	186 (Chad)	57 (Timor-Leste)	140	1 (United Arab Emirates*)
Paying Taxes (DTF Score)	19.54 (Chad)	79.97 (Timor-Leste)	55.26	99.44 (United Arab Emirates*)
Payments (number per year)	63.0 (Côte d'Ivoire)	18.0 (Timor-Leste)	42.2	3.0 (Hong Kong SAR, China*)
Time (hours per year)	732.0 (Chad)	80.0 (Solomon Islands)	290.9	55.0 (Luxembourg)
Total tax rate (% of profit)	216.5 (Comoros)	11.2 (Timor-Leste)	53.6	25.9 (Ireland)
Trading Across Borders (rank)	189 (Yemen, Rep.)	76 (Haiti)	145	1 (16 Economies*)
Trading Across Borders (DTF Score)	0.00 (Yemen, Rep.)	77.01 (Haiti)	45.00	100.00 (16 Economies*)
Time to export: Border compliance (hours)	515 (Congo, Dem. Rep.)	26 (Togo)	121	0 (15 Economies*)
Cost to export: Border compliance (USD)	1,323 (Congo, Dem. Rep.)	106 (Burundi)	515	0 (18 Economies*)
Time to export: Documentary compliance (hours)	698 (Congo, Dem. Rep.)	4 (Haiti)	124	0 (Jordan)
Cost to export: Documentary compliance (USD)	2,500 (Congo, Dem. Rep.)	25 (Togo)	333	0 (20 Economies*)
Time to import: Border compliance (hours)	588 (Congo, Dem. Rep.)	70 (Comoros)	179	0 (19 Economies*)
Cost to import: Border compliance (USD)	2,089 (Congo, Dem. Rep.)	392 (Comoros)	719	0 (28 Economies*)
Time to import: Documentary compliance (hours)	360 (South Sudan)	17 (São Tomé and Príncipe)	138	1 (21 Economies*)
Cost to import: Documentary	1,025 (Burundi)	38 (Comoros)	375	0 (30 Economies*)

Indicator	Lowest regional performance	Best regional performance	Regional average	Best global performance
compliance (USD)				
Enforcing Contracts (rank)	189 (Timor-Leste)	76 (South Sudan)	148	1 (Singapore)
Enforcing Contracts (DTF Score)	6.13 (Timor-Leste)	59.91 (South Sudan)	42.17	84.91 (Singapore)
Time (days)	1,715.0 (Guinea-Bissau)	228.0 (South Sudan)	721.3	150.0 (Singapore)
Cost (% of claim)	163.2 (Timor-Leste)	25.0 (Guinea-Bissau)	59.8	9.0 (Iceland)
Quality of judicial processes index (0-18)	2.5 (Timor-Leste)	8.5 (Papua New Guinea)	6.3	15.5 (3 Economies*)
Resolving Insolvency (rank)	189 (6 Economies*)	76 (Côte d'Ivoire)	153	1 (Finland)
Resolving Insolvency (DTF Score)	0.00 (6 Economies*)	47.03 (Côte d'Ivoire)	20.36	93.81 (Finland)
Recovery rate (cents on the dollar)	0.0 (8 Economies*)	35.1 (Côte d'Ivoire)	10.6	92.9 (Japan)
Time (years)	6.2 (São Tomé and Príncipe)	1.0 (Solomon Islands)	3.4	0.4 (Ireland)
Cost (% of estate)	76.0 (Central African Republic)	8.0 (Guinea)	32.5	1.0 (Norway)
Strength of insolvency framework index (0-16)	0.0 (7 Economies*)	9.0 (5 Economies*)	4.7	15.0 (4 Economies*)

* Two or more economies share the top ranking on this indicator. A number shown in place of an economy's name indicates the number of economies that share the top ranking on the indicator. For a list of these economies, see the *Doing Business* website (<http://www.doingbusiness.org>).

Note: The global best performer on time for paying taxes is defined as the lowest time recorded among all economies in the DB2016 sample that levy the 3 major taxes: profit tax, labor taxes and mandatory contributions, and VAT or sales tax.

Source: *Doing Business* database.

STARTING A BUSINESS

Formal registration of companies has many immediate benefits for the companies and for business owners and employees. Legal entities can outlive their founders. Resources are pooled as several shareholders join forces to start a company. Formally registered companies have access to services and institutions from courts to banks as well as to new markets. And their employees can benefit from protections provided by the law. An additional benefit comes with limited liability companies. These limit the financial liability of company owners to their investments, so personal assets of the owners are not put at risk. Where governments make registration easy, more entrepreneurs start businesses in the formal sector, creating more good jobs and generating more revenue for the government.

What do the indicators cover?

Doing Business measures the ease of starting a business in an economy by recording all procedures officially required or commonly done in practice by an entrepreneur to start up and formally operate an industrial or commercial business—as well as the time and cost required to complete these procedures. It also records the paid-in minimum capital that companies must deposit before registration (or within 3 months). 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.

To make the data comparable across economies, *Doing Business* uses several assumptions about the business and the procedures. It assumes that all information is readily available to the entrepreneur and that there has been no prior contact with officials. It also assumes that the entrepreneur will pay no bribes. And it assumes that the business:

- Is a limited liability company, located in the largest business city¹, is 100% domestically owned with between 10 and 50 employees.

WHAT 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 city¹
- 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). Procedures that can be fully completed online are recorded as ½ day.
- Procedure completed once final 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)

- Deposited in a bank or with a notary before registration (or within 3 months)
- Conducts general commercial or industrial activities.
- Has a start-up capital of 10 times income per capita.
- Has a turnover of at least 100 times income per capita.
- Does not qualify for any special benefits.
- Does not own real estate.

¹ For the 11 economies with a population of more than 100 million, data for a second city have been added.

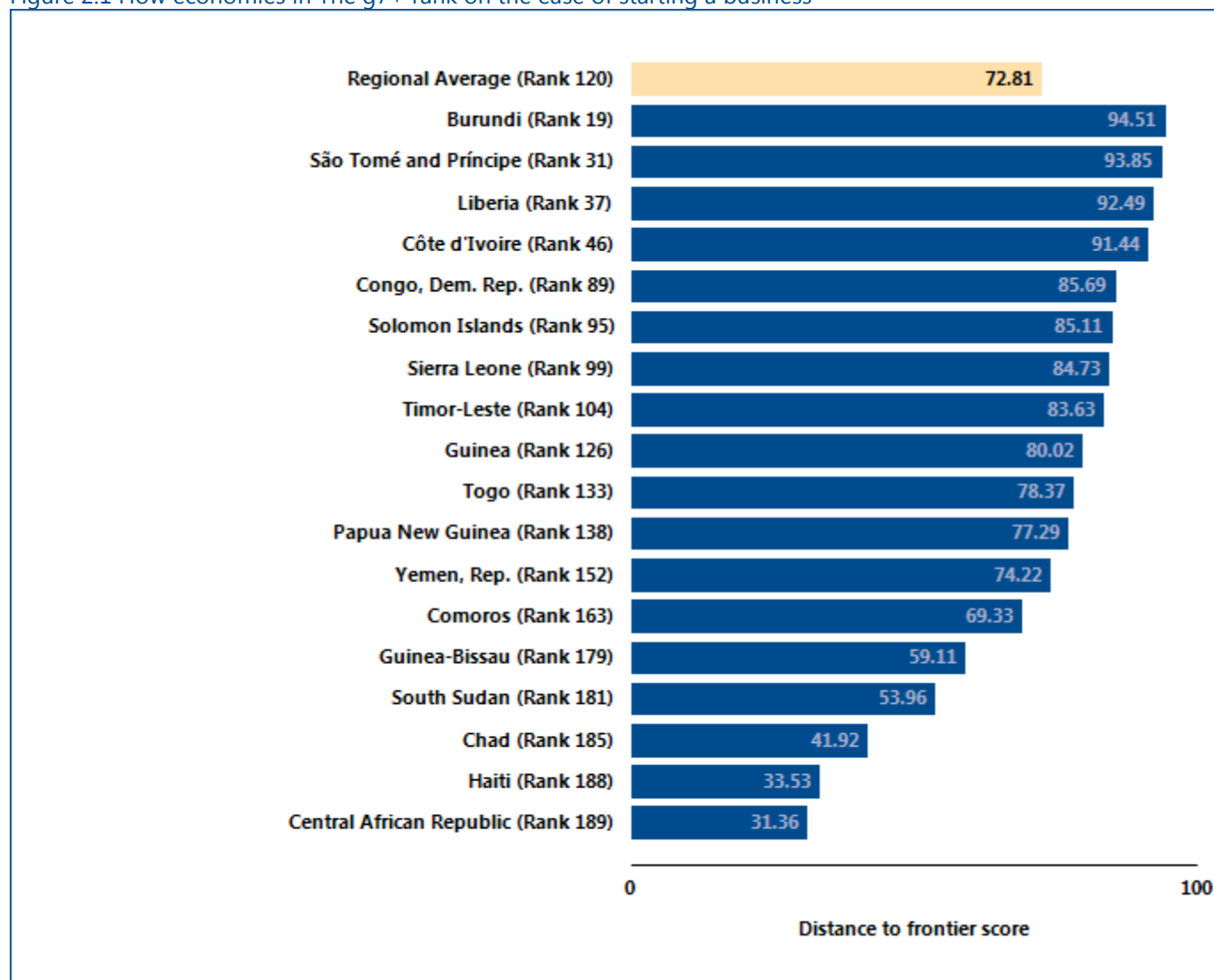
STARTING A BUSINESS

Where do the region's economies stand today?

How easy is it for entrepreneurs in economies in The g7+ to start a business? The global rankings of these economies on the ease of starting a business suggest an

answer (figure 2.1). The average ranking of the region and comparator regions provide a useful benchmark.

Figure 2.1 How economies in The g7+ rank on the ease of starting a business



Source: Doing Business database.

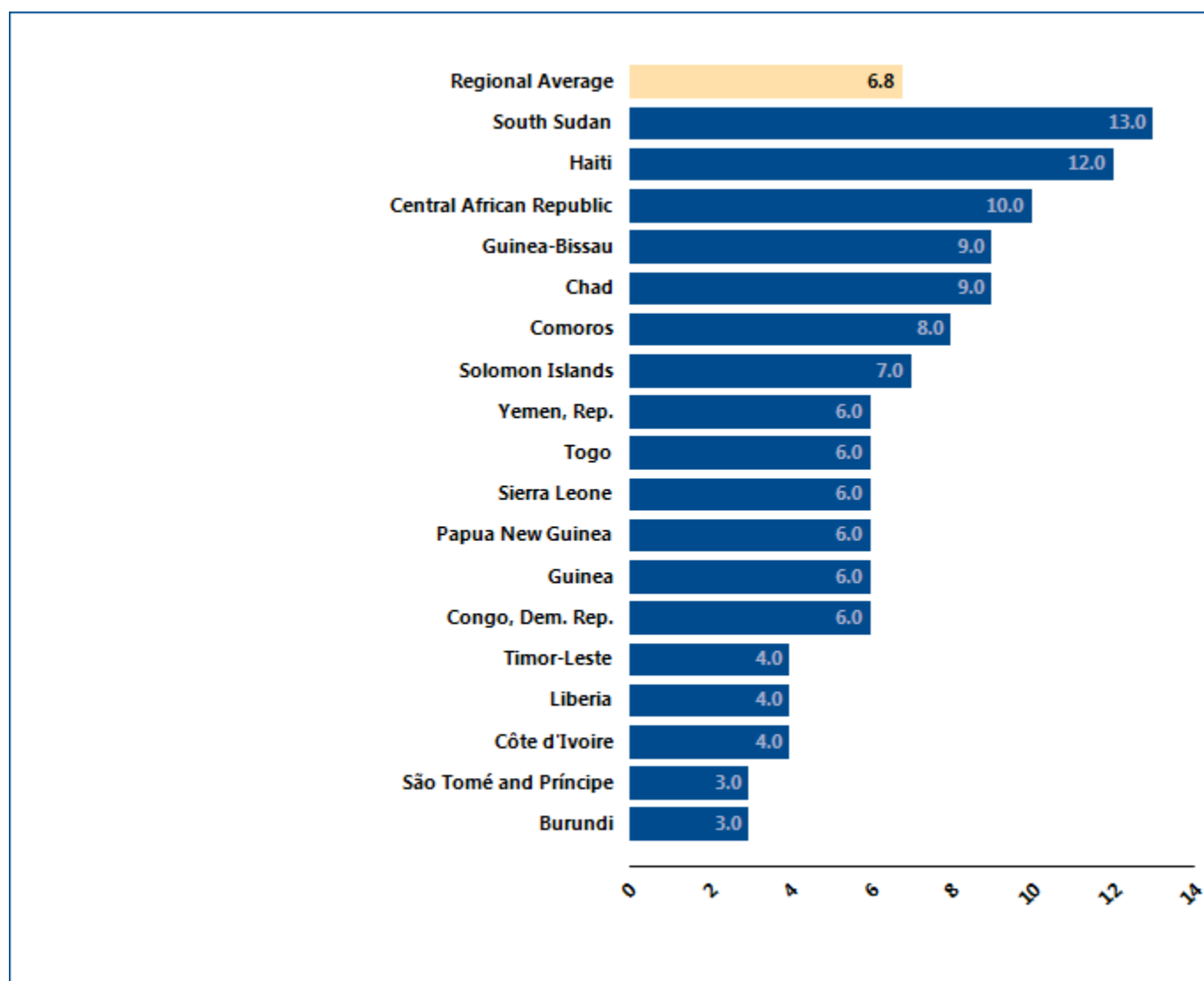
STARTING A BUSINESS

The indicators underlying the rankings may be more revealing. Data collected by *Doing Business* show what it takes to start a business in each economy in the region: the number of procedures, the time, the cost

and the paid-in minimum capital requirement (figure 2.2). Comparing these indicators across the region and with averages both for the region and for comparator regions can provide useful insights.

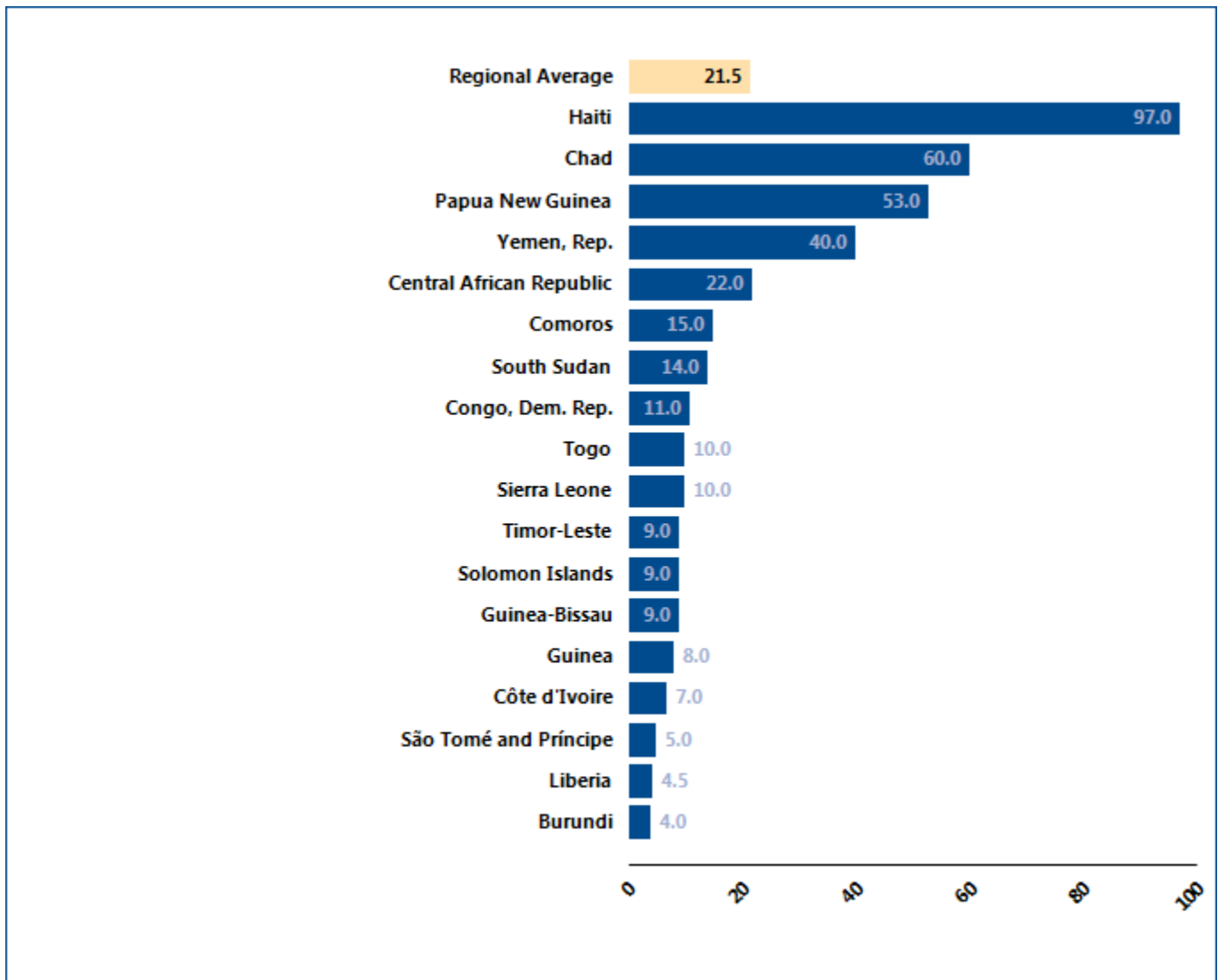
Figure 2.2 What it takes to start a business in economies in The g7+

Procedures (number)



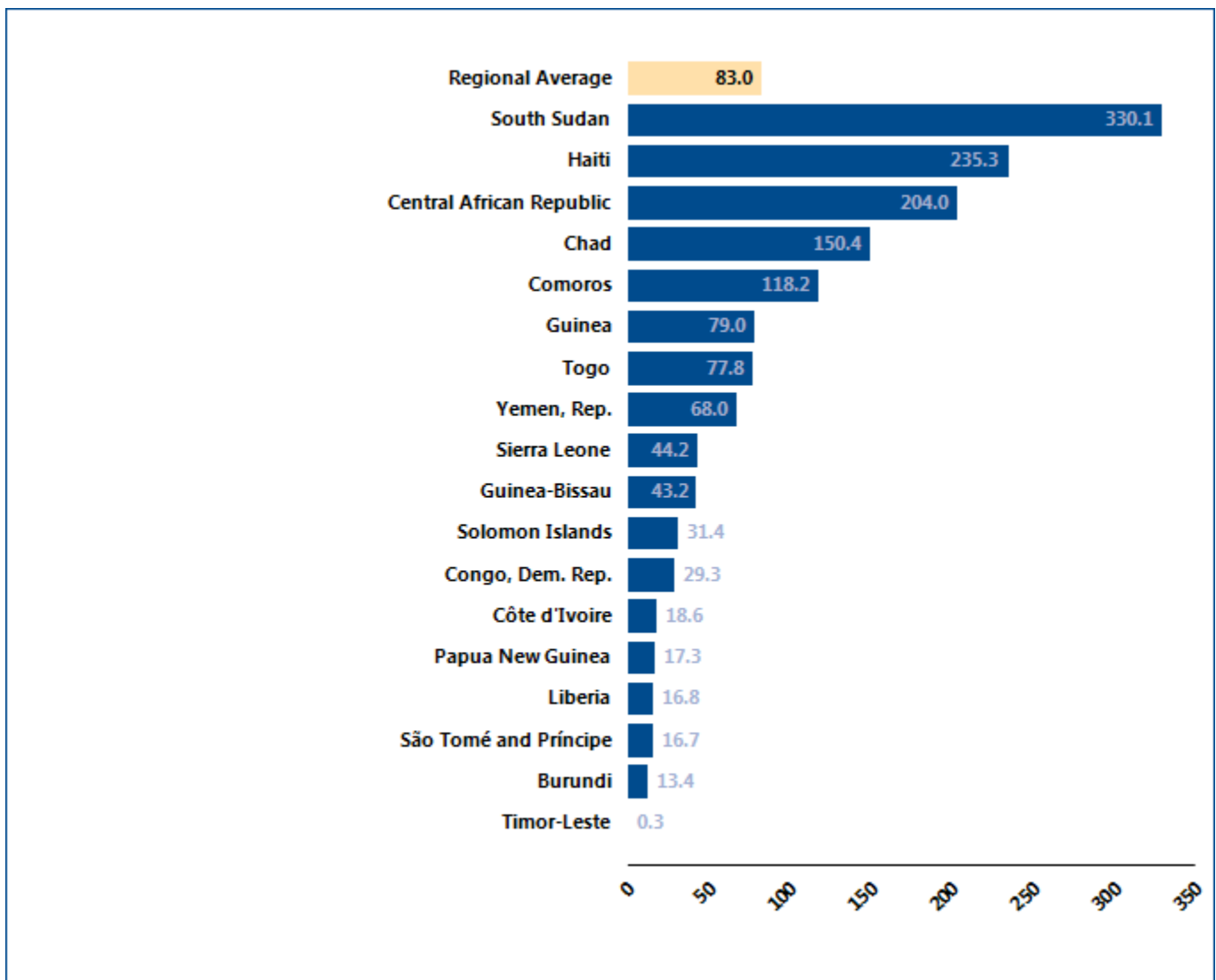
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Time (days)



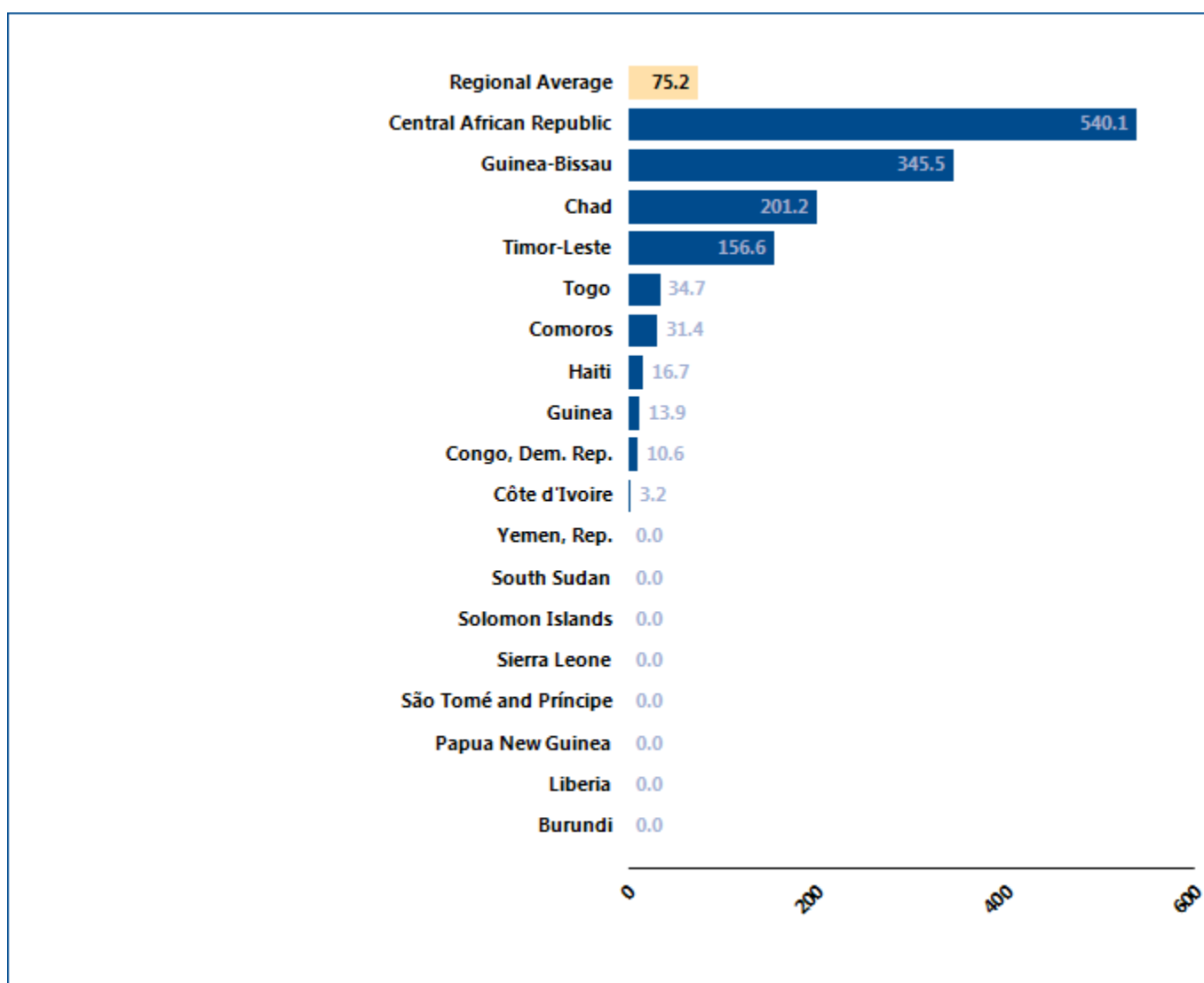
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Cost (% of income per capita)



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



Source: Doing Business database.

STARTING A BUSINESS

What are the changes over time?

Economies around the world have taken steps making it easier to start a business—streamlining procedures by setting up a one-stop shop, making procedures simpler or faster by introducing technology, and reducing or eliminating minimum capital requirements. Many have undertaken business registration reforms in stages—and

often as part of a larger regulatory reform program. Among the benefits have been greater firm satisfaction and savings and more registered businesses, financial resources and job opportunities.

What business registration reforms has *Doing Business* recorded in The g7+ (table 2.1)?

Table 2.1 How have economies in The g7+ made starting a business easier—or not?
By *Doing Business* report year DB2011 to DB2016

DB year	Economy	Reform
DB2016	<i>Comoros</i>	The Comoros made starting a business easier by reducing the minimum capital requirement.
DB2016	<i>Guinea</i>	Guinea made starting a business easier by reducing the minimum capital requirement.
DB2016	<i>Togo</i>	Togo made starting a business less costly by reducing the fees to register with the tax authority.
DB2016	<i>Congo, Dem. Rep.</i>	The Democratic Republic of Congo made starting a business easier by simplifying registration procedures and reducing the minimum capital requirement.
DB2015	<i>Côte d'Ivoire</i>	Côte d'Ivoire made starting a business easier by reducing the minimum capital requirement, lowering registration fees and enabling the one-stop shop to publish notices of incorporation.
DB2015	<i>São Tomé and Príncipe</i>	São Tomé and Príncipe made starting a business easier by eliminating the minimum capital requirement for business entities with no need to obtain a commercial license.
DB2015	<i>Togo</i>	Togo made starting a business easier by enabling the one-stop shop to publish notices of incorporation and eliminating the requirement to obtain an economic operator card.
DB2015	<i>Timor-Leste</i>	Timor-Leste made starting a business easier by creating a one-stop shop.
DB2015	<i>Congo, Dem. Rep.</i>	The Democratic Republic of Congo made starting a business easier by creating a one-stop shop.
DB2014	<i>Burundi</i>	Burundi made starting a business easier by allowing registration with the Ministry of Labor at the one-stop shop and by speeding up the process of obtaining the registration certificate.

DB year	Economy	Reform
DB2014	<i>Côte d'Ivoire</i>	Côte d'Ivoire made starting a business easier by creating a one-stop shop, reducing the notary fees and replacing the requirement for a copy of the founders' criminal records with one for a sworn declaration at the time of company registration.
DB2014	<i>Comoros</i>	The Comoros made starting a business easier by eliminating the requirement to deposit the minimum capital in a bank before incorporation.
DB2014	<i>Guinea</i>	Guinea made starting a business easier by enabling the one-stop shop to publish incorporation notices and by reducing the notary fees.
DB2014	<i>Liberia</i>	Liberia made starting a business easier by eliminating the business trade license fees.
DB2014	<i>Togo</i>	Togo made starting a business easier by reducing the time required to register at the one-stop shop and by reducing registration costs.
DB2014	<i>Congo, Dem. Rep.</i>	The Democratic Republic of Congo made starting a business more complicated by increasing the minimum capital requirement. At the same time, it made the process easier by reducing the time and by eliminating the requirement to obtain a certificate confirming the location of the new company's headquarters.
DB2013	<i>Burundi</i>	Burundi made starting a business easier by eliminating the requirements to have company documents notarized, to publish information on new companies in a journal and to register new companies with the Ministry of Trade and Industry.
DB2013	<i>Chad</i>	Chad made starting a business easier by setting up a one-stop shop.
DB2013	<i>Comoros</i>	The Comoros made starting a business easier and less costly by replacing the requirement for a copy of the founders' criminal records with one for a sworn declaration at the time of the company's registration and by reducing the fees to incorporate a company.
DB2013	<i>Congo, Dem. Rep.</i>	The Democratic Republic of Congo made starting a business easier by appointing additional public notaries.
DB2013	<i>Guinea</i>	Guinea made starting a business easier by setting up a one-stop shop for company incorporation and by replacing the requirement for a copy of the founders' criminal records with one for a sworn declaration at the time of the company's registration
DB2013	<i>Togo</i>	Togo made starting a business easier and less costly by reducing incorporation fees, improving the work flow at the one-stop shop for company registration and replacing the requirement for a copy of the founders' criminal records with one for a sworn declaration at the time of the company's

DB year	Economy	Reform
		registration.
DB2012	<i>Solomon Islands</i>	The Solomon Islands made starting a business easier by implementing an online registration process.
DB2012	<i>Yemen, Rep.</i>	Yemen made starting a business more difficult due to the suspension of registration services at the one-stop shop.
DB2012	<i>Timor-Leste</i>	Timor-Leste made starting a business faster by improving the registration process.
DB2012	<i>Congo, Dem. Rep.</i>	The Democratic Republic of Congo made business start-up faster by reducing the time required to complete company registration and obtain a national identification number.
DB2012	<i>Guinea-Bissau</i>	Guinea-Bissau made starting a business easier by establishing a one-stop shop, eliminating the requirement for an operating license and simplifying the method for providing criminal records and publishing the registration notice.
DB2012	<i>Liberia</i>	Liberia made starting a business easier by introducing a one-stop shop.
DB2012	<i>São Tomé and Príncipe</i>	São Tomé and Príncipe made starting a business easier by establishing a one-stop shop, eliminating the requirement for an operating license for general commercial companies and simplifying publication requirements.
DB2012	<i>Côte d'Ivoire</i>	Côte d'Ivoire made starting a business easier by reorganizing the court clerk's office where entrepreneurs file their company documents.
DB2012	<i>Comoros</i>	Comoros made the process of starting a business more difficult by increasing the minimum capital requirement.
DB2012	<i>Central African Republic</i>	The Central African Republic made starting a business easier by reducing business registration fees and by replacing the requirement for a copy of the founders' criminal records with one for a sworn declaration at the time of the company's registration.
DB2012	<i>Chad</i>	Chad made starting a business easier by eliminating the requirement for a medical certificate and by replacing the requirement for a copy of the founders' criminal records with one for a sworn declaration at the time of the company's registration.
DB2011	<i>Congo, Dem. Rep.</i>	The Democratic Republic of Congo eased business start-up by eliminating procedures, including the company seal.
DB2011	<i>São Tomé and Príncipe</i>	São Tomé and Príncipe made starting a business more difficult by introducing a minimum capital requirement for limited liability companies.
DB2011	<i>Haiti</i>	Haiti eased business start-up by eliminating the review by the president's or the prime minister's office of the incorporation act submitted for publication.

DB year	Economy	Reform
DB2010	<i>Liberia</i>	Liberia made starting a business easier by eliminating the requirement to obtain an environmental impact assessment when forming a general trading company.
DB2010	<i>Guinea-Bissau</i>	Guinea-Bissau simplified business start-up by making the company name search electronic, introducing some computers and flash drives and reducing the registration fees.
DB2010	<i>Sierra Leone</i>	Sierra Leone made starting a business easier by establishing a one-stop shop for company registration.
DB2010	<i>Central African Republic</i>	The Central African Republic simplified business start-up by establishing a one-stop shop (Guichet Unique de Formalité des Entreprises), which merged several procedures into one.
DB2010	<i>Togo</i>	Togo made starting a business easier and less costly by setting up a one-stop shop and thereby making it possible to consolidate several procedures.
DB2010	<i>Yemen, Rep.</i>	The Republic of Yemen made starting a business easier by eliminating the requirement to obtain a bank account certificate for company registration.

Note: For information on reforms in earlier years (back to DB2005), see the *Doing Business* reports for these years, available at <http://www.doingbusiness.org>.

Source: *Doing Business* database.

DEALING WITH CONSTRUCTION PERMITS

Regulation of construction is critical to protect the public. But it needs to be efficient, to avoid excessive constraints on a sector that plays an important part in every economy. Where complying with building regulations is excessively costly in time and money, many builders opt out. They may pay bribes to pass inspections or simply build illegally, leading to hazardous construction that puts public safety at risk. Where compliance is simple, straightforward and inexpensive, everyone is better off.

What do the indicators cover?

Doing Business records all procedures required for a business in the construction industry to build a warehouse along with the time and cost to complete each procedure. In addition, this year Doing Business introduces a new measure, the building quality control index, evaluating the quality of building regulations, the strength of quality control and safety mechanisms, liability and insurance regimes, and professional certification requirements.

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.

To make the data comparable across economies, several assumptions about the construction company, the warehouse project and the utility connections are used.

Assumptions about the construction company

The construction company (BuildCo):

- Is a limited liability company (or its legal equivalent).
- Operates in the economy's largest business city. For 11 economies the data are also collected for the second largest business city.
- Is 100% domestically and privately owned with five owners, none of whom is a legal entity.
- Is fully licensed and insured to carry out construction projects, such as building warehouses.

WHAT 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 and selling the warehouse after its completion

Time required to complete each procedure (calendar days)

Does not include time spent gathering information

Each procedure starts on a separate day. Procedures that can be fully completed online are recorded as ½ day

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

Building quality control index (0-15)

Sum of the scores of six component indices:

Quality of building regulations (0-2)

Quality control before construction (0-1)

Quality control during construction (0-3)

Quality control after construction (0-3)

Liability and insurance regimes (0-2)

Professional certifications (0-4)

The construction company (BuildCo) (*continued*):

- 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 one employee who is a licensed architect or engineer and registered with the local association of architects or engineers. BuildCo is not assumed to have any other employees who are technical or licensed experts, such as geological or topographical experts.
- 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 and will sell the warehouse upon its completion.
- Is valued at 50 times income per capita.
- Will be a new construction (there was no previous construction on the land), with no trees, natural water sources, natural reserves or historical monuments of any kind on the plot.
- 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.
- 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 two stories, both above ground, with a total constructed area of approximately 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 approximately 929 square meters (10,000 square feet) that is 100% owned by BuildCo and is accurately registered in the cadastre and land registry.

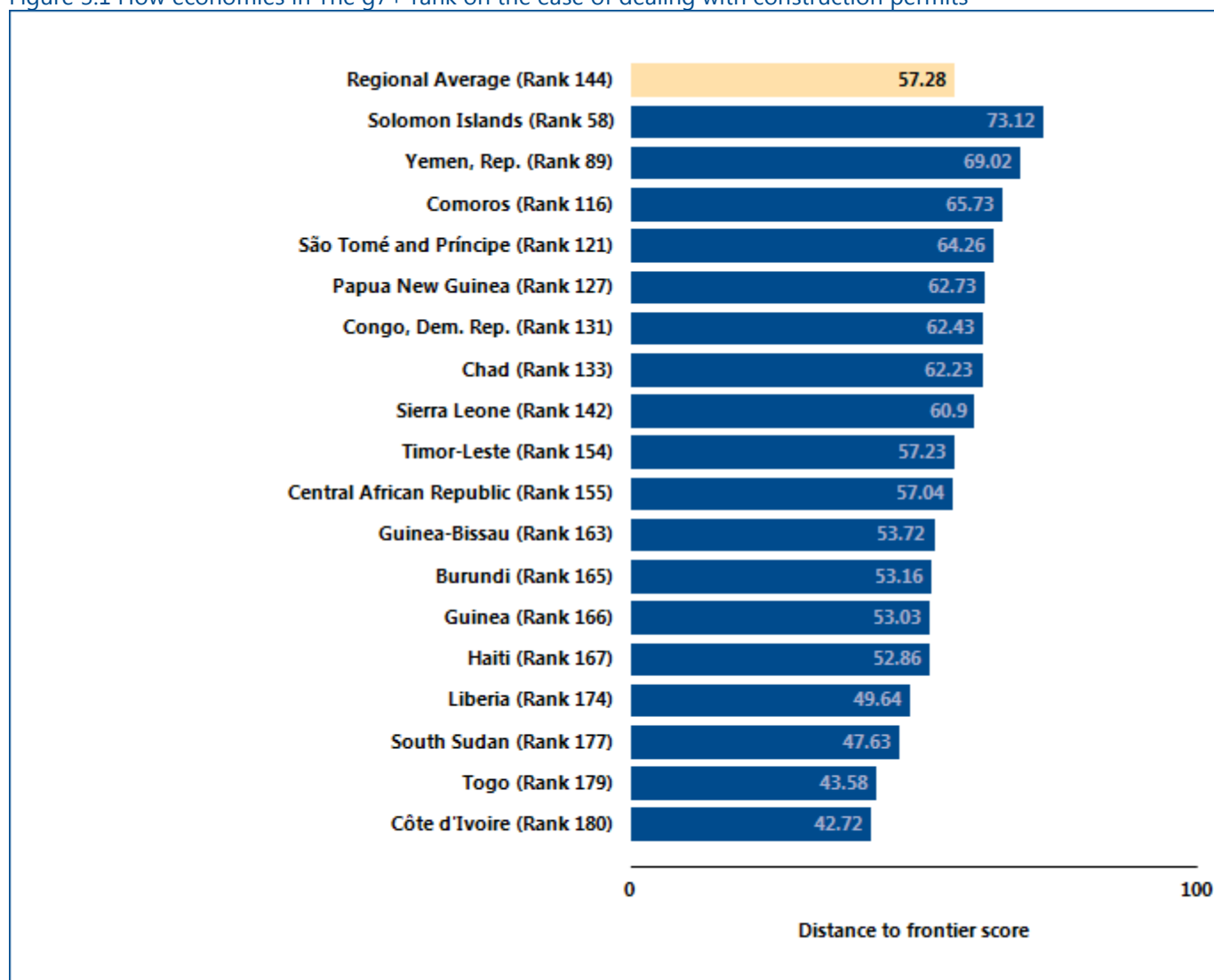
DEALING WITH CONSTRUCTION PERMITS

Where do the region's economies stand today?

How easy it is for entrepreneurs in economies in The g7+ to legally build a warehouse? The global rankings of these economies on the ease of dealing with

construction permits suggest an answer (figure 3.1). The average ranking of the region and comparator regions provide a useful benchmark.

Figure 3.1 How economies in The g7+ rank on the ease of dealing with construction permits



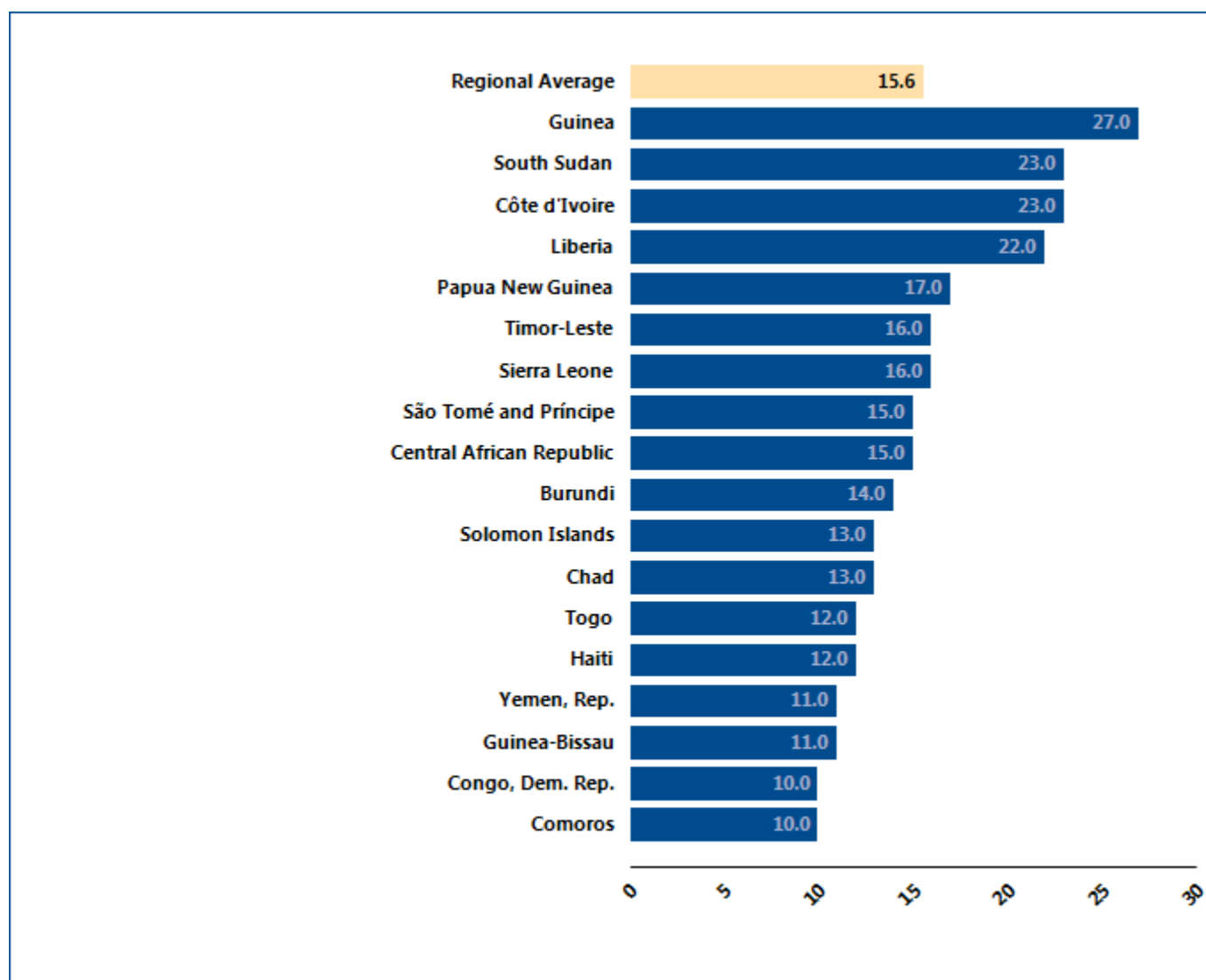
Source: Doing Business database.

DEALING WITH CONSTRUCTION PERMITS

The indicators underlying the rankings may be more revealing. Data collected by *Doing Business* show what it takes to comply with formalities to build a warehouse in each economy in the region: the number of procedures,

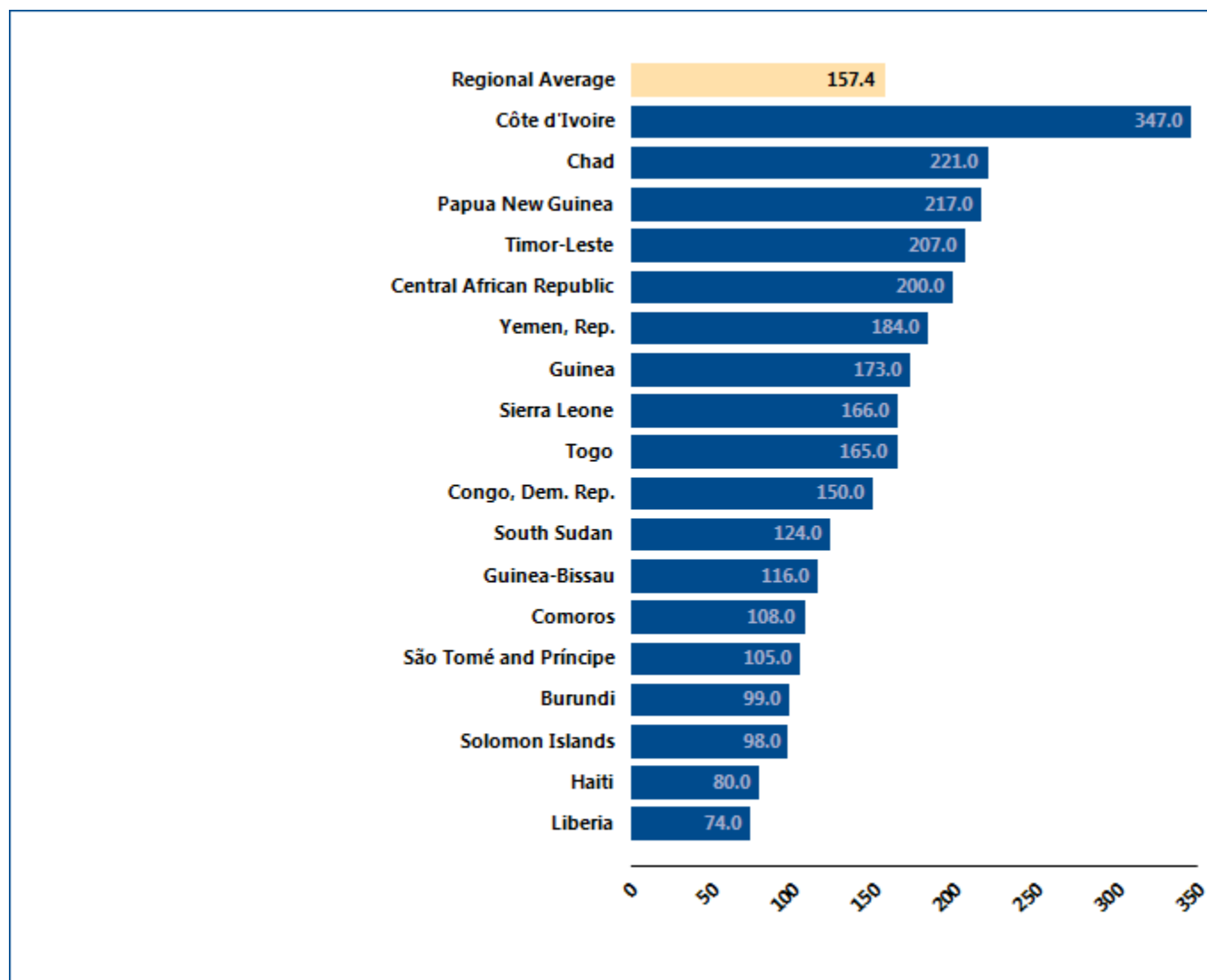
the time and the cost (figure 3.2). Comparing these indicators across the region and with averages both for the region and for comparator regions can provide useful insights.

Figure 3.2 What it takes to comply with formalities to build a warehouse in economies in The g7+
Procedures (number)



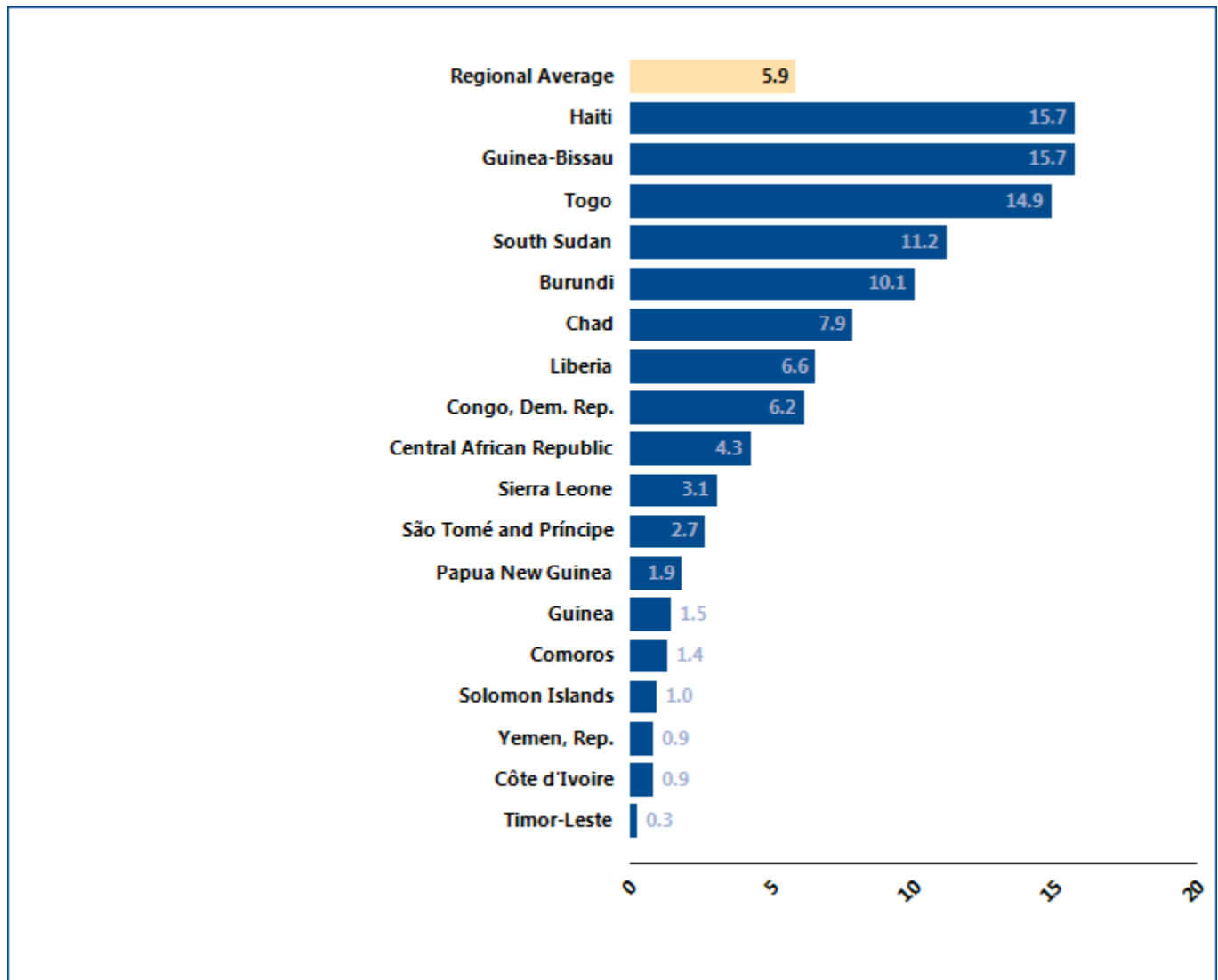
DEALING WITH CONSTRUCTION PERMITS

Time (days)



DEALING WITH CONSTRUCTION PERMITS

Cost (% of warehouse value)

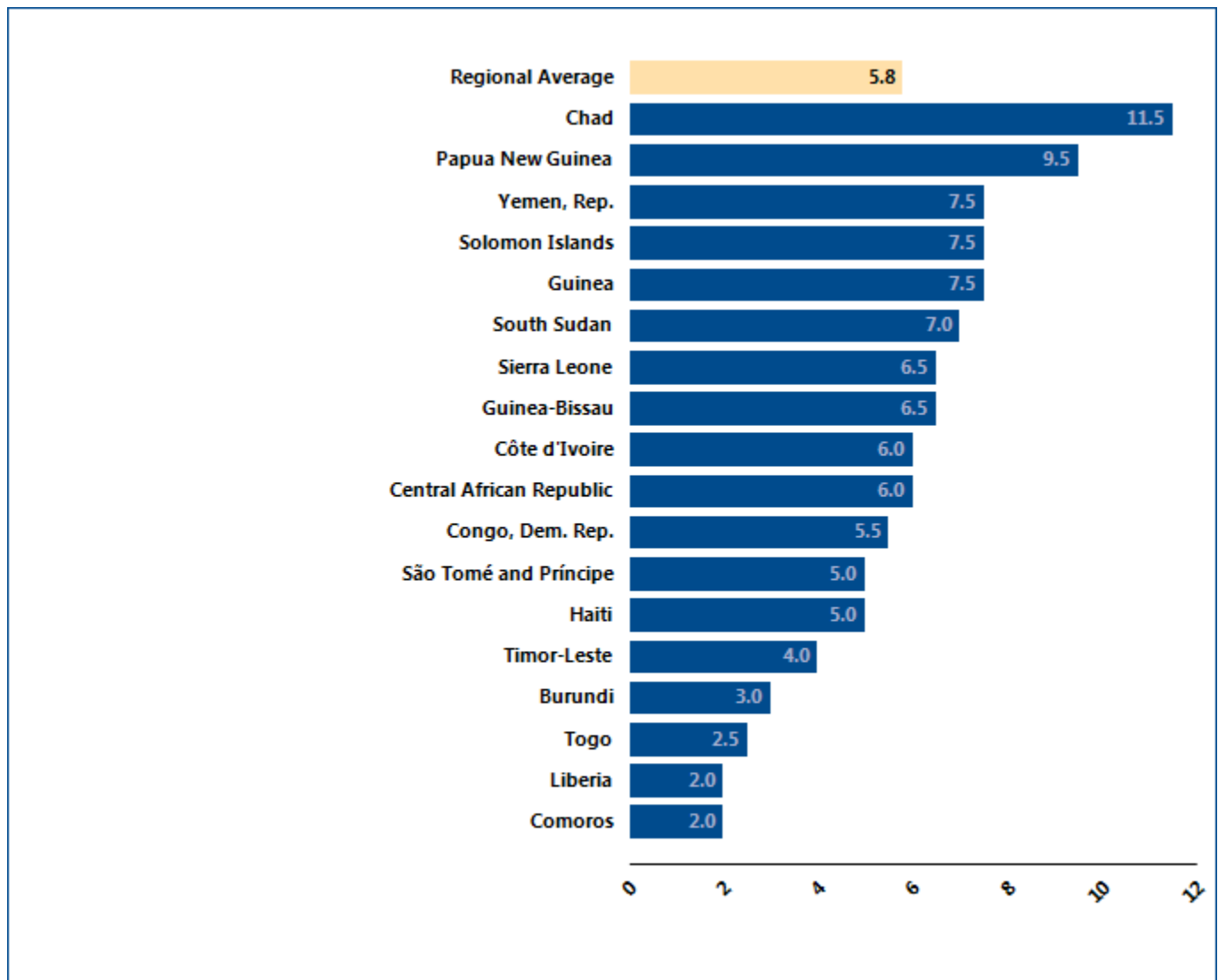


* Indicates a “no practice” mark. If an economy has no laws or regulations covering a specific area—for example, insolvency—it receives a “no practice” mark. Similarly, an economy receives a “no practice” or “not possible” mark if regulation exists but is never used in practice or if a competing regulation prohibits such practice. Either way, a “no practice” mark puts the economy at the bottom of the ranking on the relevant indicator.

Source: *Doing Business* database.

DEALING WITH CONSTRUCTION PERMITS

Building Quality Control Index (0-15)



* Indicates a “no practice” mark. If an economy has no laws or regulations covering a specific area—for example, insolvency—it receives a “no practice” mark. Similarly, an economy receives a “no practice” or “not possible” mark if regulation exists but is never used in practice or if a competing regulation prohibits such practice. Either way, a “no practice” mark puts the economy at the bottom of the ranking on the relevant indicator.

Note: The index ranges from 0 to 15, with higher values indicating better quality control and safety mechanisms in the construction permitting system. The indicator is based on the same case study assumptions as the measures of efficiency.

Source: *Doing Business* database.

DEALING WITH CONSTRUCTION PERMITS

What are the changes over time?

Smart regulation ensures that standards are met while making compliance easy and accessible to all. Coherent and transparent rules, efficient processes and adequate allocation of resources are especially important in sectors where safety is at stake. Construction is one of them. In an effort to ensure building safety while keeping compliance costs reasonable, governments around the

world have worked on consolidating permitting requirements. What construction permitting reforms has *Doing Business* recorded in The g7+ (table 3.1)?

Table 3.1 How have economies in The g7+ made dealing with construction permits easier—or not?
By *Doing Business* report year DB2011 to DB2016

DB year	Economy	Reform
DB2016	<i>Congo, Dem. Rep.</i>	The Democratic Republic of Congo made dealing with construction permits less expensive by halving the cost to obtain a building permit.
DB2015	<i>Congo, Dem. Rep.</i>	The Democratic Republic of Congo made dealing with construction permits more costly by increasing the building permit fee.
DB2014	<i>Burundi</i>	Burundi made dealing with construction permits easier by establishing a one-stop shop for obtaining building permits and utility connections.
DB2014	<i>Côte d'Ivoire</i>	Côte d'Ivoire reduced the time required for obtaining a building permit by streamlining procedures at the onestop shop (Service du Guichet Unique du Foncier et de l'Habitat).
DB2014	<i>Togo</i>	Togo made dealing with construction permits easier by improving internal operations at the City Hall of Lomé.
DB2013	<i>Burundi</i>	Burundi made obtaining a construction permit easier by eliminating the requirement for a clearance from the Ministry of Health and reducing the cost of the geotechnical study.
DB2013	<i>Central African Republic</i>	The Central African Republic made obtaining a construction permit more costly.
DB2013	<i>Guinea</i>	Guinea made obtaining a building permit less expensive by clarifying the method for calculating the cost.
DB2013	<i>São Tomé and Príncipe</i>	São Tomé and Príncipe made obtaining a construction permit more expensive by increasing the fees.

DB year	Economy	Reform
DB2012	<i>Haiti</i>	Haiti made dealing with construction permits costlier by increasing the fees to obtain a building permit.
DB2012	<i>São Tomé and Príncipe</i>	São Tomé and Príncipe made dealing with construction permits easier by reducing the time required to process building permit applications.
DB2012	<i>Congo, Dem. Rep.</i>	The Democratic Republic of Congo reduced the administrative costs of obtaining a construction permit.
DB2012	<i>Burundi</i>	Burundi made dealing with construction permits easier by reducing the cost to obtain a geotechnical study.
DB2011	<i>Côte d'Ivoire</i>	Côte d'Ivoire eased construction permitting by eliminating the need to obtain a preliminary approval.
DB2011	<i>Guinea</i>	Guinea increased the cost of obtaining a building permit.
DB2011	<i>Congo, Dem. Rep.</i>	Dealing with construction permits became easier in the Democratic Republic of Congo thanks to a reduction in the cost of a building permit from 1% of the estimated construction cost to 0.6% and a time limit for issuing building permits.
DB2011	<i>Sierra Leone</i>	Sierra Leone made dealing with construction permits easier by streamlining the issuance of location clearances and building permits.
DB2010	<i>Solomon Islands</i>	The cost of dealing with construction permits increased significantly in the Solomon Islands as a result of fee increases and high prices for construction materials.
DB2010	<i>Liberia</i>	Liberia made dealing with construction permits easier by reducing the building permit fee and eliminating the requirement to obtain a tax waiver certificate before submitting a building permit application. In addition, the cost of obtaining a power generator declined, and with the reopening of Libtelco fixed telephone connections became more readily available.

Note: For information on reforms in earlier years (back to DB2005), see the *Doing Business* reports for these years, available at <http://www.doingbusiness.org>.

Source: *Doing Business* database.

GETTING ELECTRICITY

Access to reliable and affordable electricity is vital for businesses. To counter weak electricity supply, many firms in developing economies have to rely on self-supply, often at a prohibitively high cost. Whether electricity is reliably available or not, the first step for a customer is always to gain access by obtaining a connection.

What do the indicators cover?

Doing Business records all procedures required for a local business to obtain a permanent electricity connection and supply for a standardized warehouse, as well as the time and cost to complete them. These procedures include applications and contracts with electricity utilities, clearances from other agencies and the external and final connection works. In addition, this year Doing Business adds two new measures: the reliability of supply and transparency of tariffs index (included in the aggregate distance to frontier score and ranking on the ease of doing business) and the price of electricity (omitted from these aggregate measures). 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 frontier scores for each of the component indicators. To make the data comparable across economies, several assumptions 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.
- 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), and 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.

WHAT 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
- Excludes value added tax

The reliability of supply and transparency of tariffs index

- Sum of the scores of six component indices:
 - Duration and frequency of outages
 - Tools to monitor power outages
 - Tools to restore power supply
 - Regulatory monitoring of utilities' performance
 - Financial deterrents aimed at limiting outages
 - Transparency and accessibility of tariffs

Price of electricity (cents per kilowatt-hour)*

Price based on monthly bill for commercial warehouse in case study

**Price of electricity is not included in the calculation of distance to frontier nor ease of doing business ranking*

The warehouse (*continued*):

- Has two 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 goods.

Assumptions about the electricity connection

The electricity connection:

- Is a permanent one.
- Is a three-phase, four-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 26,880 kilowatt-hours (kWh).
- Does not involve work to install the internal electrical wiring. This has already been completed, up to and including the customer's service panel or switchboard and installation of the meter base.

Assumptions about the monthly consumption

- It is assumed that the warehouse operates 8 hours a day for 30 days a month, with equipment utilized at 80% of capacity on average, and that there are no electricity cuts (assumed for simplicity). The subscribed capacity of the warehouse is 140 kVA, with a power factor of 1 (1 kVA = 1 kW). The monthly energy consumption is therefore 26,880 kWh, and the hourly consumption 112 kWh (26,880 kWh/30 days/8 hours).
- If multiple electricity suppliers exist, the warehouse is served by the cheapest supplier.
- Tariffs effective in March of the current year are used for calculation of the price of electricity for the warehouse.

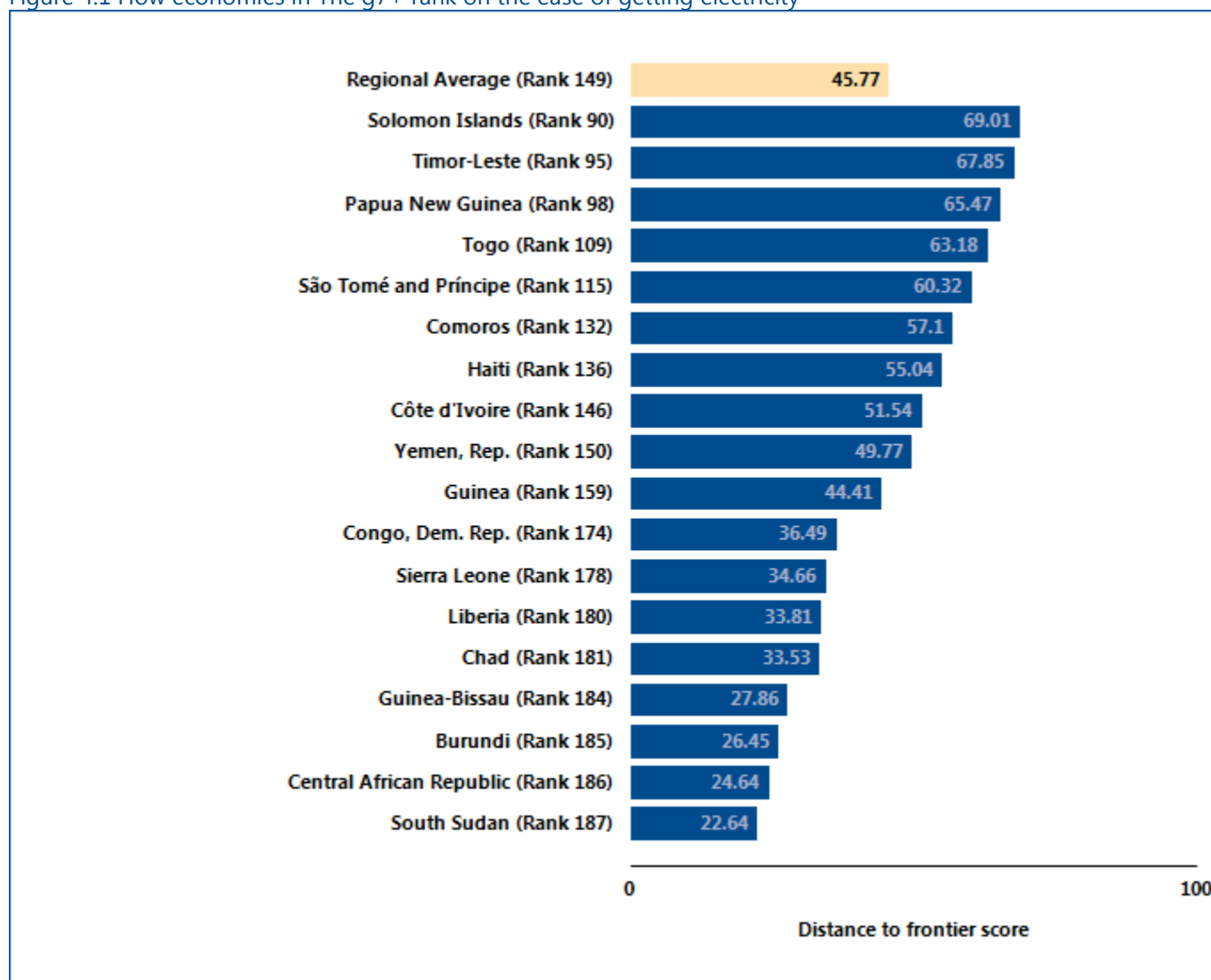
GETTING ELECTRICITY

Where do the region's economies stand today?

How easy is it for entrepreneurs in economies in The g7+ to connect a warehouse to electricity? The global rankings of these economies on the ease of getting electricity suggest an answer (figure 4.1). The average

ranking of the region and comparator regions provide a useful benchmark.

Figure 4.1 How economies in The g7+ rank on the ease of getting electricity



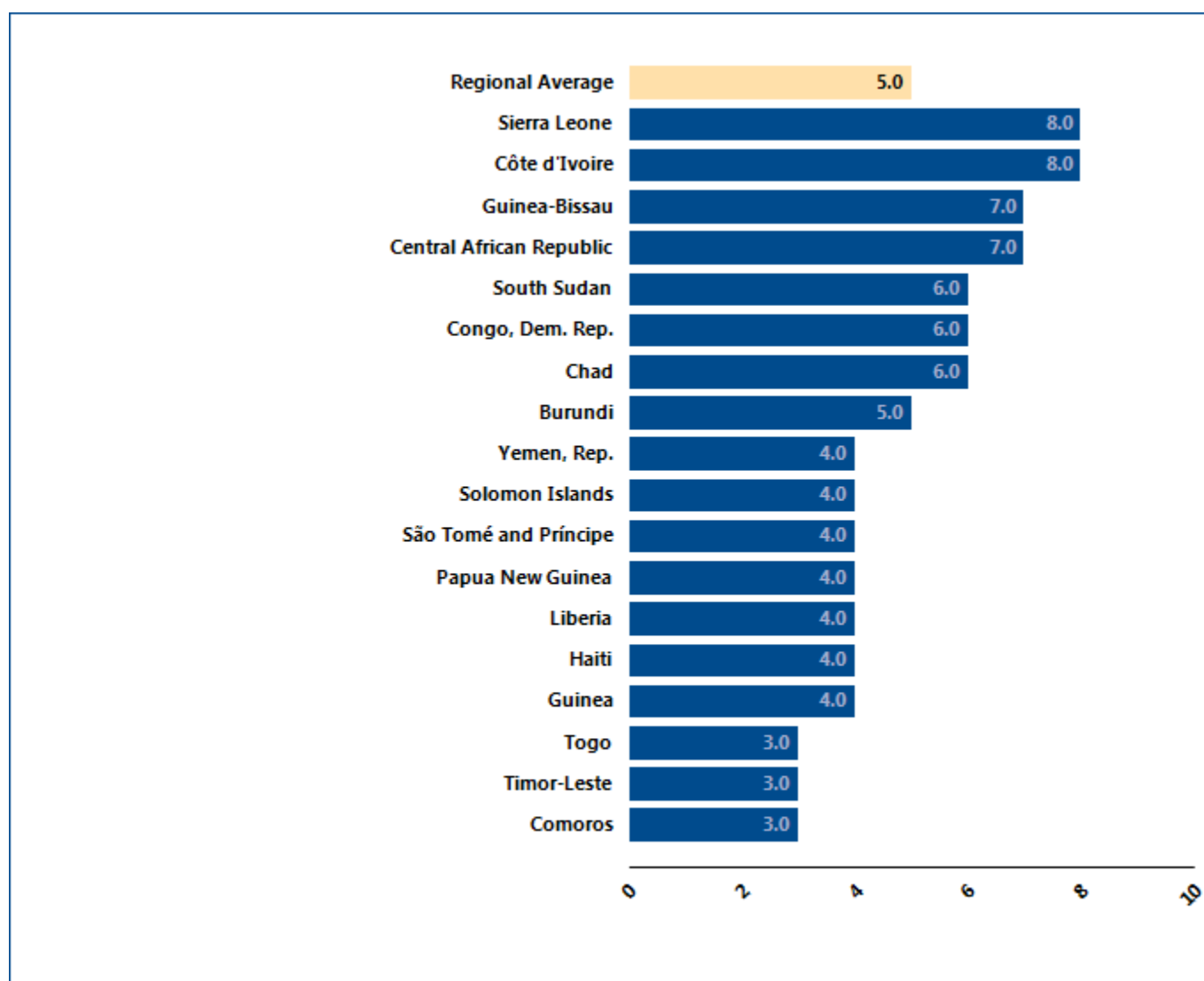
Source: Doing Business database.

GETTING ELECTRICITY

The indicators underlying the rankings may be more revealing. Data collected by *Doing Business* show what it takes to get a new electricity connection in each economy in the region: the number of procedures, the

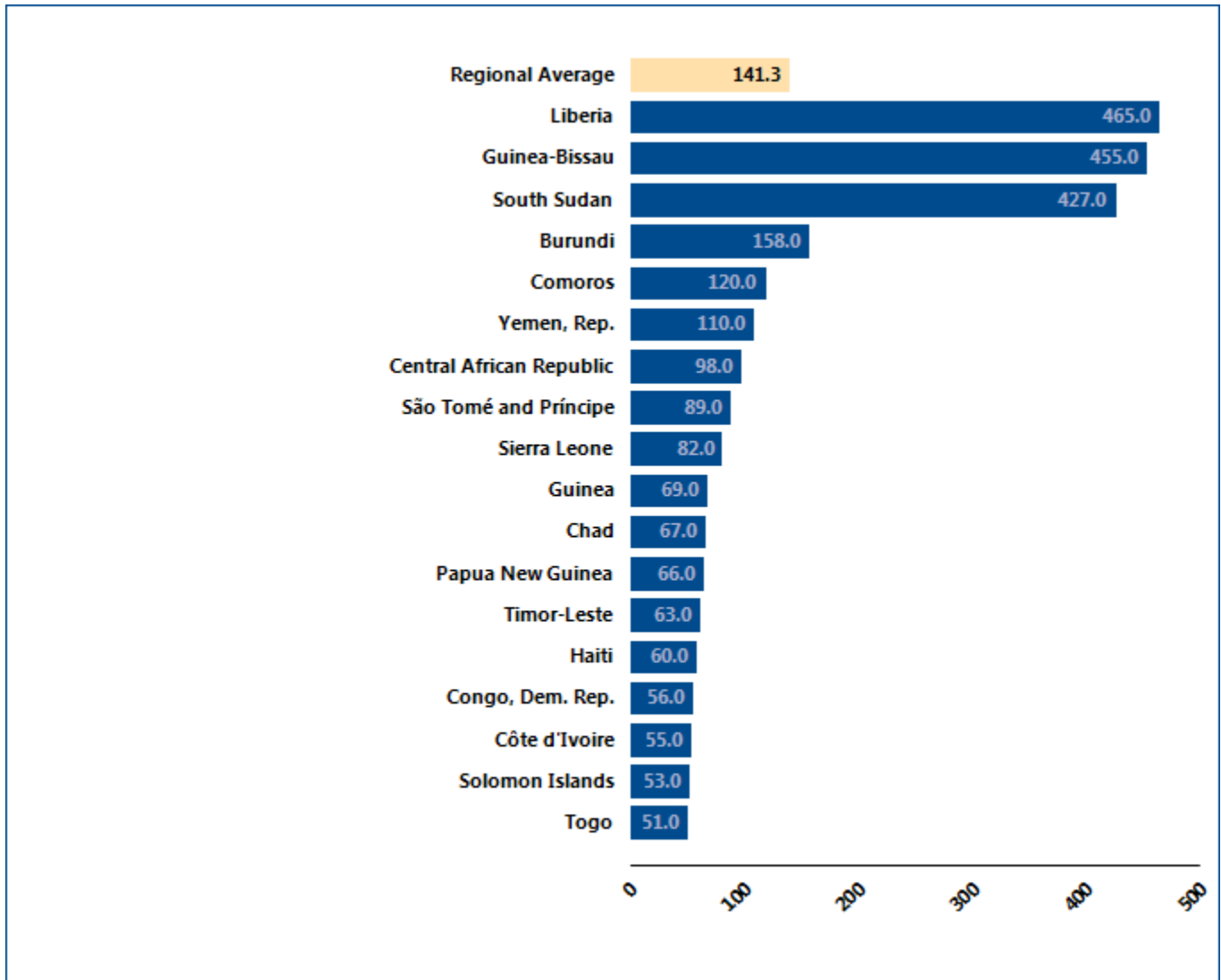
time and the cost (figure 4.2). Comparing these indicators across the region and with averages both for the region and for comparator regions can provide useful insights.

Figure 4.2 What it takes to get an electricity connection in economies in The g7+
Procedures (number)



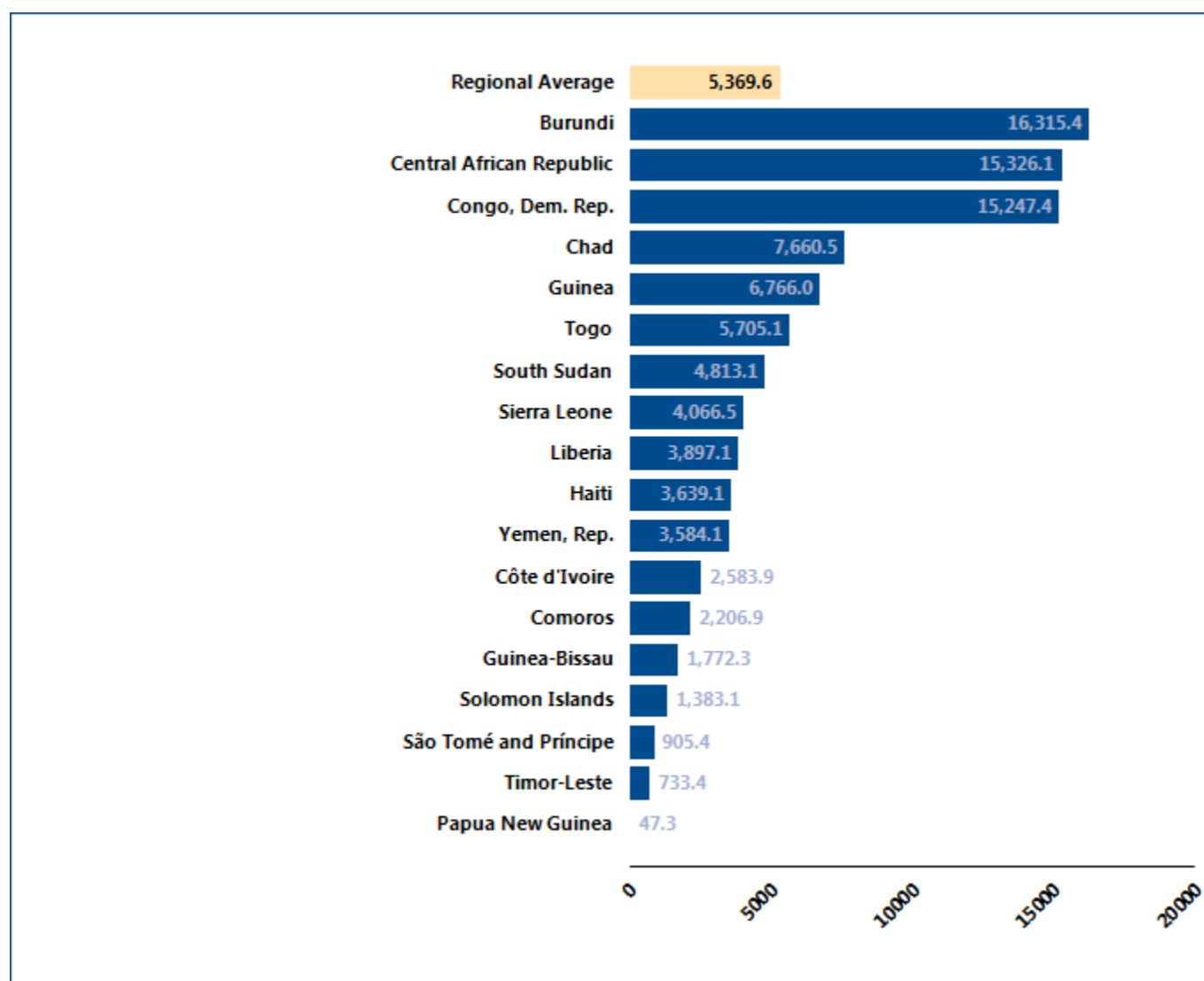
GETTING ELECTRICITY

Time (days)



GETTING ELECTRICITY

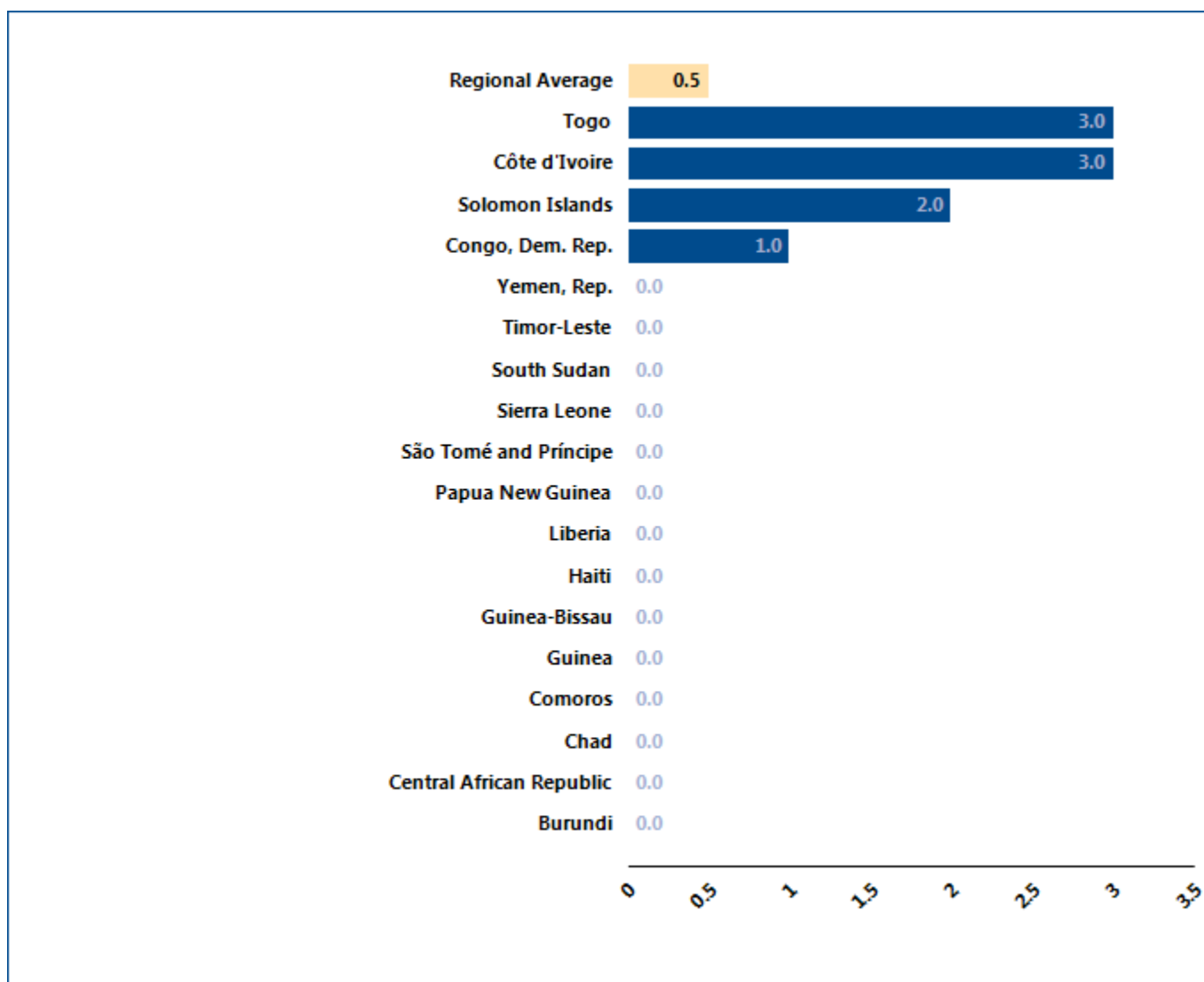
Cost (% of income per capita)



Source: Doing Business database.

GETTING ELECTRICITY

Reliability of supply and transparency of tariff index (0-8)



Source: *Doing Business* database.

Note: The index ranges from 0 to 8, with higher values indicating greater reliability of electricity supply and greater transparency of tariffs.

GETTING ELECTRICITY

What are the changes over time?

Obtaining an electricity connection is essential to enable a business to conduct its most basic operations. In many economies the connection process is complicated by the multiple laws and regulations involved—covering service quality, general safety, technical standards, procurement practices and internal wiring installations. In an effort to

ensure safety in the connection process while keeping connection costs reasonable, governments around the world have worked to consolidate requirements for obtaining an electricity connection. What reforms in getting electricity has *Doing Business* recorded in The g7+ (table 4.1)?

Table 4.1 How have economies in The g7+ made getting electricity easier—or not?
By *Doing Business* report year DB2011 to DB2016

DB year	Economy	Reform
DB2016	<i>Togo</i>	The utility in Togo reduced the time and procedures for getting an electricity connection through several initiatives, including by creating a single window enabling customers to pay all fees at once.
DB2015	<i>Solomon Islands</i>	The Solomon Islands made getting electricity easier by improving procurement practices for the materials needed to establish new connections.
DB2015	<i>Sierra Leone</i>	Sierra Leone made getting electricity easier by eliminating the need for customers to submit an application letter inquiring about a new connection before submitting an application—and made the process faster by improving staffing at the utility.
DB2015	<i>Congo, Dem. Rep.</i>	In the Democratic Republic of Congo the utility in Kinshasa made getting electricity easier by reducing the number of approvals required for new connections and reducing the burden of the security deposit.
DB2014	<i>Burundi</i>	Burundi made getting electricity easier by eliminating the electricity utility's monopoly on the sale of materials needed for new connections and by dropping the processing fee for new connections.
DB2013	<i>Guinea</i>	Guinea made getting electricity easier by simplifying the process for connecting new customers to the distribution network.
DB2013	<i>Liberia</i>	In Liberia obtaining an electricity connection became easier thanks to the adoption of better procurement practices by the Liberia Electricity Corporation.

Source: *Doing Business* database.

REGISTERING PROPERTY

Ensuring formal property rights is fundamental. Effective administration of land is part of that. If formal property transfer is too costly or complicated, formal titles might go informal again. And where property is informal or poorly administered, it has little chance of being accepted as collateral for loans—limiting access to finance.

What do the indicators cover?

Doing Business records the full sequence of procedures necessary for a business to purchase property from another business and transfer the property title to the buyer's name. The transaction is considered complete when it is opposable to third parties and when the buyer can use the property, use it as collateral for a bank loan or resell it. In addition, this year *Doing Business* adds a new measure to the set of registering property indicators, an index of the quality of the land administration system in each economy. 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. To make the data comparable across economies, several assumptions about the parties to the transaction, the property and the procedures are used.

The parties (buyer and seller):

- Are limited liability companies, 100% domestically and privately owned and perform general commercial activities and are located in the economy's largest business city².
- Have 50 employees each, all of whom are nationals.

The property (fully owned by the seller):

- Has a value of 50 times income per capita. The sale price equals the value and entire property will be transferred.
- Is registered in the land registry or cadastre, or both, and is free of title disputes.

WHAT THE REGISTERING PROPERTY INDICATORS MEASURE

Procedures to legally transfer title on immovable property (number)

Preregistration (for example, checking for liens, notarizing sales agreement, paying property transfer taxes)

Registration in the economy's largest business city²

Postregistration (for example, filing title with the municipality)

Time required to complete each procedure (calendar days)

Does not include time spent gathering information

Each procedure starts on a separate day. Procedures that can be fully completed online are recorded as ½ day.

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

Quality of land administration index (0-30)

- Is located in a periurban commercial zone, and no rezoning is required.
- Has no mortgages attached, has been under the same ownership for the past 10 years.
- Consists of 557.4 square meters (6,000 square feet) of land and a 10-year-old, 2-story warehouse of 929 square meters (10,000 square feet). The warehouse is in good condition and complies with all safety standards, building codes and legal requirements. There is no heating system.

² For the 11 economies with a population of more than 100 million, data for a second city have been added.

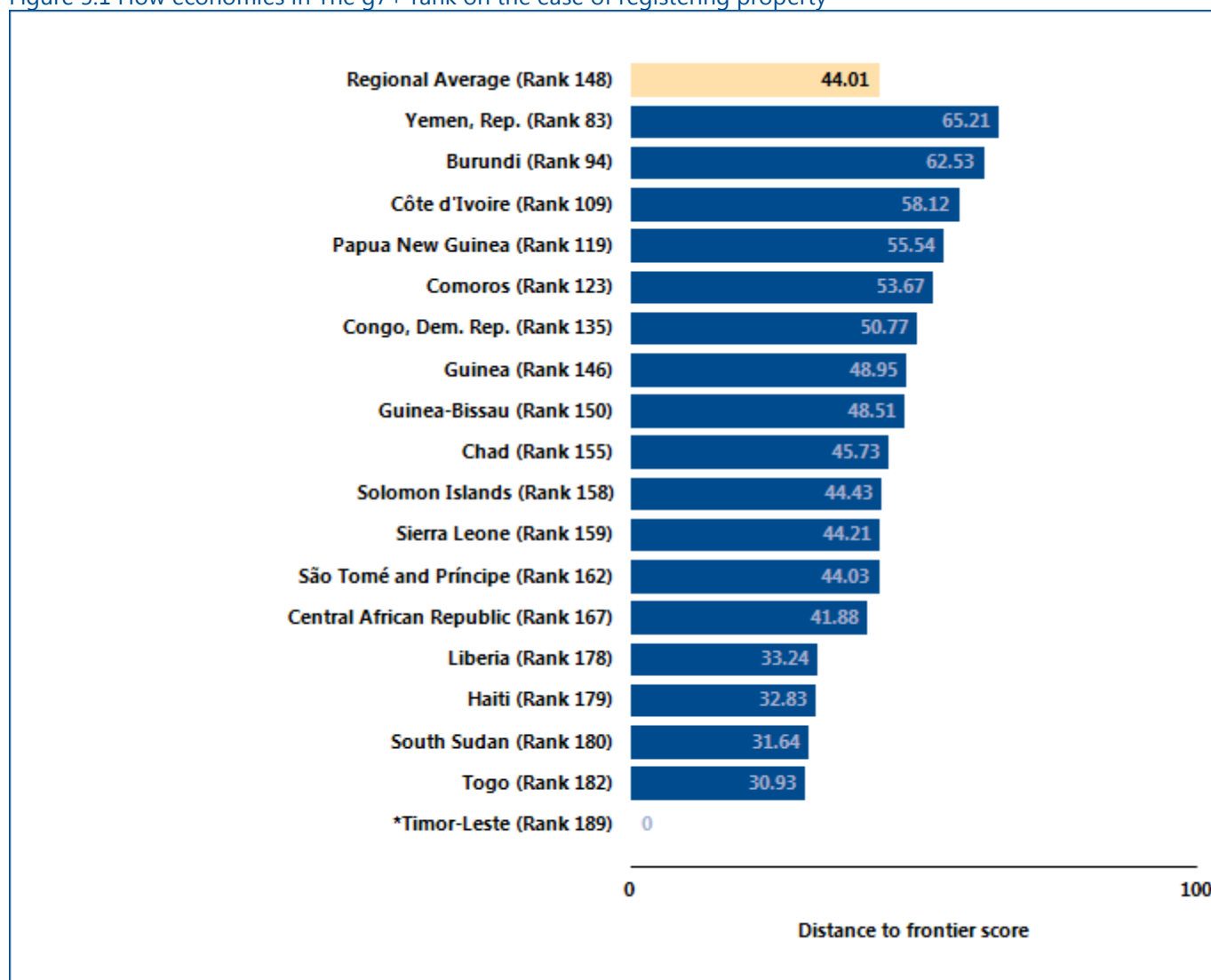
REGISTERING PROPERTY

Where do the region's economies stand today?

How easy is it for entrepreneurs in economies in The g7+ to transfer property? The global rankings of these economies on the ease of registering property suggest

an answer (figure 5.1). The average ranking of the region and comparator regions provide a useful benchmark.

Figure 5.1 How economies in The g7+ rank on the ease of registering property



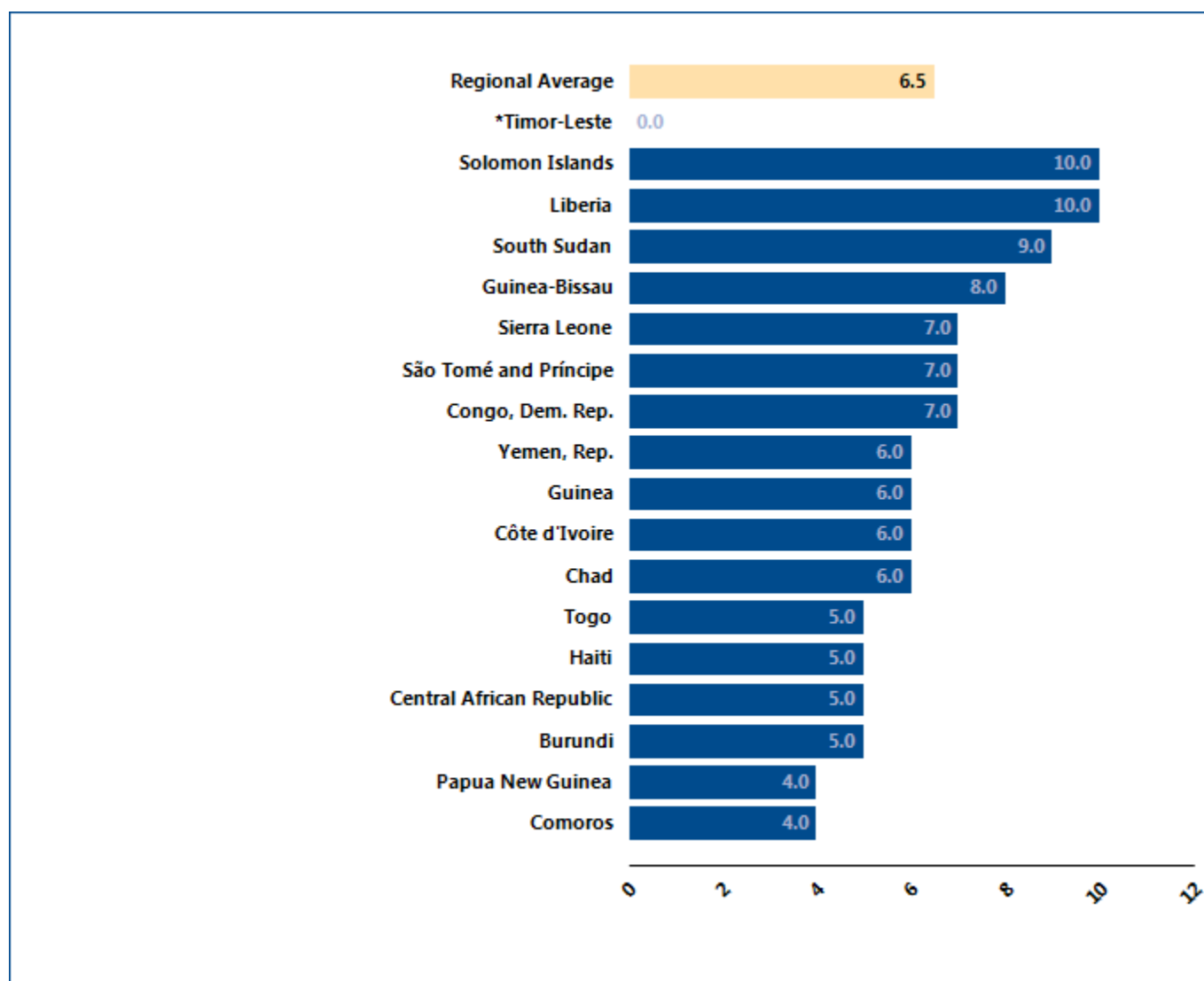
Source: Doing Business database.

REGISTERING PROPERTY

The indicators underlying the rankings may be more revealing. Data collected by *Doing Business* show what it takes to complete a property transfer in each economy in the region: the number of procedures, the

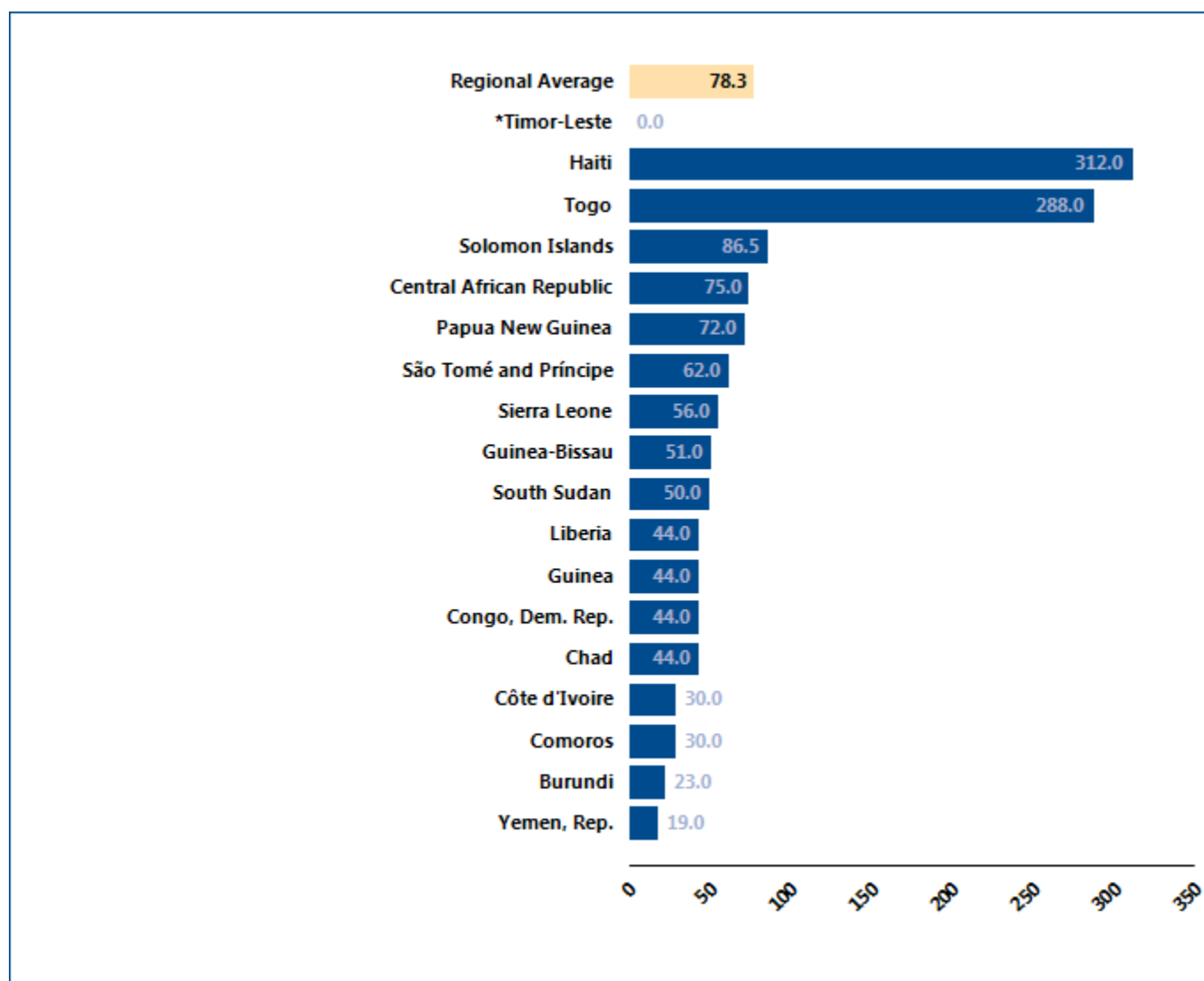
time and the cost (figure 5.2). Comparing these indicators across the region and with averages both for the region and for comparator regions can provide useful insights.

Figure 5.2 What it takes to register property in economies in The g7+
Procedures (number)



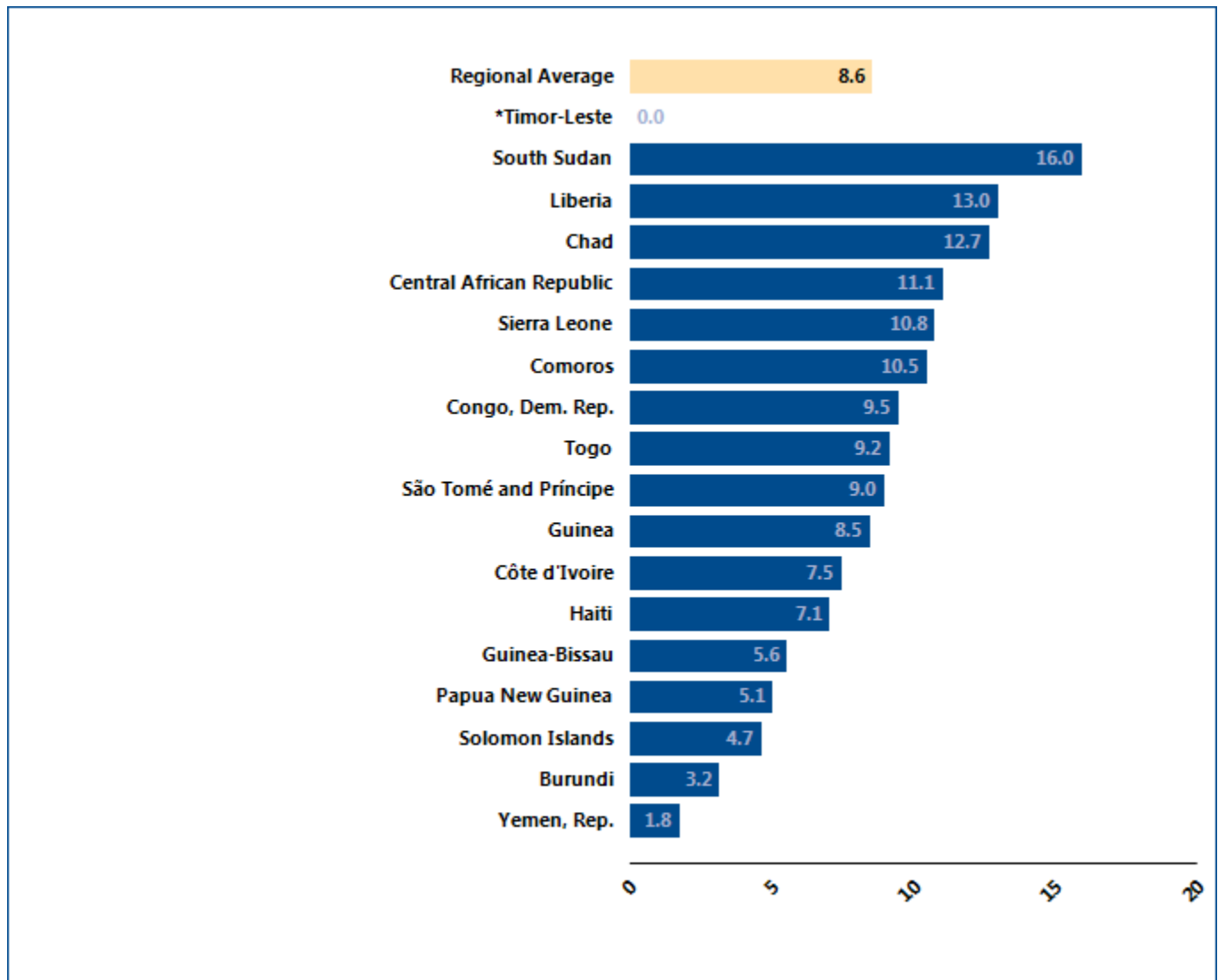
REGISTERING PROPERTY

Time (days)



REGISTERING PROPERTY

Cost (% of property value)

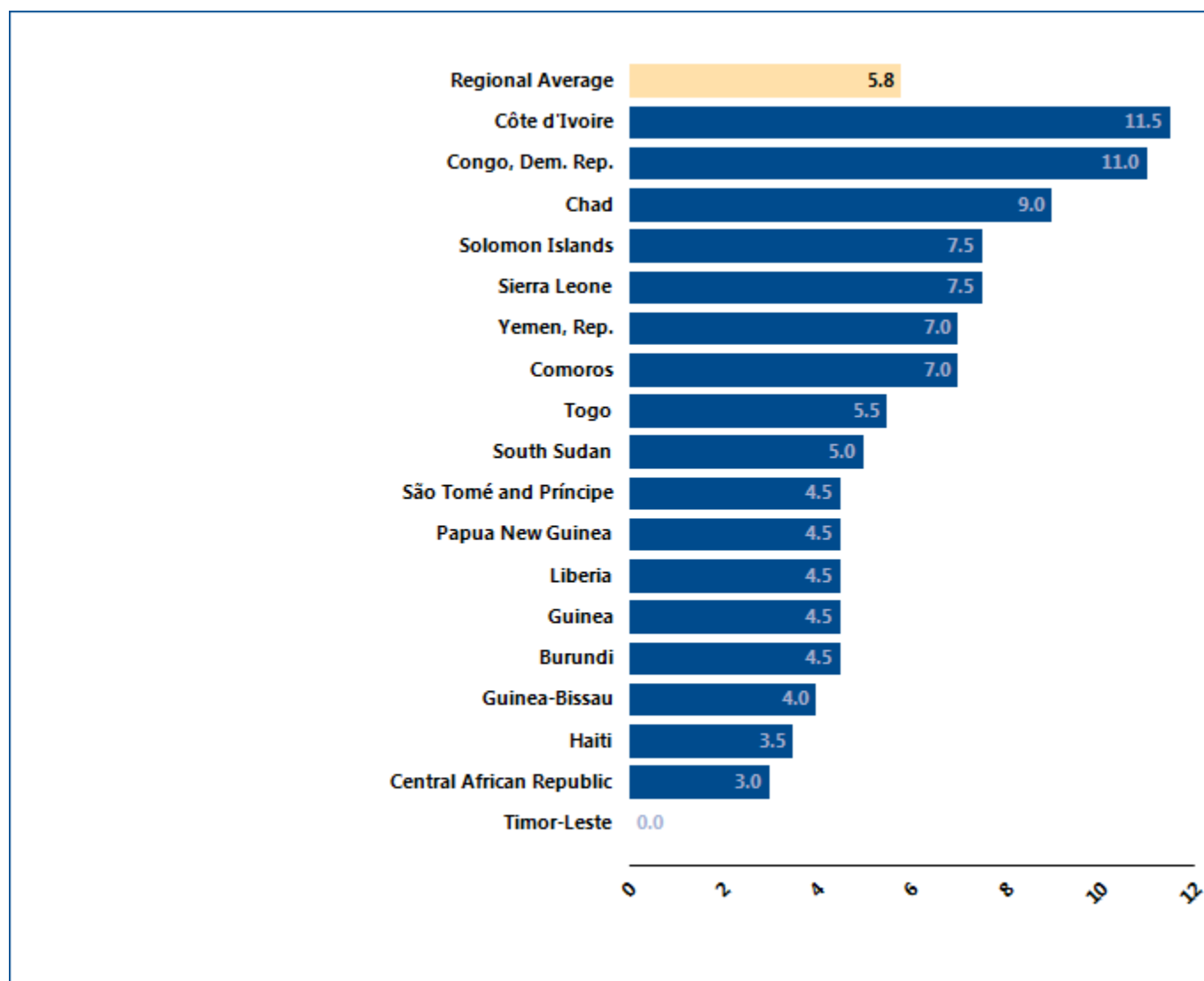


* Indicates a “no practice” mark. If an economy has no laws or regulations covering a specific area—for example, insolvency—it receives a “no practice” mark. Similarly, an economy receives a “no practice” or “not possible” mark if regulation exists but is never used in practice or if a competing regulation prohibits such practice. Either way, a “no practice” mark puts the economy at the bottom of the ranking on the relevant indicator.

Source: *Doing Business* database.

REGISTERING PROPERTY

Quality of Land Administration Index (0-30)



* Indicates a “no practice” mark. If an economy has no laws or regulations covering a specific area—for example, insolvency—it receives a “no practice” mark. Similarly, an economy receives a “no practice” or “not possible” mark if regulation exists but is never used in practice or if a competing regulation prohibits such practice. Either way, a “no practice” mark puts the economy at the bottom of the ranking on the relevant indicator.

Source: *Doing Business* database.

Note: The index ranges from 0 to 30, with higher values indicating better quality of the land administration system.

REGISTERING PROPERTY

What are the changes over time?

Economies worldwide have been making it easier for entrepreneurs to register and transfer property—such as by computerizing land registries, introducing time limits for procedures and setting low fixed fees. Many have cut the time required substantially—enabling

buyers to use or mortgage their property earlier. What property registration reforms has *Doing Business* recorded in The g7+ (table 5.1)?

Table 5.1 How have economies in The g7+ made registering property easier—or not?
By *Doing Business* report year DB2011 to DB2016

DB year	Economy	Reform
DB2016	<i>Côte d'Ivoire</i>	Côte d'Ivoire made transferring property less costly by lowering the property transfer tax rate.
DB2016	<i>Guinea-Bissau</i>	Guinea-Bissau made transferring property easier by lowering the property registration tax.
DB2016	<i>Chad</i>	Chad made transferring property less costly by lowering the property transfer tax.
DB2015	<i>Côte d'Ivoire</i>	Côte d'Ivoire made transferring property easier by digitizing its land registry system and lowering the property registration tax.
DB2015	<i>Guinea</i>	Guinea made registering property easier by reorganizing the records at the land registry and reducing the notary fees.
DB2015	<i>Sierra Leone</i>	Sierra Leone made registering property easier by introducing a fast-track procedure.
DB2015	<i>Togo</i>	Togo made transferring property easier by lowering the property registration tax rate.
DB2014	<i>Burundi</i>	Burundi made transferring property easier by creating a one-stop shop for property registration.
DB2014	<i>Côte d'Ivoire</i>	Côte d'Ivoire made transferring property easier by streamlining procedures and reducing the property transfer tax.
DB2014	<i>Guinea</i>	Guinea made transferring property easier by reducing the

DB year	Economy	Reform
		property transfer tax.
DB2014	<i>Guinea-Bissau</i>	Guinea-Bissau made transferring property easier by increasing the number of notaries dealing with property transactions.
DB2014	<i>Liberia</i>	Liberia made transferring property easier by digitizing the records at the land registry.
DB2014	<i>Chad</i>	Chad made transferring property easier by lowering the property transfer tax.
DB2013	<i>Burundi</i>	Burundi made property transfers faster by establishing a statutory time limit for processing property transfer requests at the land registry.
DB2013	<i>Comoros</i>	The Comoros made it easier to transfer property by reducing the property transfer tax.
DB2013	<i>Sierra Leone</i>	Sierra Leone made registering property easier by computerizing the Ministry of Lands, Country Planning and the Environment.
DB2012	<i>Solomon Islands</i>	The Solomon Islands made registering property faster by separating the land registry from the business and movable property registries.
DB2012	<i>São Tomé and Príncipe</i>	São Tomé and Príncipe made registering property less costly by lowering property transfer taxes.
DB2012	<i>Central African Republic</i>	The Central African Republic halved the cost of registering property.
DB2011	<i>Congo, Dem. Rep.</i>	The Democratic Republic of Congo reduced by half the property transfer tax to 3% of the property value.
DB2011	<i>Sierra Leone</i>	Sierra Leone lifted a moratorium on sales of privately owned properties.
DB2010	<i>Sierra Leone</i>	Sierra Leone made transferring property more difficult by reinstating a moratorium on the authorization of property transfers by the director of surveys and lands.

Note: For information on reforms in earlier years (back to DB2005), see the *Doing Business* reports for these years, available at <http://www.doingbusiness.org>.

Source: *Doing Business* database.

GETTING CREDIT

Two types of frameworks can facilitate access to credit and improve its allocation: credit information systems and borrowers and lenders in collateral and bankruptcy laws. Credit information systems enable lenders' rights to view a potential borrower's financial history (positive or negative)—valuable information to consider when assessing risk. And they permit borrowers to establish a good credit history that will allow easier access to credit. Sound collateral laws enable businesses to use their assets, especially movable property, as security to generate capital—while strong creditors' rights have been associated with higher ratios of private sector credit to GDP.

What do the indicators cover?

Doing Business assesses the sharing of credit information and the legal rights of borrowers and lenders with respect to secured transactions through 2 sets of indicators. The depth of credit information index measures rules and practices affecting the coverage, scope and accessibility of credit information available through a credit registry or a credit bureau. The strength of legal rights index measures whether certain features that facilitate lending exist within the applicable collateral and bankruptcy laws. *Doing Business* uses two case scenarios, Case A and Case B, to determine the scope of the secured transactions system, involving a secured borrower and a secured lender and examining legal restrictions on the use of movable collateral (for more details on each case, see the Data Notes section of the *Doing Business 2016* report). These scenarios assume that the borrower:

- Is a private limited liability company.

Has its headquarters and only base of operations in the largest business city. For the 11 economies with a population of more than 100 million, data for a second city have been added.

WHAT THE GETTING CREDIT INDICATORS MEASURE

Strength of legal rights index (0–12)

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 bureaus and credit registries

Credit bureau coverage (% of adults)

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

Credit registry coverage (% of adults)

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

- Has up to 50 employees.
- Is 100% domestically owned, as is the lender.

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 strength of legal rights index and the depth of credit information index.

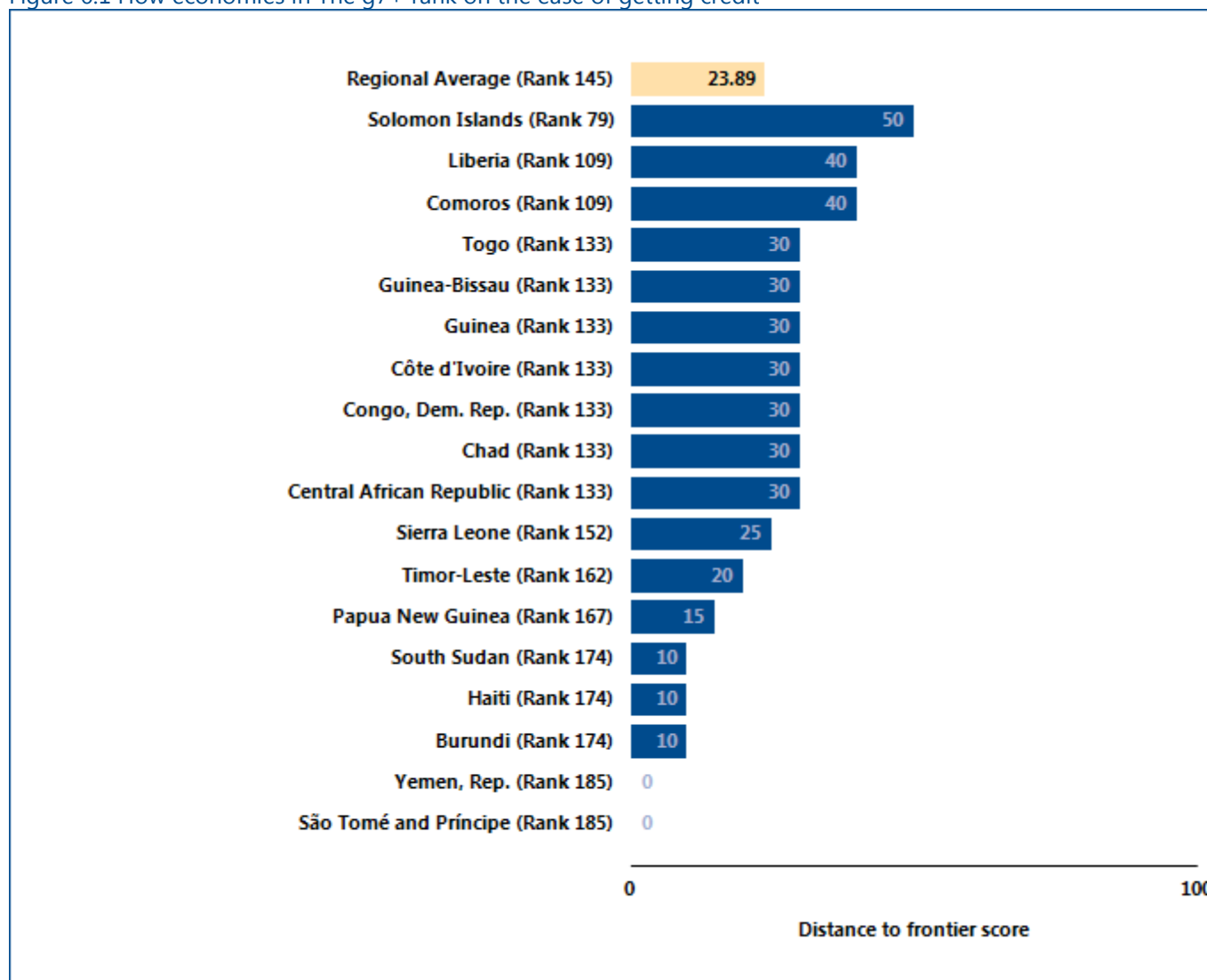
GETTING CREDIT

Where do the region’s economies stand today?

How well do the credit information systems and collateral and bankruptcy laws in economies in The g7+ facilitate access to credit? The global rankings of these

economies on the ease of getting credit suggest an answer (figure 6.1). The average ranking of the region and comparator regions provide a useful benchmark.

Figure 6.1 How economies in The g7+ rank on the ease of getting credit



Source: Doing Business database.

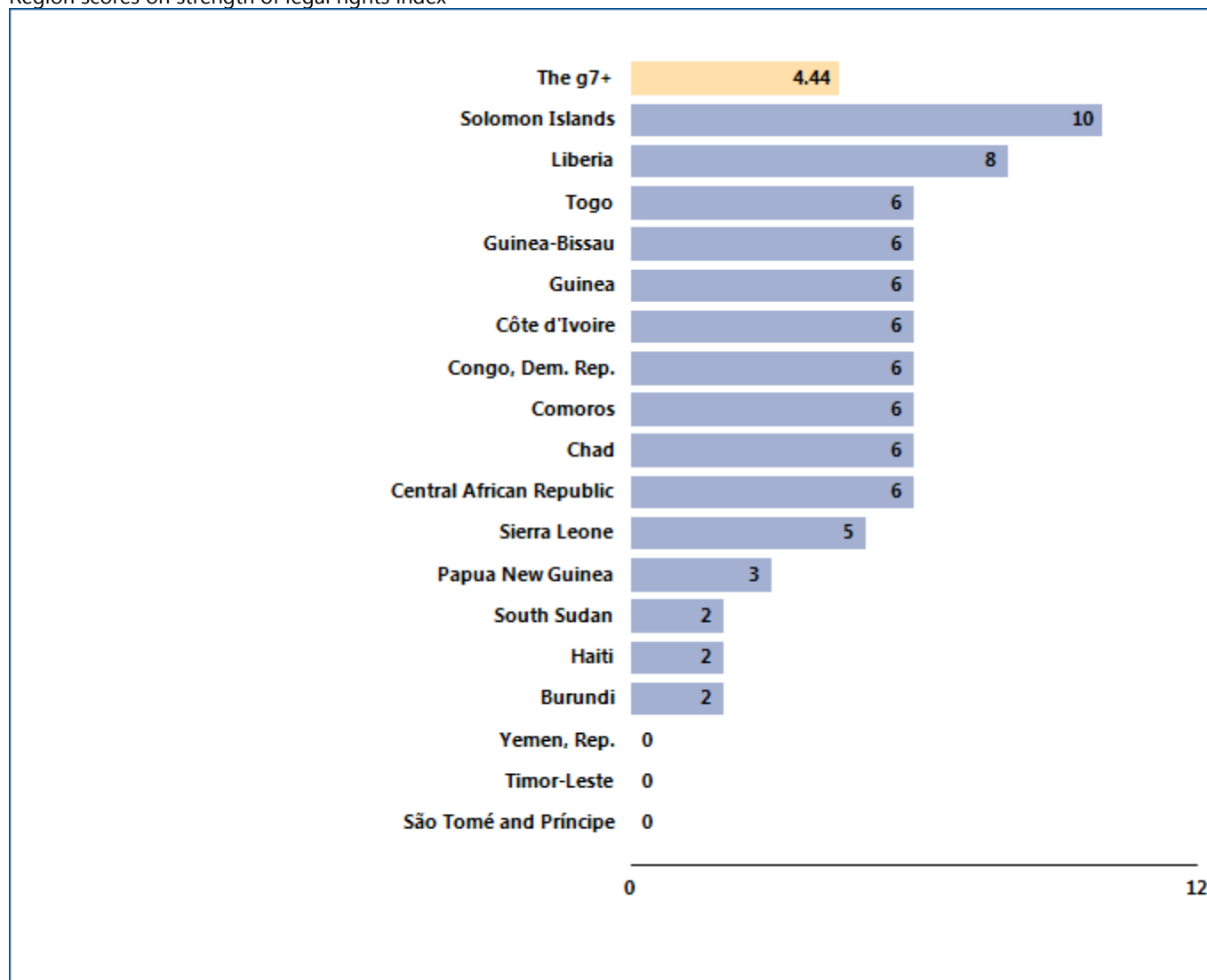
GETTING CREDIT

Another way to assess how well regulations and institutions support lending and borrowing in the region is to see where the region stands in the distribution of scores across regions. Figure 6.2 highlights the score on

the strength of legal rights index for The g7+ and comparators on the strength of legal rights index. Figure 6.3 shows the same thing for the depth of credit information index.

Figure 6.2 How strong are legal rights for borrowers and lenders?

Region scores on strength of legal rights index

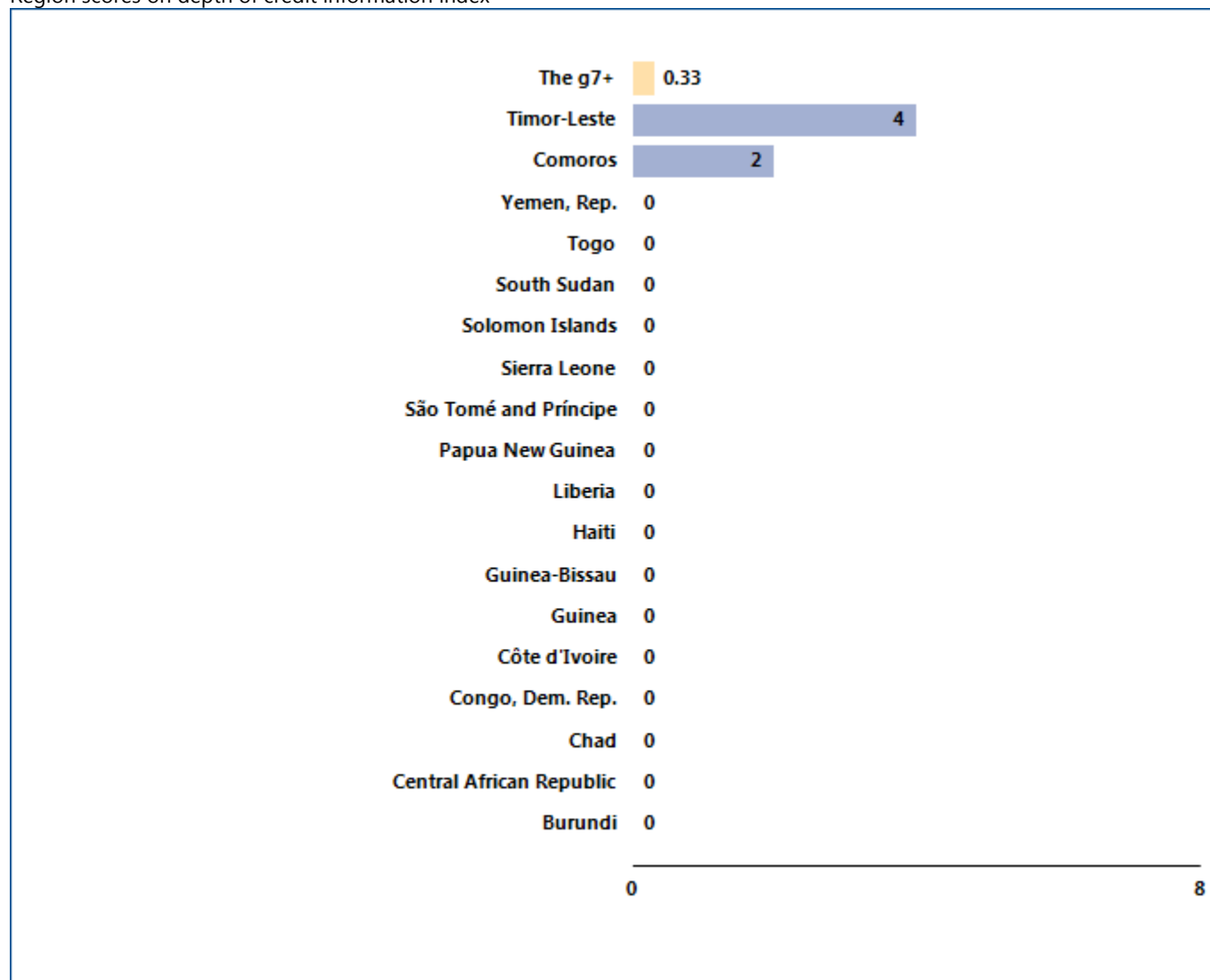


Note: Higher scores indicate that collateral and bankruptcy laws are better designed to facilitate access to credit.

Source: *Doing Business* database.

Figure 6.3 How much credit information is shared—and how widely?

Region scores on depth of credit information index



Note: Higher scores indicate the availability of more credit information, from either a credit registry or a credit bureau, to facilitate lending decisions. If the credit bureau or registry is not operational or covers less than 5% of the adult population, the total score on the depth of credit information index is 0.

Source: *Doing Business* database.

GETTING CREDIT

What are the changes over time?

When economies strengthen the legal rights of lenders and borrowers under collateral and bankruptcy laws, and increase the scope, coverage and accessibility of credit

information, they can increase entrepreneurs' access to credit. What credit reforms has *Doing Business* recorded in The g7+ (table 6.1)?

Table 6.1 How have economies in The g7+ made getting credit easier—or not?
By *Doing Business* report year DB2011 to DB2016

DB year	Economy	Reform
DB2016	Comoros	The Comoros improved access to credit information by establishing a new credit registry.
DB2016	Liberia	Liberia improved access to credit by adopting new laws on secured transactions that establish a modern, unified and notice-based collateral registry.
DB2015	Côte d'Ivoire	Côte d'Ivoire improved its credit information system by introducing regulations that govern the licensing and operation of credit bureaus.
DB2015	Sierra Leone	Sierra Leone improved its credit information system by beginning to distribute both positive and negative data and by increasing the system's coverage rate.
DB2015	Congo, Dem. Rep.	The Democratic Republic of Congo improved access to credit information by establishing a credit registry.
DB2014	Congo, Dem. Rep.	The Democratic Republic of Congo strengthened its secured transactions system by adopting the OHADA (Organization for the Harmonization of Business Law in Africa) Uniform Act on Secured Transactions. The new law broadens the range of assets that can be used as collateral (including future assets) and the range of obligations that can be secured, extends security interests to the proceeds of the original asset and introduces the possibility of out-of-court enforcement.
DB2013	Sierra Leone	Sierra Leone improved access to credit information by establishing a public credit registry at its central bank and guaranteeing borrowers' right to inspect their personal data.
DB2012	Liberia	Liberia strengthened its legal framework for secured transactions by adopting a new commercial code that broadens the range of assets that can be used as collateral (including future assets) and extends the security interest to

DB year	Economy	Reform
		the proceeds of the original asset.
DB2012	<i>Togo</i>	Access to credit in Togo was improved through amendments to the OHADA Uniform Act on Secured Transactions that broaden the range of assets that can be used as collateral (including future assets), extend the security interest to the proceeds of the original asset and introduce the possibility of out-of-court enforcement.
DB2012	<i>Sierra Leone</i>	Sierra Leone improved its credit information system by enacting a new law providing for the creation of a public credit registry.
DB2012	<i>Timor-Leste</i>	Timor-Leste improved its credit information system by establishing a public credit registry.
DB2012	<i>Central African Republic</i>	Access to credit in the Central African Republic was improved through amendments to the OHADA Uniform Act on Secured Transactions that broaden the range of assets that can be used as collateral (including future assets), extend the security interest to the proceeds of the original asset and introduce the possibility of out-of-court enforcement.
DB2012	<i>Chad</i>	Access to credit in Chad was improved through amendments to the OHADA Uniform Act on Secured Transactions that broaden the range of assets that can be used as collateral (including future assets), extend the security interest to the proceeds of the original asset and introduce the possibility of out-of-court enforcement.
DB2012	<i>Comoros</i>	Access to credit in Comoros was improved through amendments to the OHADA Uniform Act on Secured Transactions that broaden the range of assets that can be used as collateral (including future assets), extend the security interest to the proceeds of the original asset and introduce the possibility of out-of-court enforcement.
DB2012	<i>Côte d'Ivoire</i>	Access to credit in Côte d'Ivoire was improved through amendments to the OHADA Uniform Act on Secured Transactions that broaden the range of assets that can be used as collateral (including future assets), extend the security interest to the proceeds of the original asset and introduce the possibility of out-of-court enforcement.
DB2012	<i>Guinea</i>	Access to credit in Guinea was improved through amendments to the OHADA Uniform Act on Secured Transactions that broaden the range of assets that can be

DB year	Economy	Reform
		used as collateral (including future assets), extend the security interest to the proceeds of the original asset and introduce the possibility of out-of-court enforcement.
DB2012	<i>Guinea-Bissau</i>	Access to credit in Guinea-Bissau was improved through amendments to the OHADA Uniform Act on Secured Transactions that broaden the range of assets that can be used as collateral (including future assets), extend the security interest to the proceeds of the original asset and introduce the possibility of out-of-court enforcement.
DB2011	<i>Papua New Guinea</i>	Operation of a new private credit bureau improved the credit information system in Papua New Guinea.
DB2011	<i>Solomon Islands</i>	The Solomon Islands strengthened access to credit by passing a new secured transactions law that broadens the range of assets that can be used as collateral, allows a general description of debts and obligations secured by collateral, permits out-of-court enforcement and creates a collateral registry.
DB2010	<i>Sierra Leone</i>	Sierra Leone strengthened its secured transactions system through a new company act that allows the use of fixed and floating charges and automatically extends a security interest to the products, proceeds and replacements of the collateral.
DB2010	<i>Yemen, Rep.</i>	The Republic of Yemen improved access to credit information by eliminating the minimum threshold for the loans reported and guaranteeing borrowers' right to view their credit reports.
DB2010	<i>Haiti</i>	Haiti strengthened its secured transactions system through a new law broadening the range of assets that can be used as collateral, allowing future and after-acquired property to be used as collateral and automatically extending security interests to the products, proceeds and replacements of the original asset.

Note: For information on reforms in earlier years (back to DB2005), see the *Doing Business* reports for these years, available at <http://www.doingbusiness.org>.

Source: *Doing Business* database.

PROTECTING MINORITY INVESTORS

Protecting minority investors matters for the ability of companies to raise the capital they need to grow, innovate, diversify and compete. Effective regulations define related-party transactions precisely, promote clear and efficient disclosure requirements, require shareholder participation in major decisions of the company and set detailed standards of accountability for company insiders.

What do the indicators cover?

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. 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. To make the data comparable across economies, a case study uses several assumptions about the business and the transaction.

The business (Buyer):

- Is a publicly traded corporation listed on the economy's most important stock exchange (or at least 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.

The transaction involves the following details:

- Mr. James, a director and the majority shareholder of the company, proposes that the company purchase used trucks from another company he owns.
- The price is higher than the going price for used trucks, but the transaction goes forward.
- All required approvals are obtained, and all required disclosures made, though the transaction is prejudicial to Buyer.
- Shareholders sue the interested parties and the members of the board of directors.

WHAT THE PROTECTING MINORITY INVESTORS INDICATORS MEASURE

Extent of disclosure index (0–10)

Review and approval requirements for related-party transactions ; Disclosure requirements for related-party transactions

Extent of director liability index (0–10)

Ability of minority shareholders to sue and hold interested directors liable for prejudicial related-party transactions; Available legal remedies (damages, disgorgement of profits, fines, imprisonment, rescission of the transaction)

Ease of shareholder suits index (0–10)

Access to internal corporate documents; Evidence obtainable during trial and allocation of legal expenses

Extent of conflict of interest regulation index (0–10)

Simple average of the extent of disclosure, extent of director liability and ease of shareholder indices

Extent of shareholder rights index (0-10)

Shareholders' rights and role in major corporate decisions

Extent of ownership and control index (0-10)

Governance safeguards protecting shareholders from undue board control and entrenchment

Extent of corporate transparency index (0-10)

Corporate transparency on ownership stakes, compensation, audits and financial prospects

Extent of shareholder governance index (0–10)

Simple average of the extent of shareholders rights, extent of ownership and control and extent of corporate transparency indices

Strength of investor protection index (0–10)

Simple average of the extent of conflict of interest regulation and extent of shareholder governance indices

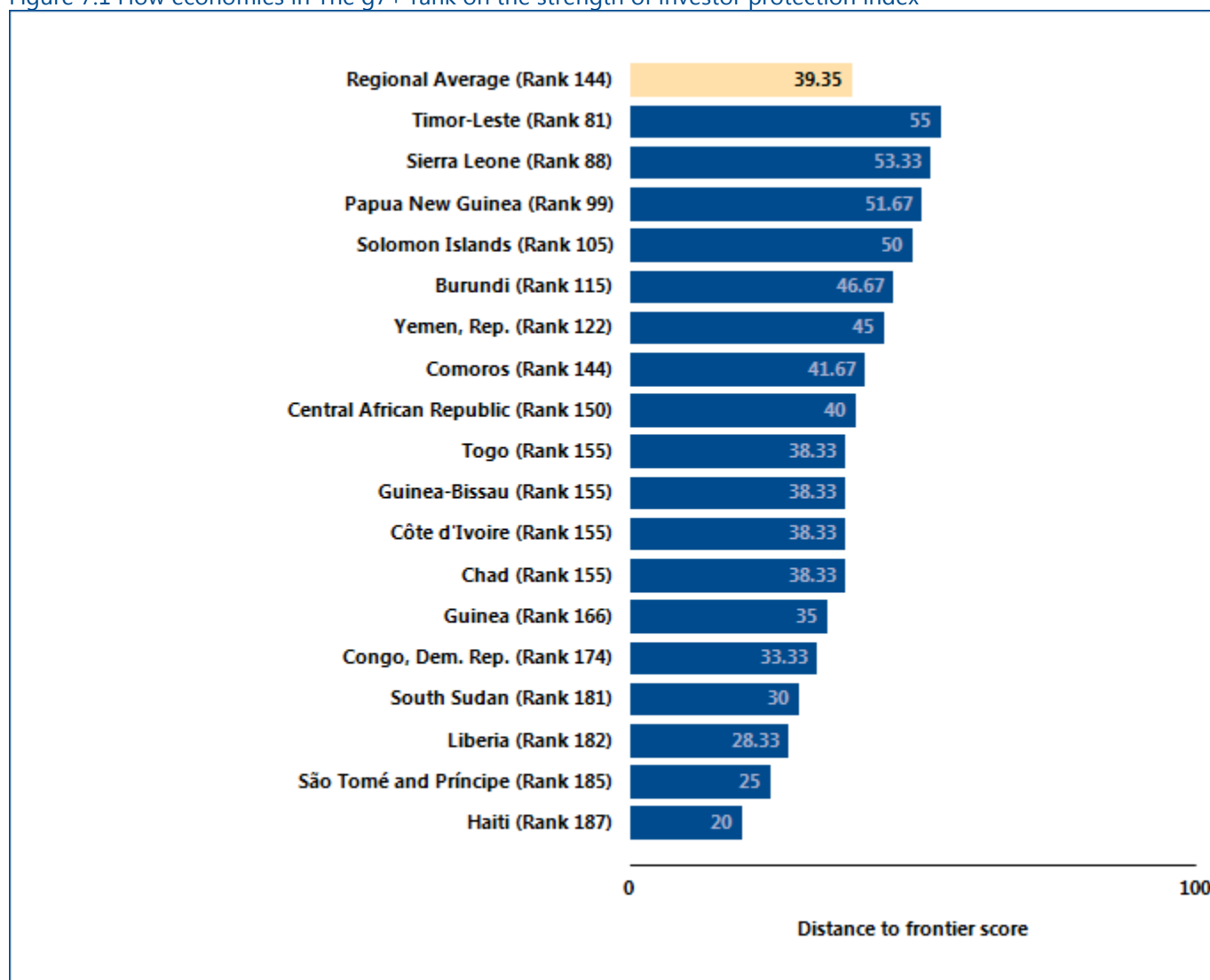
PROTECTING MINORITY INVESTORS

Where do the region's economies stand today?

How strong are investor protections against self-dealing in economies in The g7+? The global rankings of these economies on the strength of investor protection index suggest an answer (figure 7.1). While the indicator does

not measure all aspects related to the protection of minority investors, a higher ranking does indicate that an economy's regulations offer stronger investor protections against self-dealing in the areas measured.

Figure 7.1 How economies in The g7+ rank on the strength of investor protection index



Source: Doing Business database.

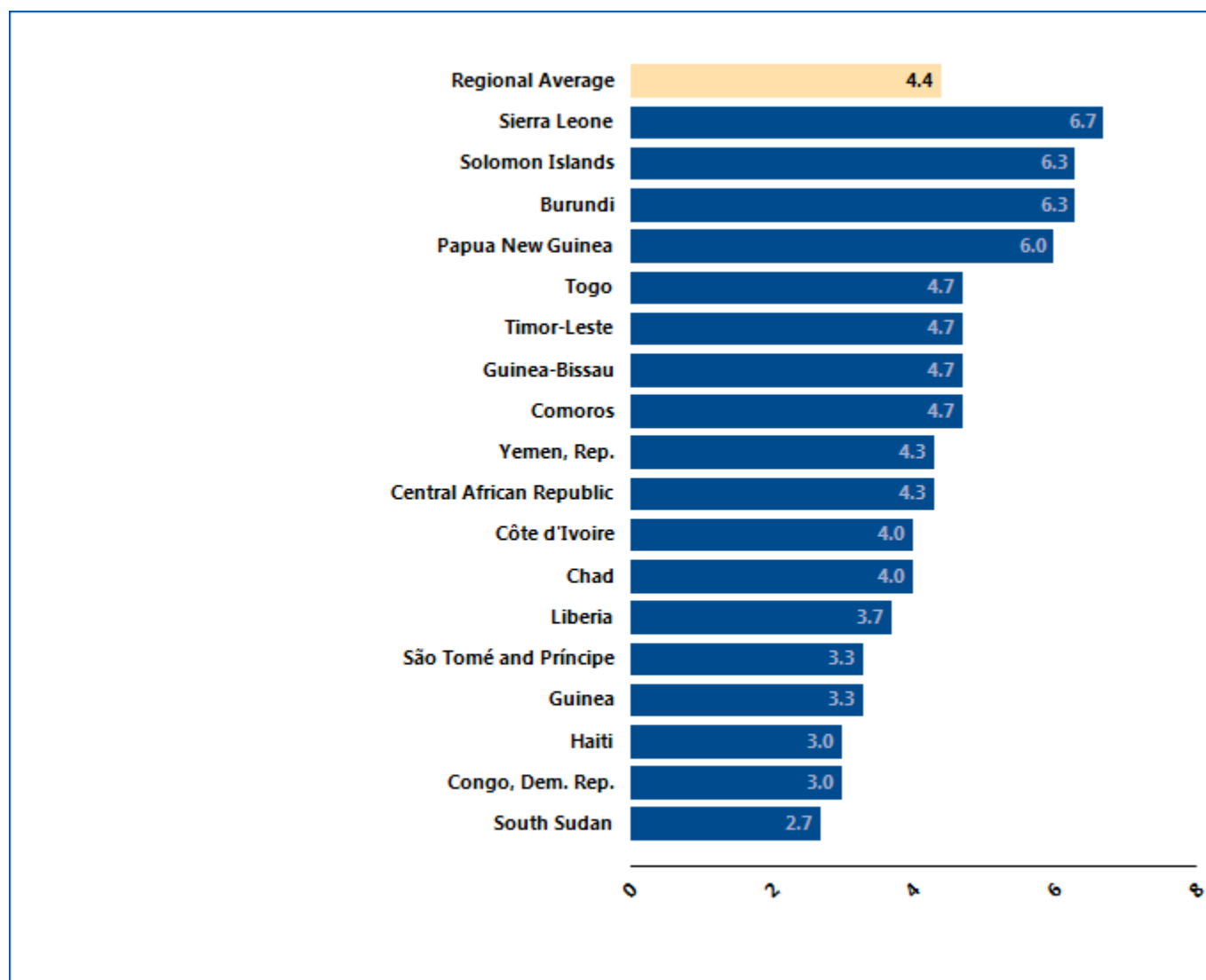
PROTECTING MINORITY INVESTORS

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. Figures 7.2 and 7.3 highlight the scores on the various minority investor protection indices for The g7+. Comparing the scores across the region and with averages both for the region and for comparator regions can provide useful insights.

Figure 7.2 How extensive are conflict of interest regulations?

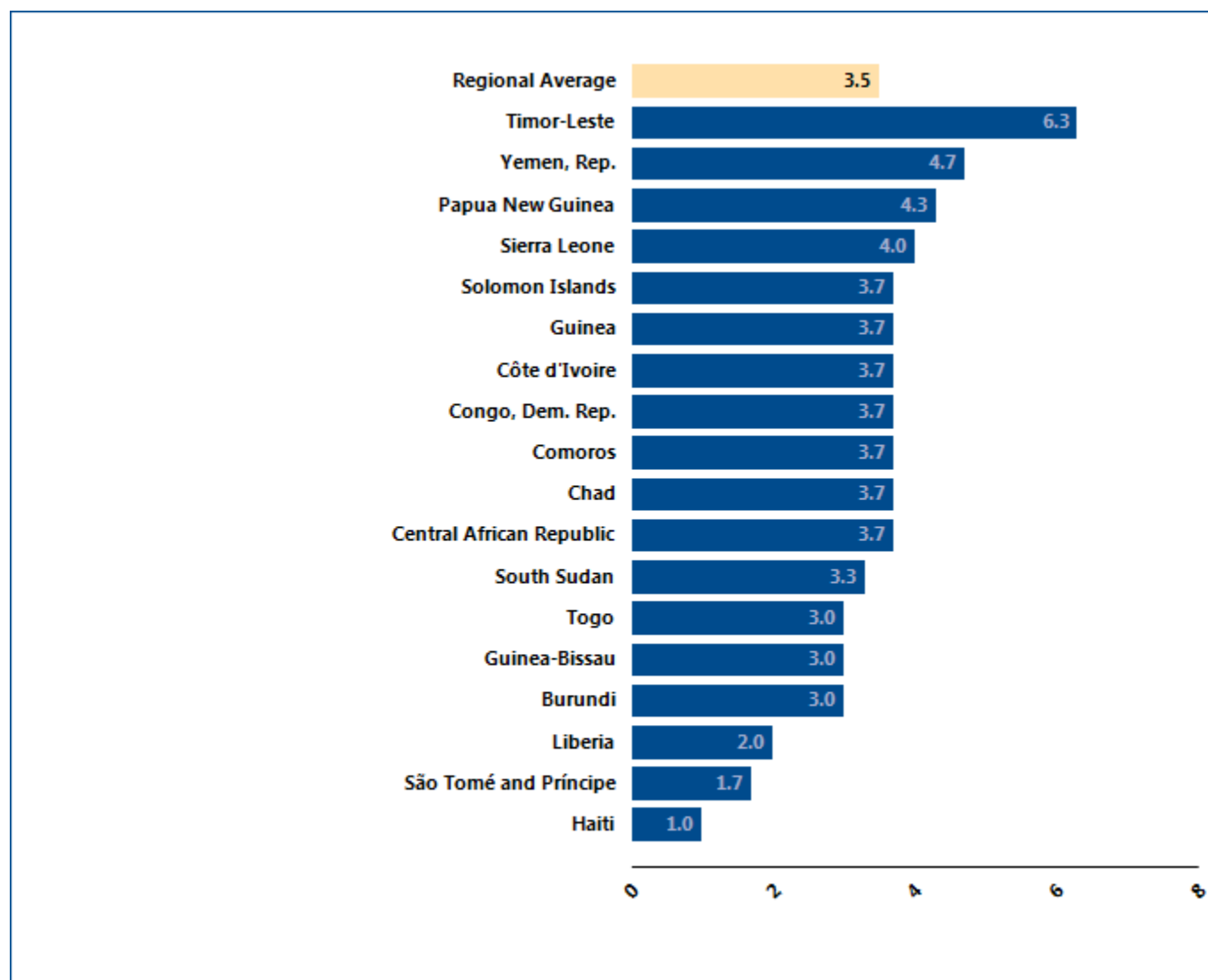
Extent of conflict of interest regulation index (0-10)



Note: Higher values indicate stronger regulation of conflicts of interest.

Source: Doing Business database.

Figure 7.3 How extensive is shareholder governance?

Extent of shareholder governance index (0-10)

Note: Higher scores indicate stronger rights of shareholders in corporate governance.

Source: Doing Business database.

PROTECTING MINORITY INVESTORS

What are the changes over time?

Economies with the strongest protections of minority investors from self-dealing require detailed disclosure and define clear duties for directors. They also have well-functioning courts and up-to-date procedural rules that give minority shareholders the means to prove their case and obtain a judgment within a reasonable time. So

reforms to strengthen minority investor protections may move ahead on different fronts—such as through new or amended company laws, securities regulations or revisions to court procedures. What minority investor protection reforms has *Doing Business* recorded in The g7+ (table 7.1)?

Table 7.1 How have economies in The g7+ strengthened minority investor protections—or not?
By *Doing Business* report year DB2011 to DB2016

DB year	Economy	Reform
DB2015	<i>Central African Republic</i>	The Central African Republic strengthened minority investor protections by introducing greater requirements for disclosure of related-party transactions to the board of directors and by making it possible for shareholders to inspect the documents pertaining to related-party transactions and to appoint auditors to conduct an inspection of such transactions.
DB2015	<i>Côte d'Ivoire</i>	Côte d'Ivoire strengthened minority investor protections by introducing greater requirements for disclosure of related-party transactions to the board of directors and by making it possible for shareholders to inspect the documents pertaining to related-party transactions and to appoint auditors to conduct an inspection of such transactions.
DB2015	<i>Comoros</i>	The Comoros strengthened minority investor protections by introducing greater requirements for disclosure of related-party transactions to the board of directors and by making it possible for shareholders to inspect the documents pertaining to related-party transactions and to appoint auditors to conduct an inspection of such transactions.
DB2015	<i>Guinea</i>	Guinea strengthened minority investor protections by introducing greater requirements for disclosure of related-party transactions to the board of directors and by making it possible for shareholders to inspect the documents pertaining to related-party transactions and to appoint auditors to conduct an inspection of such transactions.

DB year	Economy	Reform
DB2015	<i>Guinea-Bissau</i>	Guinea-Bissau strengthened minority investor protections by introducing greater requirements for disclosure of related-party transactions to the board of directors and by making it possible for shareholders to inspect the documents pertaining to related-party transactions and to appoint auditors to conduct an inspection of such transactions.
DB2015	<i>Chad</i>	Chad strengthened minority investor protections by introducing greater requirements for disclosure of related-party transactions to the board of directors and by making it possible for shareholders to inspect the documents pertaining to related-party transactions and to appoint auditors to conduct an inspection of such transactions.
DB2015	<i>Togo</i>	Togo strengthened minority investor protections by introducing greater requirements for disclosure of related-party transactions to the board of directors and by making it possible for shareholders to inspect the documents pertaining to related-party transactions and to appoint auditors to conduct an inspection of such transactions.
DB2015	<i>Congo, Dem. Rep.</i>	The Democratic Republic of Congo strengthened minority investor protections by introducing greater requirements for disclosure of related-party transactions to the board of directors and by making it possible for shareholders to inspect the documents pertaining to related-party transactions and to appoint auditors to conduct an inspection of such transactions.
DB2014	<i>Congo, Dem. Rep.</i>	The Democratic Republic of Congo strengthened investor protections by adopting the OHADA Uniform Act on Commercial Companies and Economic Interest Groups, which introduces additional approval and disclosure requirements for related-party transactions and makes it possible to sue directors when such transactions harm the company.
DB2012	<i>Burundi</i>	Burundi strengthened investor protections by introducing new requirements for the approval of transactions between interested parties, by requiring greater corporate disclosure to the board of directors and in the annual report and by making it easier to sue directors in cases of prejudicial transactions between interested parties.
DB2012	<i>Solomon Islands</i>	The Solomon Islands strengthened investor protections by

DB year	Economy	Reform
		increasing shareholder access to corporate information.
DB2010	<i>Sierra Leone</i>	Sierra Leone strengthened investor protections through a new company act enhancing director liability and improving disclosure requirements.

Note: For information on reforms in earlier years (back to DB2005), see the *Doing Business* reports for these years, available at <http://www.doingbusiness.org>.

Source: *Doing Business* database.

PAYING TAXES

Taxes are essential. The level of tax rates needs to be carefully chosen—and needless complexity in tax rules avoided. Firms in economies that rank better on the ease of paying taxes in the *Doing Business* study tend to perceive both tax rates and tax administration as less of an obstacle to business according to the World Bank Enterprise Survey research.

What do the indicators cover?

Using a case scenario, *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. This case scenario uses a set of financial statements and assumptions about transactions made over the year. Information is also compiled on the frequency of filing and payments as well as time taken to comply with tax laws. The ranking of economies on the ease of paying taxes is determined by sorting their distance to frontier scores on the ease of paying taxes. These scores are the simple average of the distance to frontier scores for each of the component indicators, with a threshold and a nonlinear transformation applied to one of the component indicators, the total tax rate³. The financial statement variables have been updated to be proportional to 2012 income per capita; previously they were proportional to 2005 income per capita. To make the data comparable across economies, several assumptions are used.

- TaxpayerCo is a medium-size business that started operations on January 1, 2013.
- The business starts from the same financial position in each economy. All the taxes and mandatory contributions paid during the second year of operation are recorded.

WHAT THE PAYING TAXES INDICATORS MEASURE

Tax payments for a manufacturing company in 2014 (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 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

- Taxes and mandatory contributions are measured at all levels of government.
- Taxes and mandatory contributions include corporate income tax, turnover tax and all labor taxes and contributions paid by the company.
- A range of standard deductions and exemptions are also recorded.

³ 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. The threshold is defined as the total tax rate at the 15th percentile of the overall distribution for all years included in the analysis up to and including *Doing Business 2015*, which is 26.1%. All economies with a total tax rate below this threshold receive the same score as the economy at the threshold.

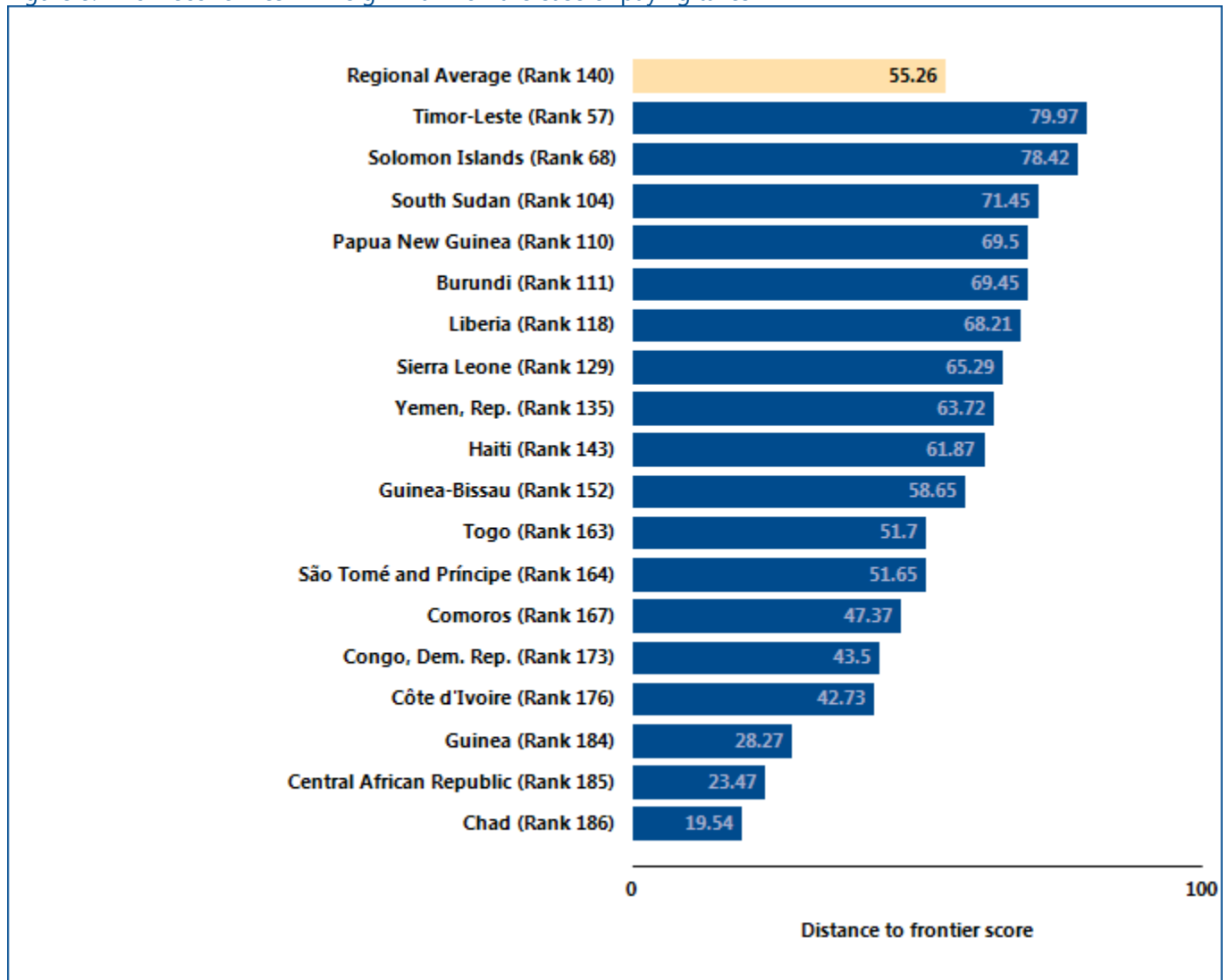
PAYING TAXES

Where do the region's economies stand today?

What is the administrative burden of complying with taxes in economies in The g7+—and how much do firms pay in taxes? The global rankings of these economies on the ease of paying taxes offer useful information for

assessing the tax compliance burden for businesses (figure 8.1). The average ranking of the region provides a useful benchmark.

Figure 8.1 How economies in The g7+ rank on the ease of paying taxes



Note: All economies with a total tax rate below the threshold of 26.1% applied in DB2015, receive the same distance to frontier score for the total tax rate (a distance to frontier score of 100 for the total tax rate) for the purpose of calculating the ranking on the ease of paying taxes.

Source: *Doing Business* database.

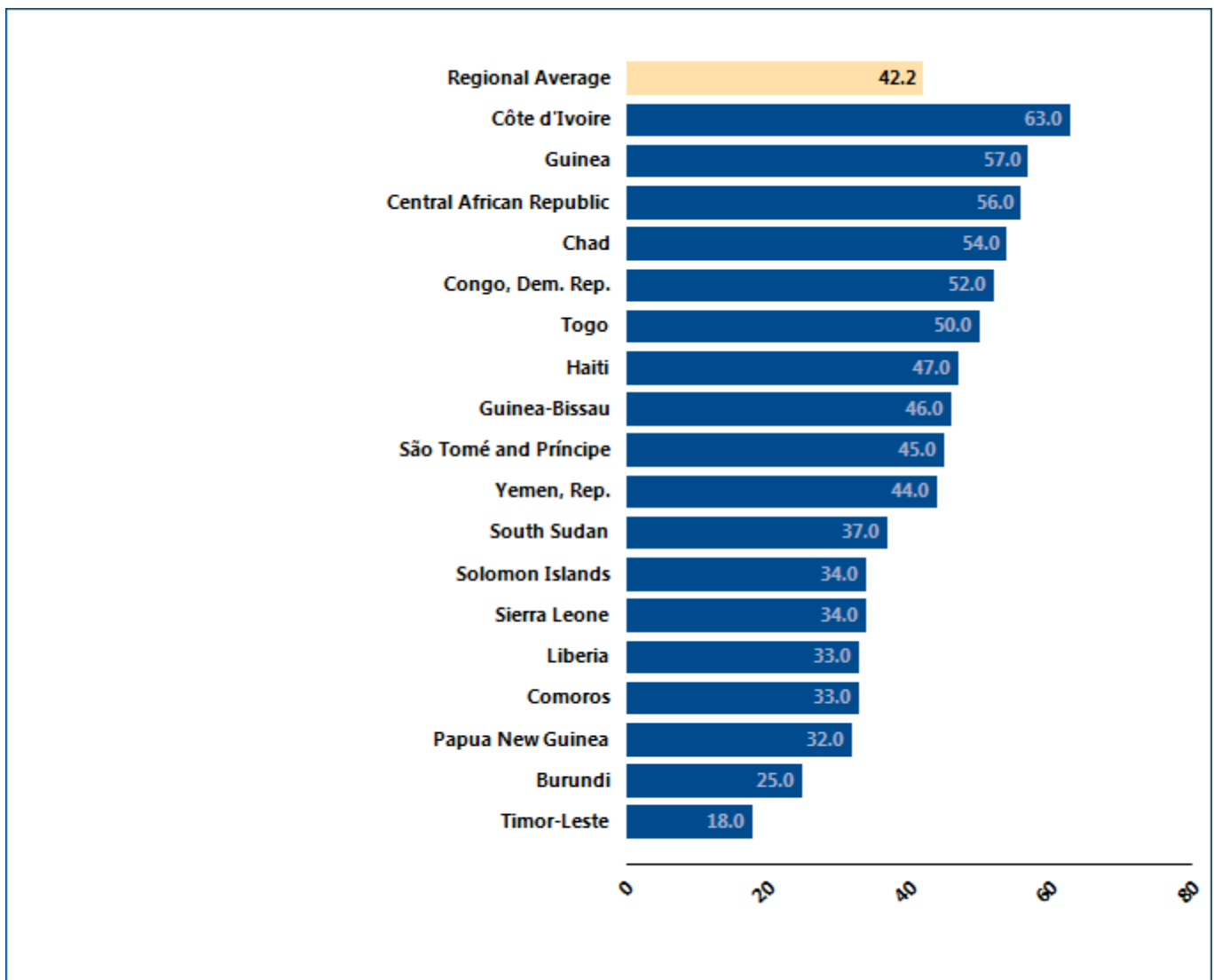
PAYING TAXES

The indicators underlying the rankings may be more revealing. Data collected by *Doing Business* show what it takes to comply with tax regulations in each economy in the region—the number of payments per year and the time required to prepare, and file and pay taxes the 3

major taxes (corporate income tax, VAT or sales tax and labor taxes and mandatory contributions)—as well as the total tax rate (figure 8.2). Comparing these indicators across the region and with averages both for the region and for comparator regions can provide useful insights.

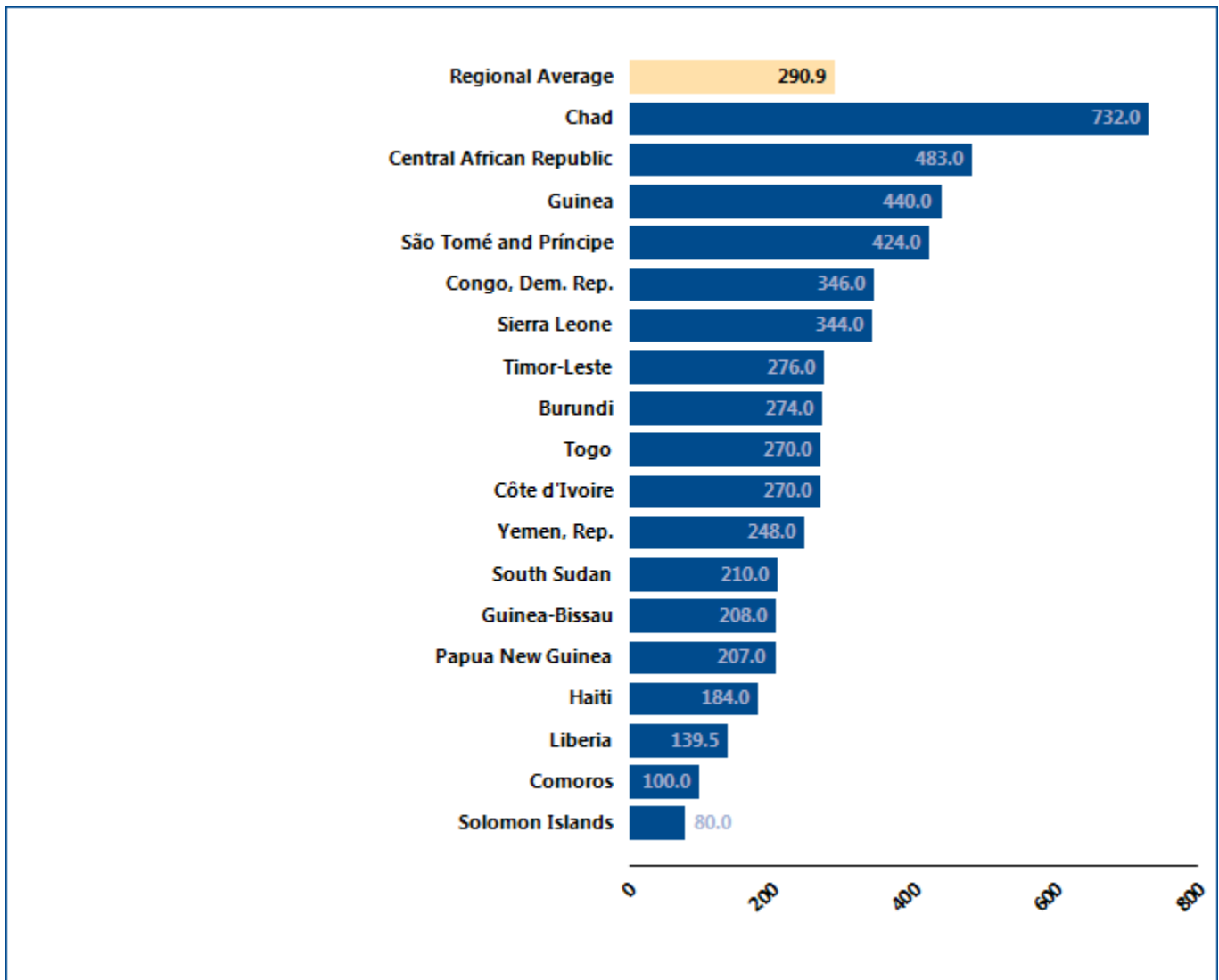
Figure 8.2 How easy is it to pay taxes in economies in The g7+—and what are the total tax rates?

Payments (number per year)



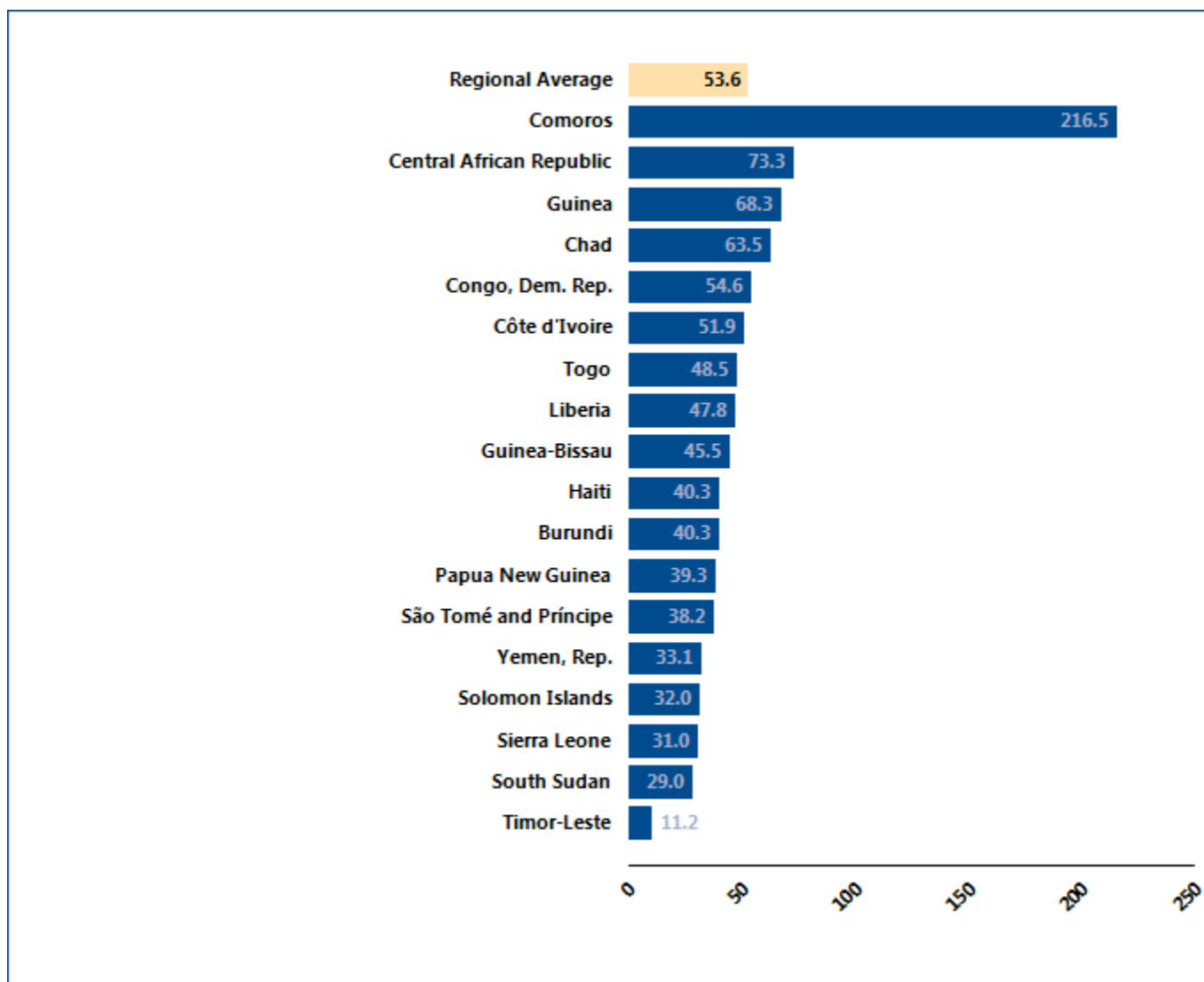
PAYING TAXES

Time (hours per year)



PAYING TAXES

Total tax rate (% of profit)



Source: Doing Business database.

PAYING TAXES

What are the changes over time?

Economies around the world have made paying taxes faster and easier for businesses—such as by consolidating filings, reducing the frequency of payments or offering electronic filing and payment. Many have lowered tax rates. Changes have brought

concrete results. Some economies simplifying compliance with tax obligations and reducing rates have seen tax revenue rise. What tax reforms has *Doing Business* recorded in The g7+ (table 8.1)?

Table 8.1 How have economies in The g7+ made paying taxes easier—or not?
By *Doing Business* report year DB2011 to DB2016

DB year	Economy	Reform
DB2016	<i>Liberia</i>	Liberia made paying taxes more complicated for companies by introducing a minimum corporate income tax.
DB2016	<i>Congo, Dem. Rep.</i>	The Democratic Republic of Congo made paying taxes more complicated for companies by introducing a new social security contribution paid by employers, though it subsequently reduced the rate of the contribution.
DB2015	<i>Sierra Leone</i>	Sierra Leone made paying taxes more complicated for companies by introducing a capital gains tax.
DB2015	<i>Togo</i>	Togo made paying taxes less costly for companies by reducing the payroll tax rate.
DB2015	<i>Congo, Dem. Rep.</i>	The Democratic Republic of Congo made paying taxes easier for companies by simplifying corporate income tax returns and abolishing the minimum tax payable depending on a company's size. On the other hand, it increased the rate for the minimum lump-sum tax applied to annual revenue.
DB2014	<i>Burundi</i>	Burundi made paying taxes less costly for companies by reducing corporate income tax rate.
DB2014	<i>Côte d'Ivoire</i>	Côte d'Ivoire made paying taxes more costly for companies by increasing the employers' contribution rate for social security related to retirement, increasing the rate for the special tax on equipment and eliminating several kinds of tax relief for businesses.
DB2014	<i>South Sudan</i>	South Sudan made paying taxes more costly for companies

DB year	Economy	Reform
		by increasing the corporate income tax rate.
DB2014	<i>Togo</i>	Togo made paying taxes more costly for companies by increasing corporate income tax rate and employers' social security contribution rate and by introducing a new tax on corporate cars. At the same time, Togo reduced the payroll tax rate.
DB2014	<i>Congo, Dem. Rep.</i>	The Democratic Republic of Congo made paying taxes more costly for companies by increasing the employers' social security contribution rate.
DB2013	<i>Liberia</i>	Liberia made paying taxes easier for companies by reducing the profit tax rate and abolishing the turnover tax.
DB2012	<i>Burundi</i>	Burundi made paying taxes easier for companies by reducing the payment frequency for social security contributions from monthly to quarterly.
DB2012	<i>Congo, Dem. Rep.</i>	The Democratic Republic of Congo made paying taxes easier for firms by replacing the sales tax with a value added tax.
DB2012	<i>Togo</i>	Togo reduced its corporate income tax rate.
DB2012	<i>Yemen, Rep.</i>	The Republic of Yemen enacted a new tax law that reduced the general corporate tax rate from 35% to 20% and abolished all tax exemptions except those granted under the investment law for investment projects.
DB2012	<i>Côte d'Ivoire</i>	Côte d'Ivoire eliminated a tax on firms, the contribution for national reconstruction (contribution pour la reconstruction nationale).
DB2011	<i>Côte d'Ivoire</i>	Côte d'Ivoire made paying taxes less costly for companies by reducing the corporate income tax rate.
DB2011	<i>Chad</i>	Chad increased taxes on business through changes to its social security contribution rates.
DB2011	<i>São Tomé and Príncipe</i>	São Tomé and Príncipe reduced the corporate income tax rate to a standard 25%.
DB2011	<i>Sierra Leone</i>	Sierra Leone replaced sales and service taxes with a goods

DB year	Economy	Reform
		and service tax.
DB2011	<i>Burundi</i>	Burundi made paying taxes simpler by replacing the transactions tax with a value added tax.
DB2010	<i>Togo</i>	Togo made paying taxes less costly for companies by reducing the corporate income tax rate.
DB2010	<i>Sierra Leone</i>	Sierra Leone made paying taxes easier for companies by improving training and equipment at the tax authority, publishing a consolidated income tax act and introducing a value added tax system that replaces 4 different sales taxes.
DB2010	<i>Congo, Dem. Rep.</i>	The Democratic Republic of Congo made paying taxes more costly for companies by raising the sales tax rate.
DB2010	<i>Timor-Leste</i>	Timor-Leste made paying taxes less costly for companies by reducing the corporate income tax rate and eliminating the alternative minimum tax and the withholding tax on interest.

Note: For information on reforms in earlier years (back to DB2006), see the *Doing Business* reports for these years, available at <http://www.doingbusiness.org>.

Source: *Doing Business* database.

TRADING ACROSS BORDERS

In today's globalized world, making trade between economies easier is increasingly important for business. Excessive document requirements, burdensome customs procedures, inefficient port operations and inadequate infrastructure all lead to extra costs and delays for exporters and importers, stifling trade potential.

What do the indicators cover?

Doing Business records the time and cost associated with the logistical process of exporting and importing goods. Under the new methodology introduced this year, *Doing Business* measures the time and cost (excluding tariffs) associated with three sets of procedures—documentary compliance, border compliance and domestic transport—within the overall process of exporting or importing a shipment of goods. 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 the time and cost for documentary compliance and border compliance to export and import.

To make the data comparable across economies, a few assumptions are made about the traded goods and the transactions:

Time

- Time is measured in hours, and 1 day is 24 hours (for example, 22 days are recorded as $22 \times 24 = 528$ hours). If customs clearance takes 7.5 hours, the data are recorded as is. Alternatively, suppose that documents are submitted to a customs agency at 8:00 a.m., are processed overnight and can be picked up at 8:00 a.m. the next day. In this case the time for customs clearance would be recorded as 24 hours because the actual procedure took 24 hours.

WHAT THE TRADING ACROSS BORDERS

INDICATORS MEASURE FOR IMPORT & EXPORT

Documentary compliance – cost (US\$) & time (hours)

Obtain, prepare and submit documents:

- During transport, clearance, inspections and port or border handling in origin economy
- Required by origin, transit and destination economies

Covers all documents by law and in practice

Border compliance – cost (US\$) & time (hours)

Customs clearance and inspections

Inspections by other agencies

Port or border handling

Obtaining, preparing and submitting documents during clearance, inspections and port or border handling

Domestic transport*

Loading and unloading of shipment

Transport between warehouse and terminal/port

Transport between terminal/port and border

Obtaining, preparing and submitting documents during domestic transport

Traffic delays and road police checks while shipment is en route

* Although *Doing Business* collects and publishes data on the time and cost for domestic transport, it does not use these data in calculating the distance to frontier score for trading across borders or the ranking on the ease of trading across borders.

Cost

- Insurance cost and informal payments for which no receipt is issued are excluded from the costs recorded. Costs are reported in U.S. dollars. Contributors are asked to convert local currency into U.S. dollars based on the exchange rate prevailing on the day they answer the questionnaire.

Assumptions of the case study

- For each of the 189 economies covered by *Doing Business*, it is assumed that a shipment travels from a warehouse in the largest business city of the exporting economy to a warehouse in the largest business city of the importing economy. For 11 economies the data are also collected, under the same case study assumptions, for the second largest business city.
- The import and export case studies assume different traded products. It is assumed that each economy imports a standardized shipment of 15 metric tons of containerized auto parts (HS 8708) from its natural import partner—the economy from which it imports the largest value (price times quantity) of auto parts. It is assumed that each economy exports the product of its comparative advantage (defined by the largest export value) to its natural export partner—the economy that is the largest purchaser of this product. Precious metal and gems, live animals and pharmaceuticals are excluded from the list of possible export products, however, and the second largest product category is considered as needed.
- To identify the trading partners and export product for each economy, *Doing Business* collected data on trade flows for the most recent four-year period from international databases such as the United Nations Commodity Trade Statistics Database (UN Comtrade). For economies for which trade flow data were not available, data from ancillary government sources (various ministries and departments) and World Bank Group country offices were used to identify the export product and natural trading partners.
- A shipment is a unit of trade. Export shipments do not necessarily need to be containerized, while import shipments of auto parts are assumed to be containerized.
- Shipping cost based on weight is assumed to be greater than shipping cost based on volume.
- If government fees are determined by the value of the shipment, the value is assumed to be \$50,000.
- The product is new, not secondhand or used merchandise.
- The exporting firm is responsible for hiring and paying for a freight forwarder or customs broker (or both) and pays for all costs related to international shipping, domestic transport, clearance and mandatory inspections by customs and other government agencies, port or border handling, documentary compliance fees and the like for exports. The importing firm is responsible for the above costs for imports.
- The mode of transport is the one most widely used for the chosen export or import product and the trading partner, as is the seaport, airport or land border crossing.
- All electronic submissions of information requested by any government agency in connection with the shipment are considered to be documents obtained, prepared and submitted during the export or import process.
- A port or border is defined as a place (seaport, airport or land border crossing) where merchandise can enter or leave an economy.
- Government agencies considered relevant are agencies such as customs, port authorities, road police, border guards, standardization agencies, ministries or departments of agriculture or industry, national security agencies and any other government authorities.

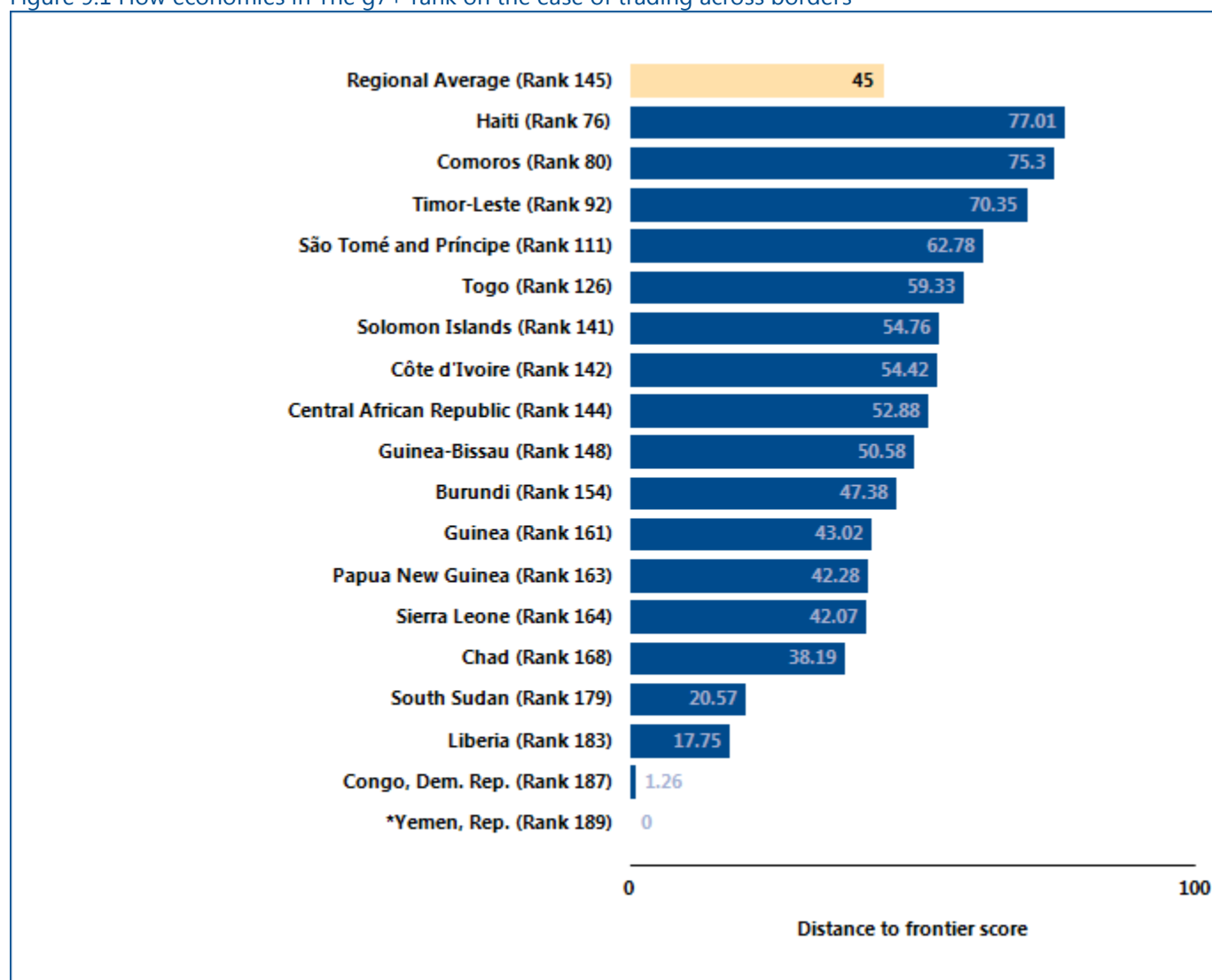
TRADING ACROSS BORDERS

Where do the region's economies stand today?

How easy it is for businesses in economies in The g7+ to export and import goods? The global rankings of these economies on the ease of trading across borders suggest

an answer (figure 9.1). The average ranking of the region and comparator regions provide a useful benchmark.

Figure 9.1 How economies in The g7+ rank on the ease of trading across borders



Source: Doing Business database.

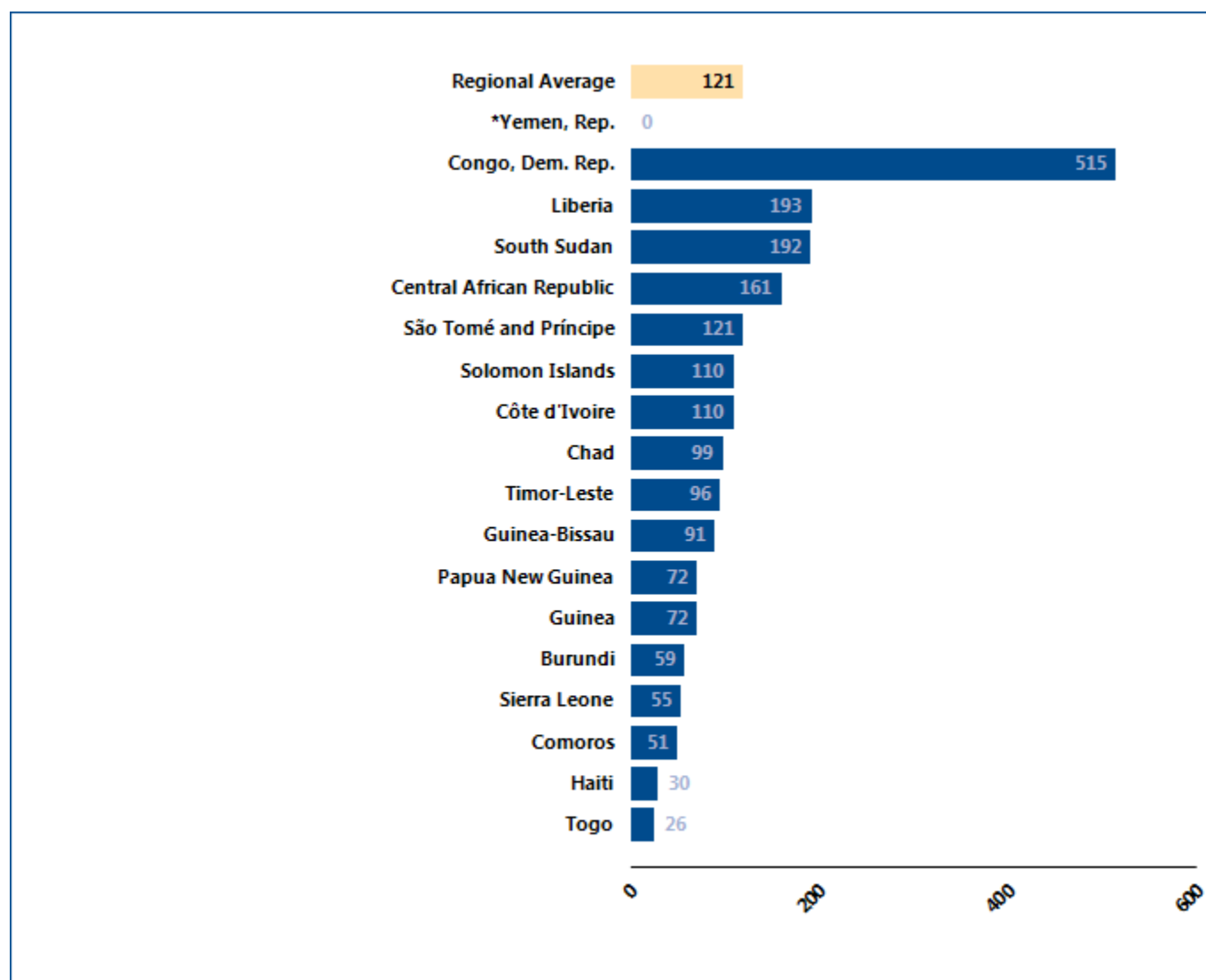
TRADING ACROSS BORDERS

The indicators reported here are for trading a shipment of goods by the most widely used mode of transport (whether sea, land, air or some combination of these). The information on the time and cost to complete export

and import is collected from local freight forwarders, customs brokers and traders. Comparing these indicators across the region and with averages both for the region and for comparator regions can provide useful insights.

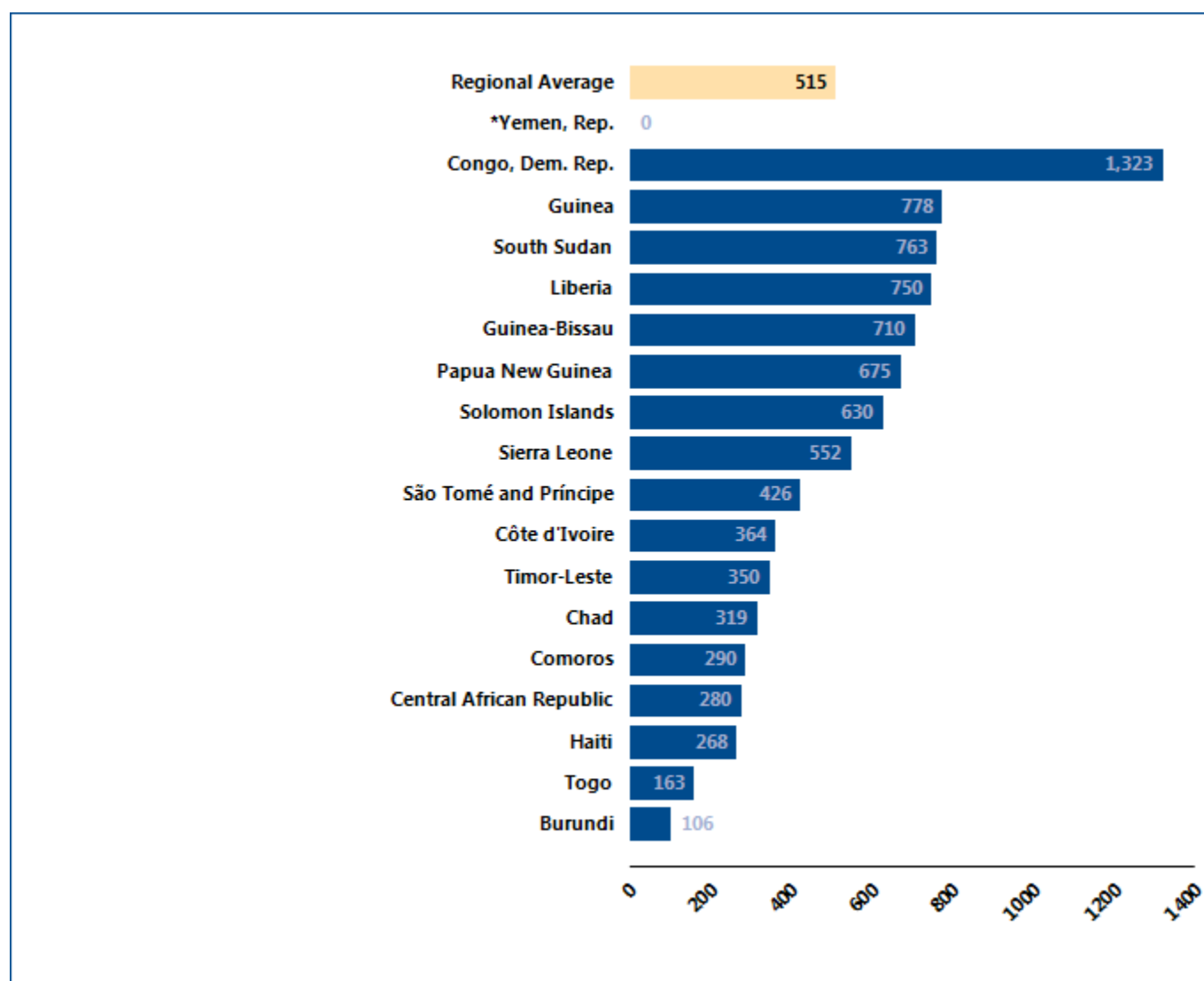
Figure 9.2 What it takes to trade across borders in economies in The g7+

Time to export: Border compliance (hours)



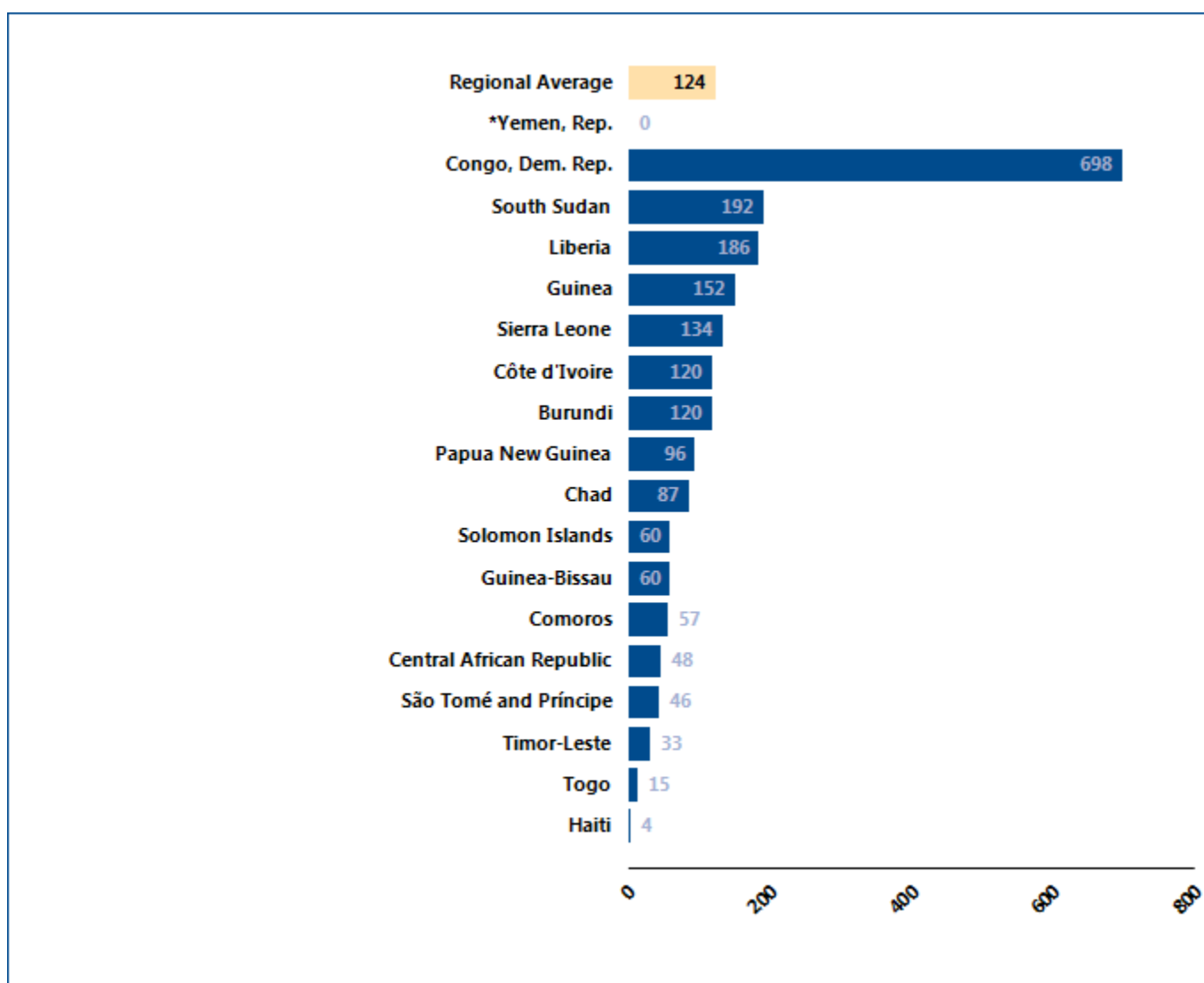
TRADING ACROSS BORDERS

Cost to export: Border compliance (USD)



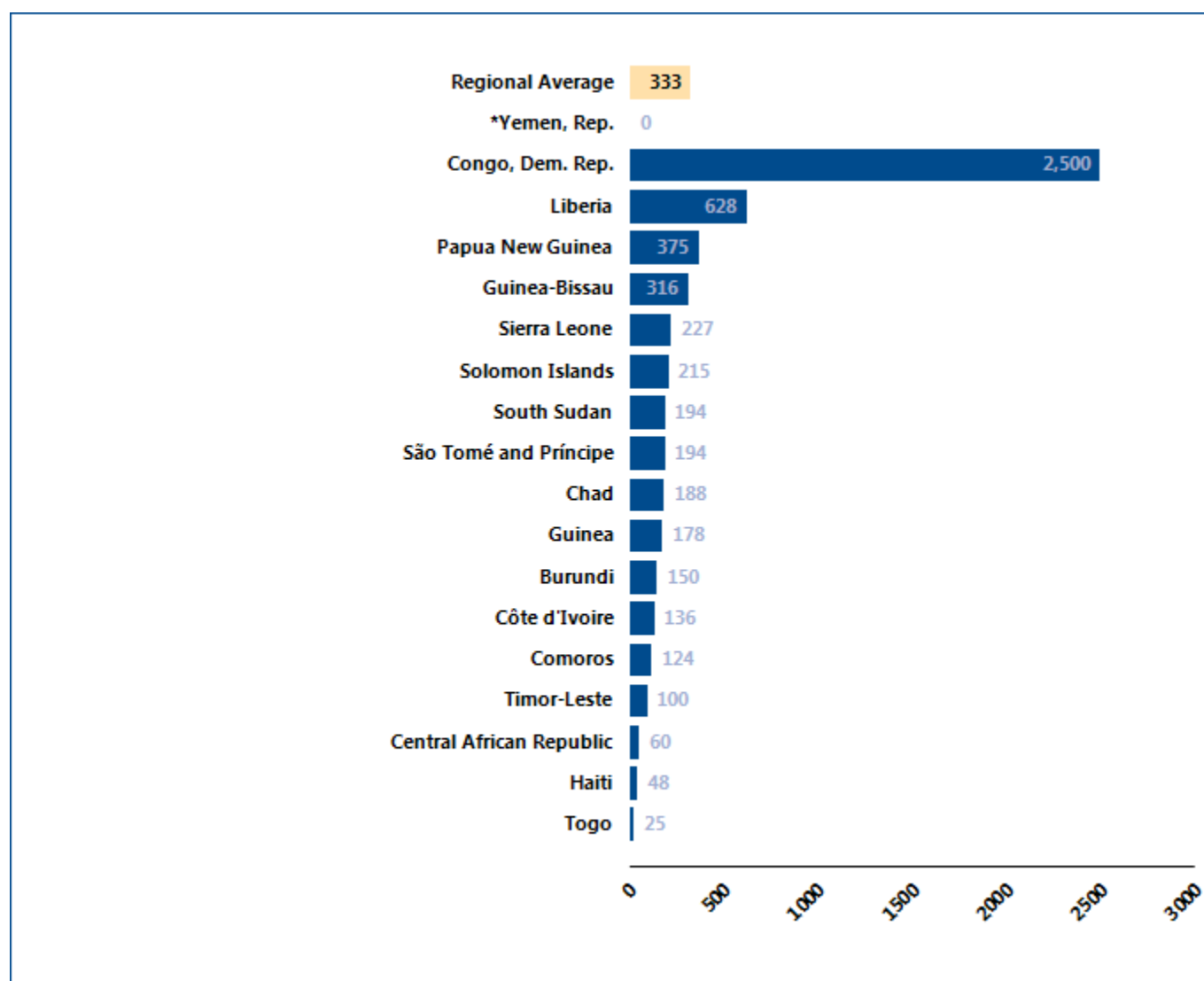
TRADING ACROSS BORDERS

Time to export: Documentary compliance (hours)



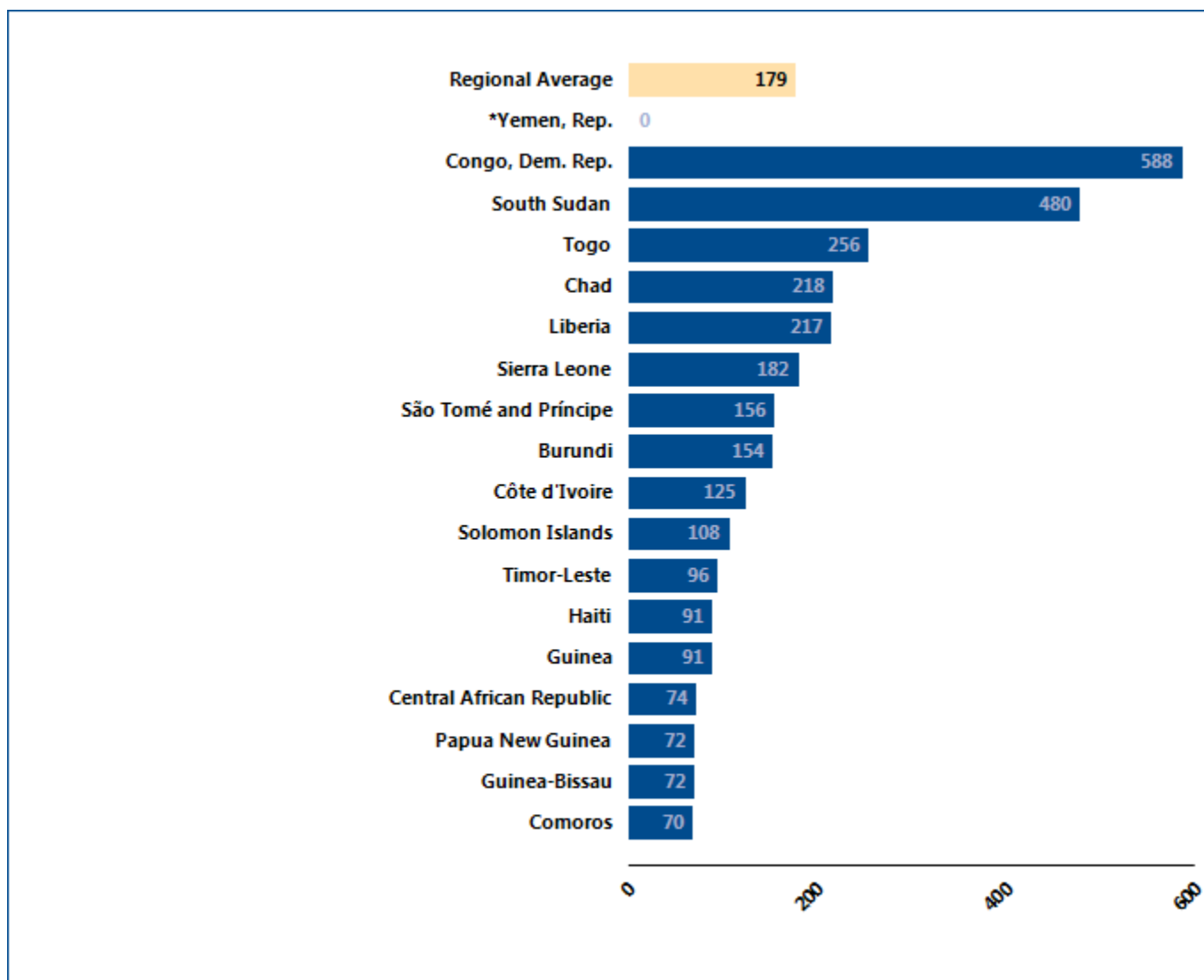
TRADING ACROSS BORDERS

Cost to export: Documentary compliance (USD)



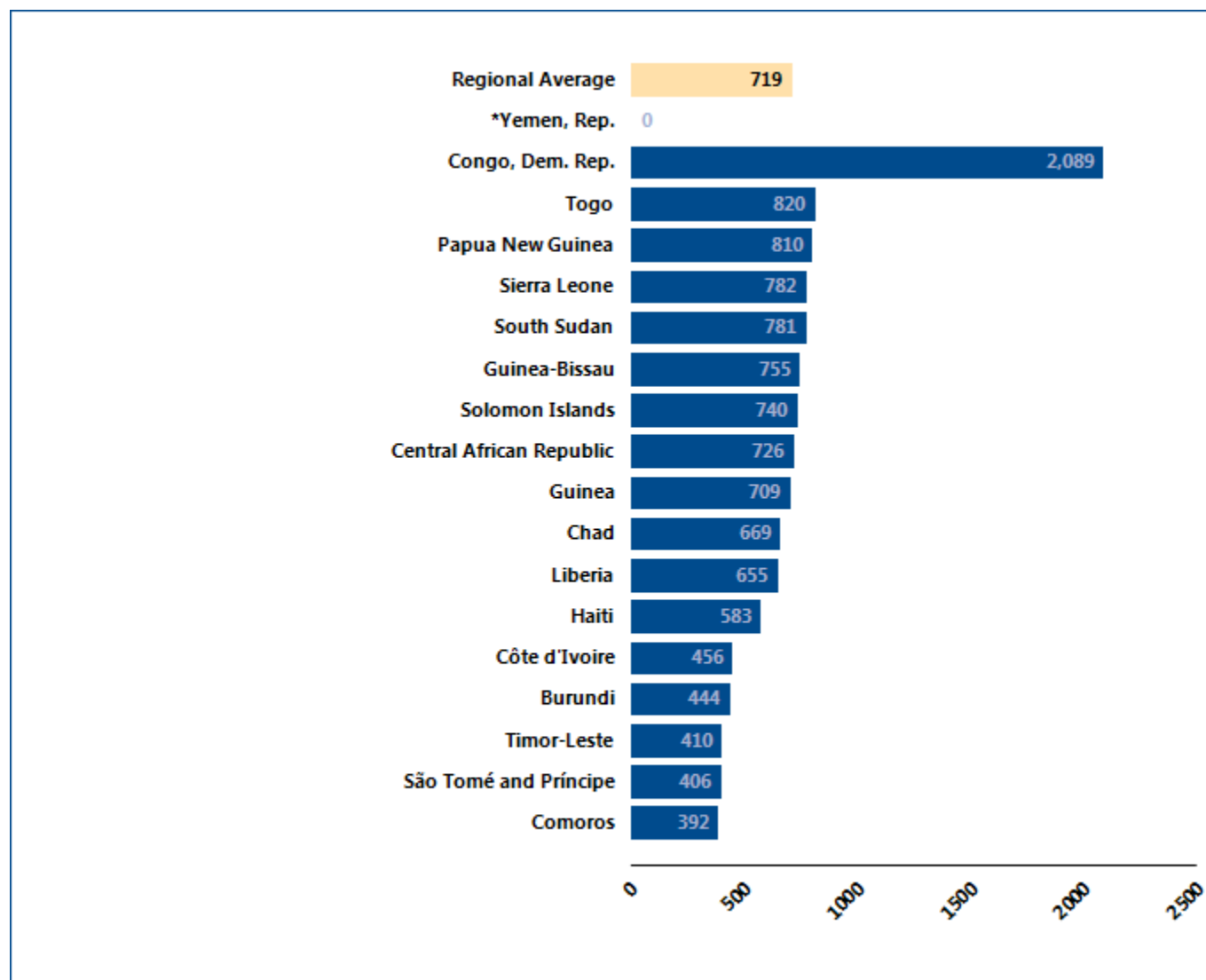
TRADING ACROSS BORDERS

Time to import: Border compliance (hours)



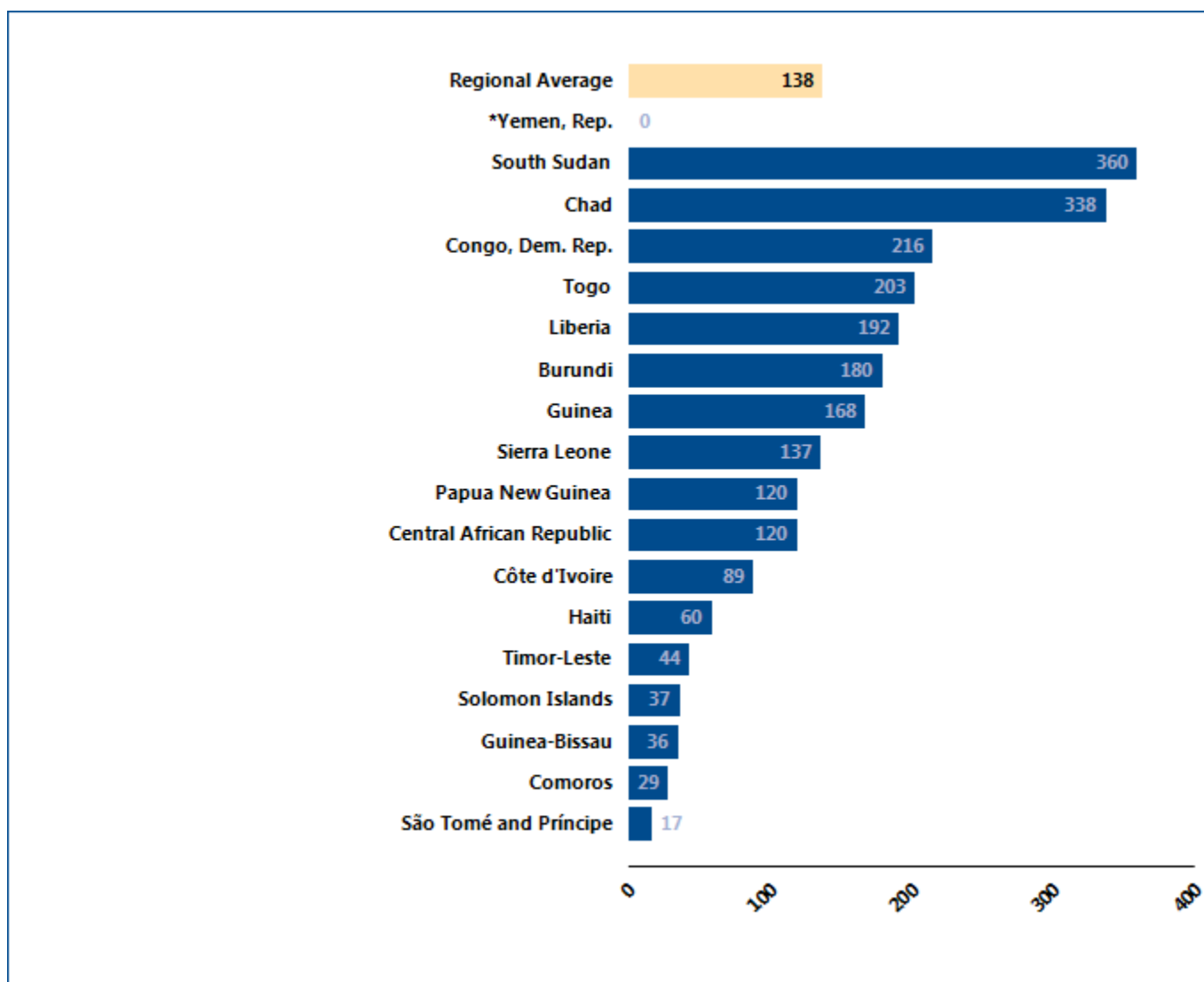
TRADING ACROSS BORDERS

Cost to import: Border compliance (USD)



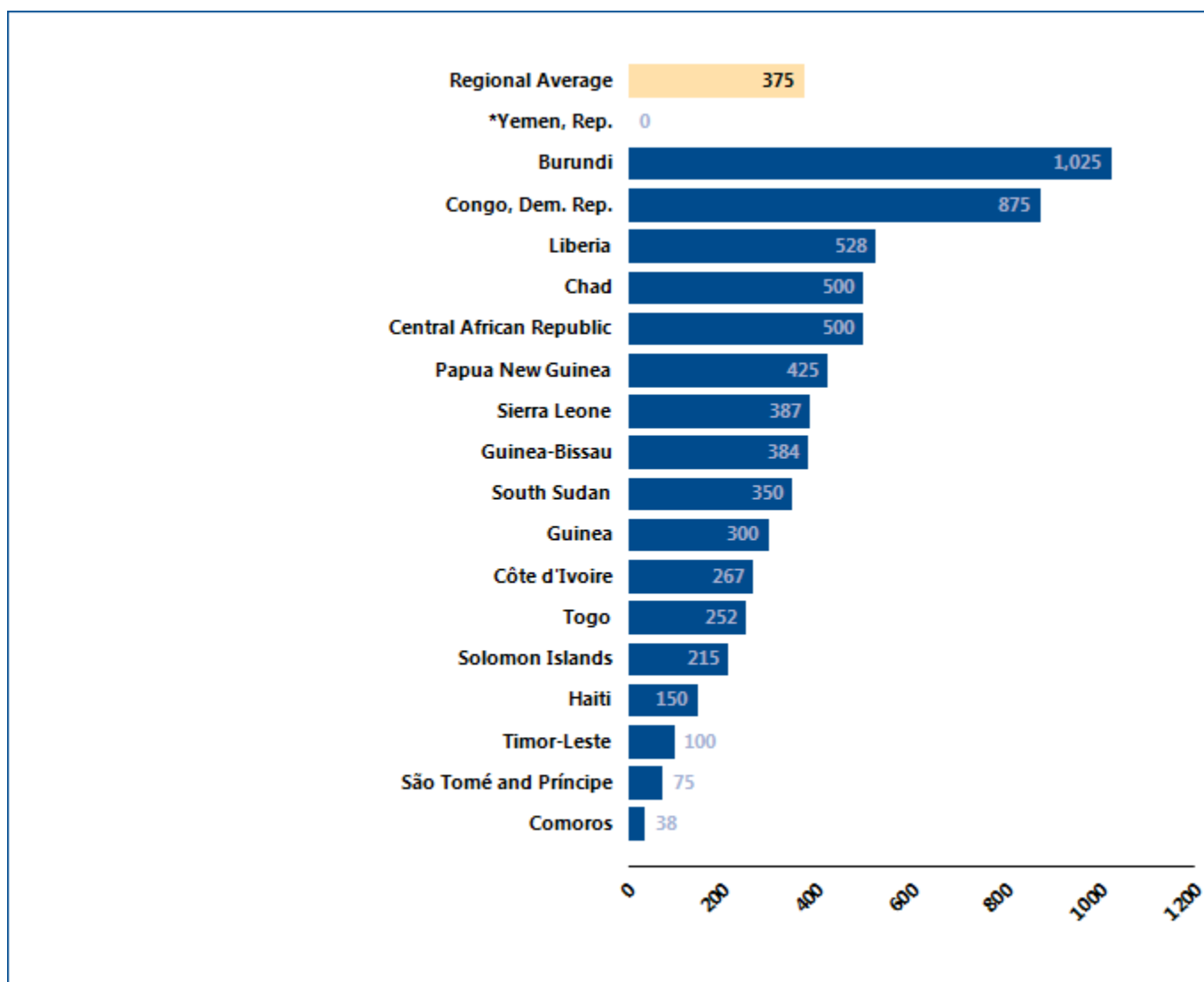
TRADING ACROSS BORDERS

Time to import: Documentary compliance (hours)



TRADING ACROSS BORDERS

Cost to import: Documentary compliance (USD)



Source: Doing Business database.

TRADING ACROSS BORDERS

What are the changes over time?

In economies around the world, trading across borders as measured by *Doing Business* has become faster and easier over the years. Governments have introduced tools to facilitate trade—including single windows, risk-based inspections and electronic data interchange

systems. These changes help improve their trading environment and boost firms' international competitiveness. What trade reforms has *Doing Business* recorded in The g7+ (table 9.1)?

Table 9.1 How have economies in The g7+ made trading across borders easier—or not?
By *Doing Business* report year DB2011 to DB2016

DB year	Economy	Reform
DB2016	<i>Côte d'Ivoire</i>	Côte d'Ivoire made trading across borders easier by implementing a single-window platform for importing, which reduced the time required for documentary compliance.
DB2016	<i>Togo</i>	Togo reduced the time for documentary and border compliance for importing by implementing an electronic platform connecting several agencies for import procedures and payments.
DB2016	<i>Congo, Dem. Rep.</i>	The Democratic Republic of Congo made trading across borders more difficult by increasing the port handling time and cost for exporting and importing.
DB2015	<i>Central African Republic</i>	The Central African Republic made trading across borders more difficult by increasing border checks and security controls at the border post with Cameroon.
DB2015	<i>Côte d'Ivoire</i>	Côte d'Ivoire made trading across borders easier by simplifying the processes for producing the inspection report and by reducing port and terminal handling charges at the port of Abidjan.
DB2015	<i>Yemen, Rep.</i>	In the Republic of Yemen trading across borders became more difficult as a result of inefficient port operation.
DB2014	<i>Burundi</i>	Burundi made trading across borders easier by eliminating the requirement for a preshipment inspection clean report of findings.

DB year	Economy	Reform
DB2014	<i>Central African Republic</i>	The Central African Republic made trading across borders easier by rehabilitating the key transit road at the border with Cameroon.
DB2014	<i>Guinea</i>	Guinea made trading across borders easier by improving port management systems.
DB2014	<i>Chad</i>	Chad made trading across borders more difficult by introducing a new export and import document.
DB2014	<i>Togo</i>	Togo made trading across borders more difficult by granting monopoly control of all port activities at the port of Lomé to a private company.
DB2013	<i>Burundi</i>	Burundi reduced the time to trade across borders by enhancing its use of electronic data interchange systems, introducing a more efficient system for monitoring goods going through transit countries and improving border coordination with neighboring transit countries.
DB2012	<i>Liberia</i>	Liberia made trading across borders faster by implementing online submission of customs forms and enhancing risk-based inspections.
DB2012	<i>São Tomé and Príncipe</i>	São Tomé and Príncipe made trading across borders faster by adopting legislative, administrative and technological improvements.
DB2012	<i>Sierra Leone</i>	Sierra Leone made trading across borders faster by implementing the Automated System for Customs Data (ASYCUDA).
DB2010	<i>Yemen, Rep.</i>	The Republic of Yemen reduced the time required for trading across borders by implementing a risk-based inspection system and an electronic data interchange system.
DB2010	<i>Sierra Leone</i>	Sierra Leone made trading across borders more costly through an increase in some fees, though it also reduced the time required for trade.
DB2010	<i>Congo, Dem. Rep.</i>	In the Democratic Republic of Congo the participation of private companies in the terminal handling process at the

DB year	Economy	Reform
		port of Matadi has reduced cargo handling time by improving the quality of service.
DB2010	<i>Haiti</i>	Haiti speeded up the clearance of goods through customs by implementing the ASYCUDA system and introducing 24-hour operations at the port.
DB2010	<i>Liberia</i>	Liberia reduced the time needed for trading across borders by creating a one-stop shop that brings together government ministries and agencies and by streamlining the inspection process.

Note: For information on reforms in earlier years (back to DB2005), see the *Doing Business* reports for these years, available at <http://www.doingbusiness.org>.

Source: *Doing Business* database.

ENFORCING CONTRACTS

Effective commercial dispute resolution has many benefits. Courts are essential for entrepreneurs because they interpret the rules of the market and protect economic rights. Efficient and transparent courts encourage new business relationships because businesses know they can rely on the courts if a new customer fails to pay. Speedy trials are essential for small enterprises, which may lack the resources to stay in business while awaiting the outcome of a long court dispute.

What do the indicators cover?

Doing Business measures the time and cost for resolving a standardized commercial dispute through a local first-instance court. In addition, this year it introduces a new measure, the quality of judicial processes index, evaluating whether each economy has adopted a series of good practices that promote quality and efficiency in the court system. This new index replaces the indicator on procedures, which was eliminated this year. The ranking of economies on the ease of enforcing contracts is determined by sorting their distance to frontier scores. These scores are the simple average of the distance to frontier scores for each of the component indicators

The dispute in the case study involves the breach of a sales contract between 2 domestic businesses. The case study assumes that the court hears an expert on the quality of the goods in dispute. This distinguishes the case from simple debt enforcement. To make the data comparable across economies, *Doing Business* uses several assumptions about the case:

- The dispute concerns a lawful transaction between two 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.
- The buyer orders custom-made goods, then fails to pay.

WHAT THE ENFORCING CONTRACTS INDICATORS MEASURE

Time required to enforce a contract through the courts (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 enforce a contract through the courts (% of claim)

- Attorney fees
- Court fees
- Enforcement fees

Quality of judicial processes index (0-18)

- Court structure and proceedings (0-5)
- Case management (0-6)
- Court automation (0-4)
- Alternative dispute resolution (0-3)

- The value of the dispute is 200% of the income per capita or the equivalent in local currency of USD 5,000, whichever is greater.
- The seller sues the buyer before the court with jurisdiction over commercial cases worth 200% of income per capita or \$5,000.
- The seller requests a pretrial attachment to secure the claim.
- The dispute on the quality of the goods requires an expert opinion.
- The judge decides in favor of the seller; there is no appeal.
- The seller enforces the judgment through a public sale of the buyer's movable assets.

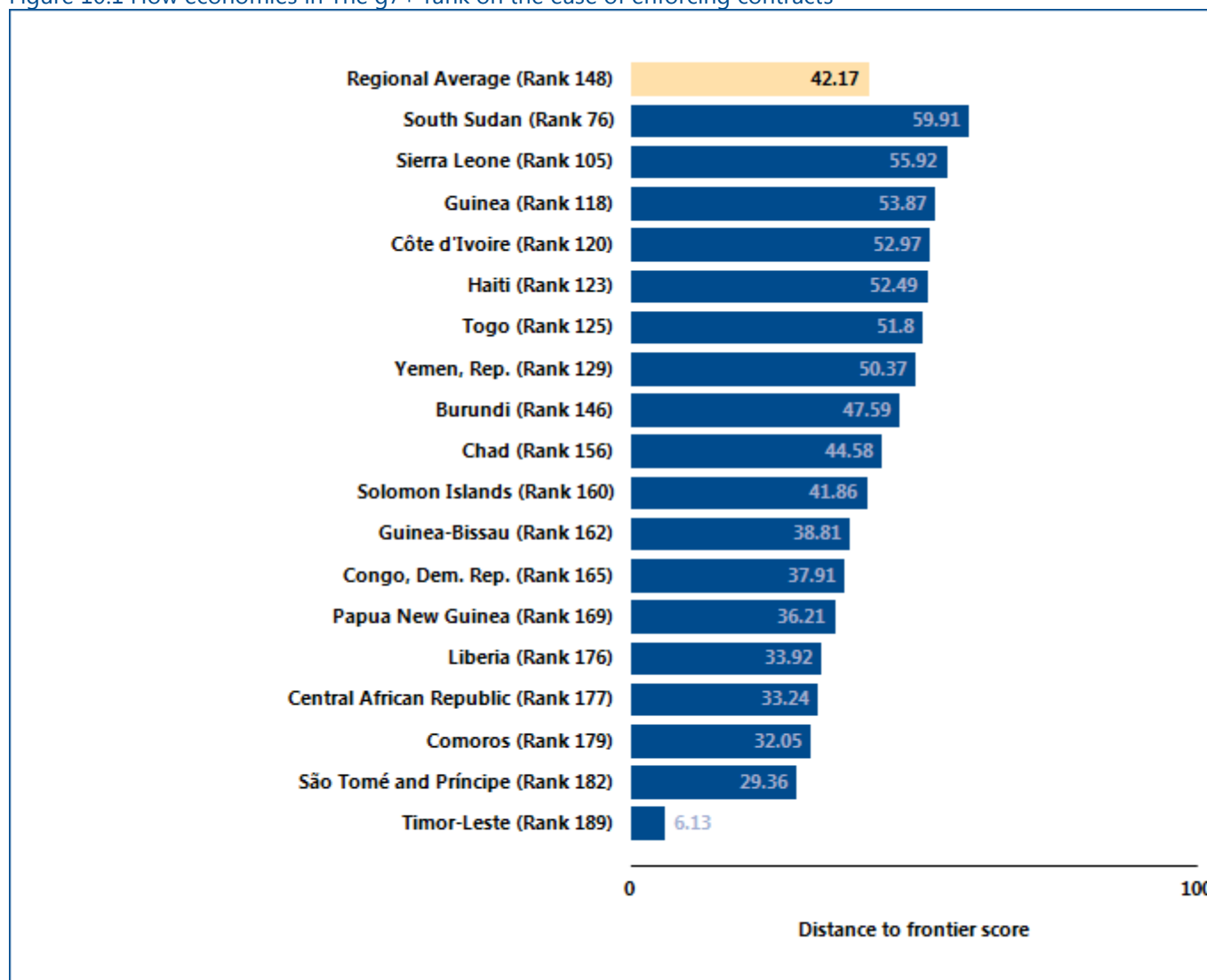
ENFORCING CONTRACTS

Where do the region’s economies stand today?

How efficient is the process of resolving a commercial dispute through the courts in economies in The g7+? The global rankings of these economies on the ease of

enforcing contracts suggest an answer (figure 10.1). The average ranking of the region and comparator regions provide a useful benchmark.

Figure 10.1 How economies in The g7+ rank on the ease of enforcing contracts



Source: Doing Business database.

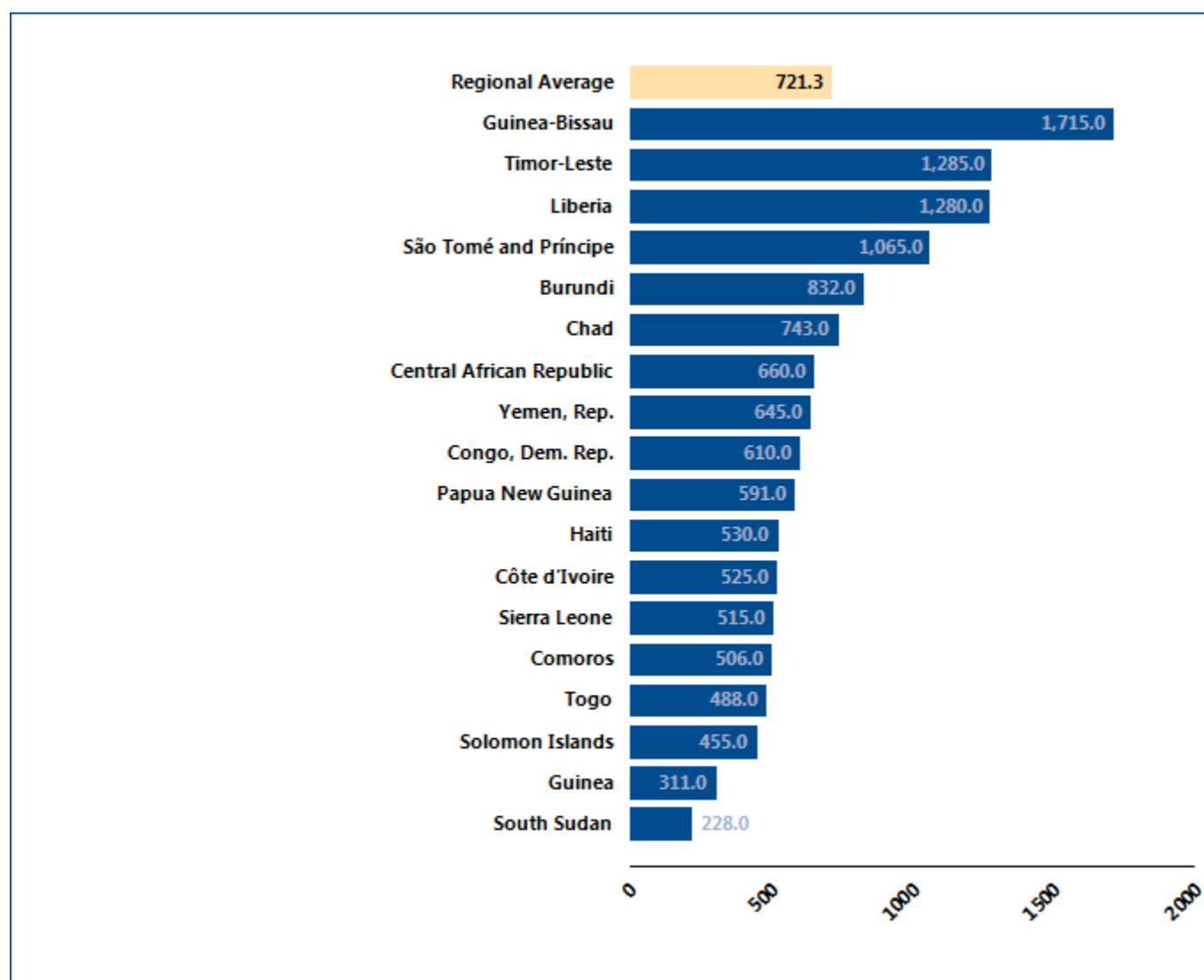
ENFORCING CONTRACTS

The indicators underlying the rankings may also be revealing. Data collected by *Doing Business* show what it takes to enforce a contract through the courts in each economy in the region: the time, the cost and quality of

judicial processes index (figure 10.2). Comparing these indicators across the region and with averages both for the region and for comparator regions can provide useful insights.

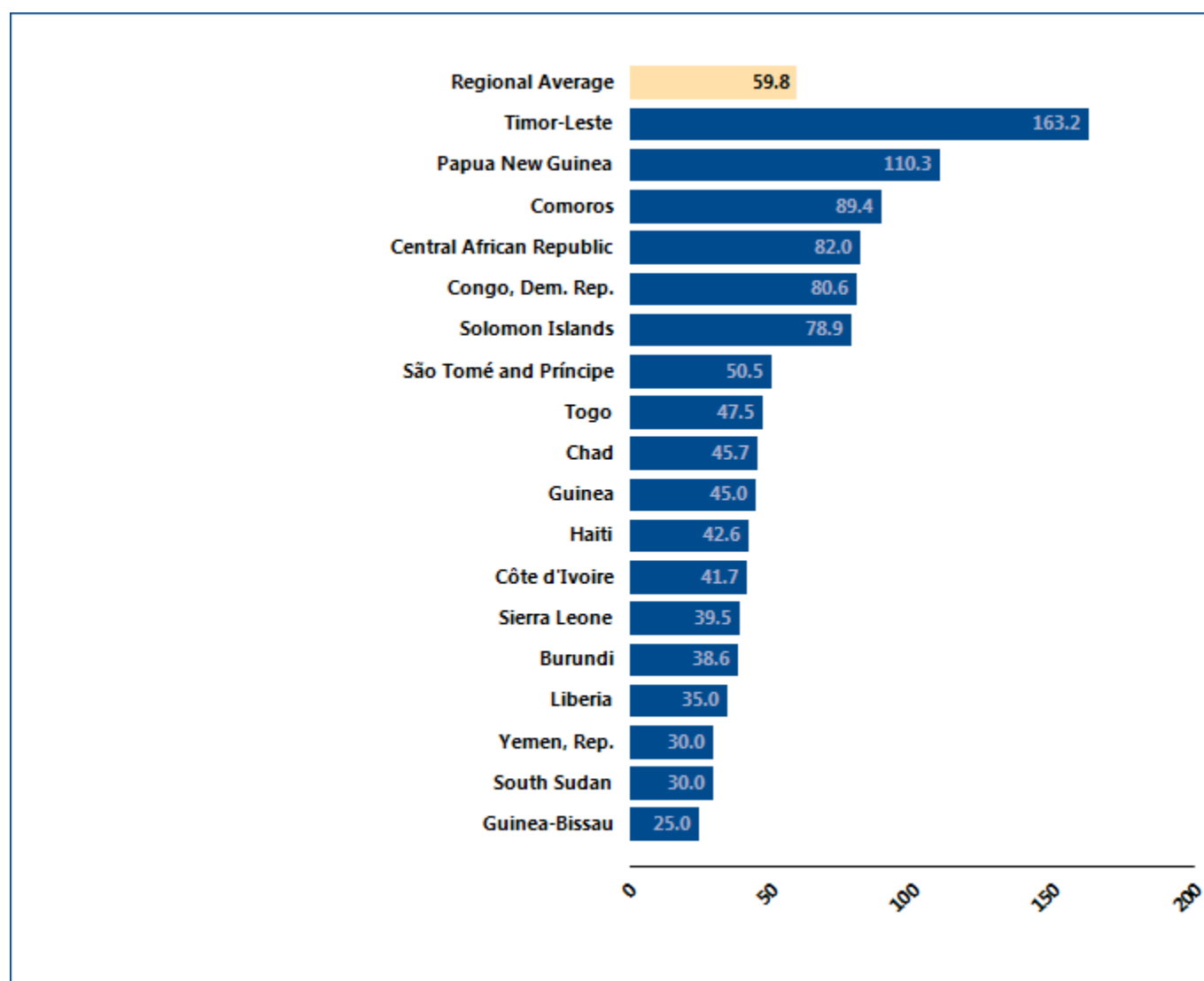
Figure 10.2 What it takes to enforce a contract through the courts in economies in The g7+

Time (days)



ENFORCING CONTRACTS

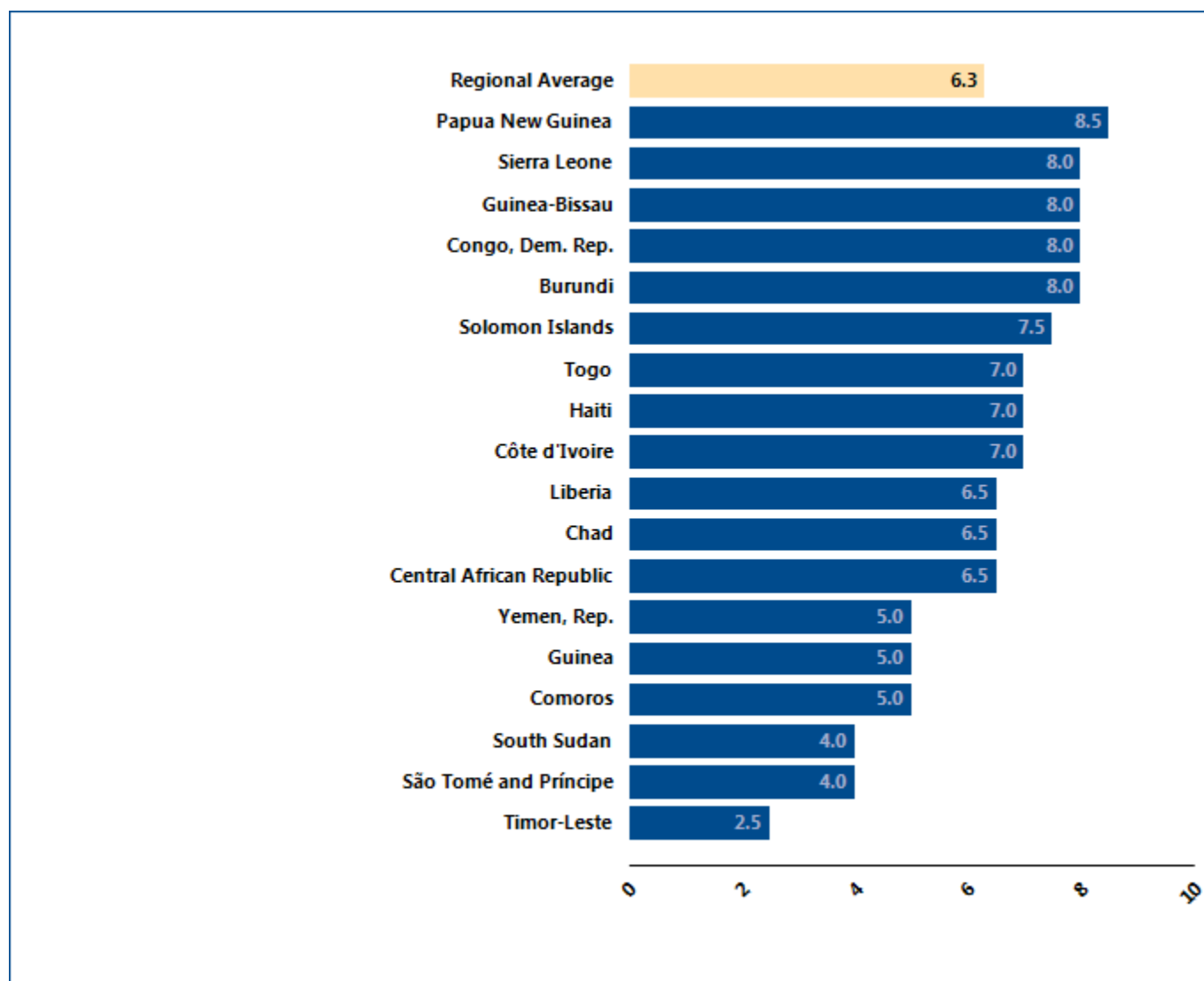
Cost (% of claim)



Source: Doing Business database.

ENFORCING CONTRACTS

Quality of Judicial Processes Index (0-18)



Source: *Doing Business* database.

Note: Higher values indicate more efficient judicial processes.

ENFORCING CONTRACTS

What are the changes over time?

Economies in all regions have improved contract enforcement in recent years. A judiciary can be improved in different ways. Higher-income economies tend to look for ways to enhance efficiency by introducing new technology. Lower-income economies often work on

reducing backlogs by introducing periodic reviews to clear inactive cases from the docket and by making procedures faster. What reforms making it easier (or more difficult) to enforce contracts has *Doing Business* recorded in The g7+ (table 10.1)?

Table 10.1 How have economies in The g7+ made enforcing contracts easier—or not?
By *Doing Business* report year DB2011 to DB2016

DB year	Economy	Reform
DB2016	<i>Côte d'Ivoire</i>	Côte d'Ivoire made enforcing contracts easier by introducing new provisions on voluntary mediation.
DB2014	<i>Côte d'Ivoire</i>	Côte d'Ivoire made enforcing contracts easier by creating a specialized commercial court.
DB2014	<i>Togo</i>	Togo made enforcing contracts easier by creating specialized commercial divisions within the court of first instance.
DB2013	<i>Liberia</i>	Liberia made enforcing contracts easier by creating a specialized commercial court.
DB2012	<i>Sierra Leone</i>	Sierra Leone made enforcing contracts easier by launching a fast-track commercial court.
DB2011	<i>Timor-Leste</i>	Timor-Leste increased court efficiency by training and appointing new judges and passing a new civil procedure code.
DB2011	<i>Guinea-Bissau</i>	Guinea-Bissau established a specialized commercial court, speeding up the enforcement of contracts.
DB2010	<i>Papua New Guinea</i>	Papua New Guinea made enforcing contracts easier by fully launching the specialized commercial track at the national court.

Note: For information on reforms in earlier years (back to DB2005), see the *Doing Business* reports for these years, available at <http://www.doingbusiness.org>.

Source: *Doing Business* database.

RESOLVING INSOLVENCY

A robust bankruptcy system functions as a filter, ensuring the survival of economically efficient companies and reallocating the resources of inefficient ones. Fast and cheap insolvency proceedings result in the speedy return of businesses to normal operation and increase returns to creditors. By clarifying the expectations of creditors and debtors about the outcome of insolvency proceedings, well-functioning insolvency systems can facilitate access to finance, save more viable businesses and sustainably grow the economy.

What do the indicators cover?

Doing Business studies the time, cost and outcome of insolvency proceedings involving domestic legal entities. These variables are used to calculate the recovery rate, which is recorded as cents on the dollar recovered by secured creditors through reorganization, liquidation or debt enforcement (foreclosure or receivership) proceedings. To determine the present value of the amount recovered by creditors, *Doing Business* uses the lending rates from the International Monetary Fund, supplemented with data from central banks and the Economist Intelligence Unit.

In addition, *Doing Business* evaluates the adequacy and integrity of the existing legal framework applicable to liquidation and reorganization proceedings through the strength of insolvency framework index. The index tests whether economies adopted internationally accepted good practices in four areas: commencement of proceedings, management of debtor's assets, reorganization proceedings and creditor participation.

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. The Resolving Insolvency indicator does not measure insolvency proceedings of individuals and financial institutions. The data 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.

WHAT THE RESOLVING INSOLVENCY INDICATORS 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 business continues operating as a going concern or business assets are sold piecemeal

Recovery rate for creditors

Measures the cents on the dollar recovered by secured creditors

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

Official costs of the insolvency proceedings are deducted

Depreciation of furniture is taken into account

Present value of debt recovered

Strength of insolvency framework index (0-16)

Sum of the scores of four component indices:

Commencement of proceedings index (0-3)

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

Reorganization proceedings index (0-3)

Creditor participation index (0-4)

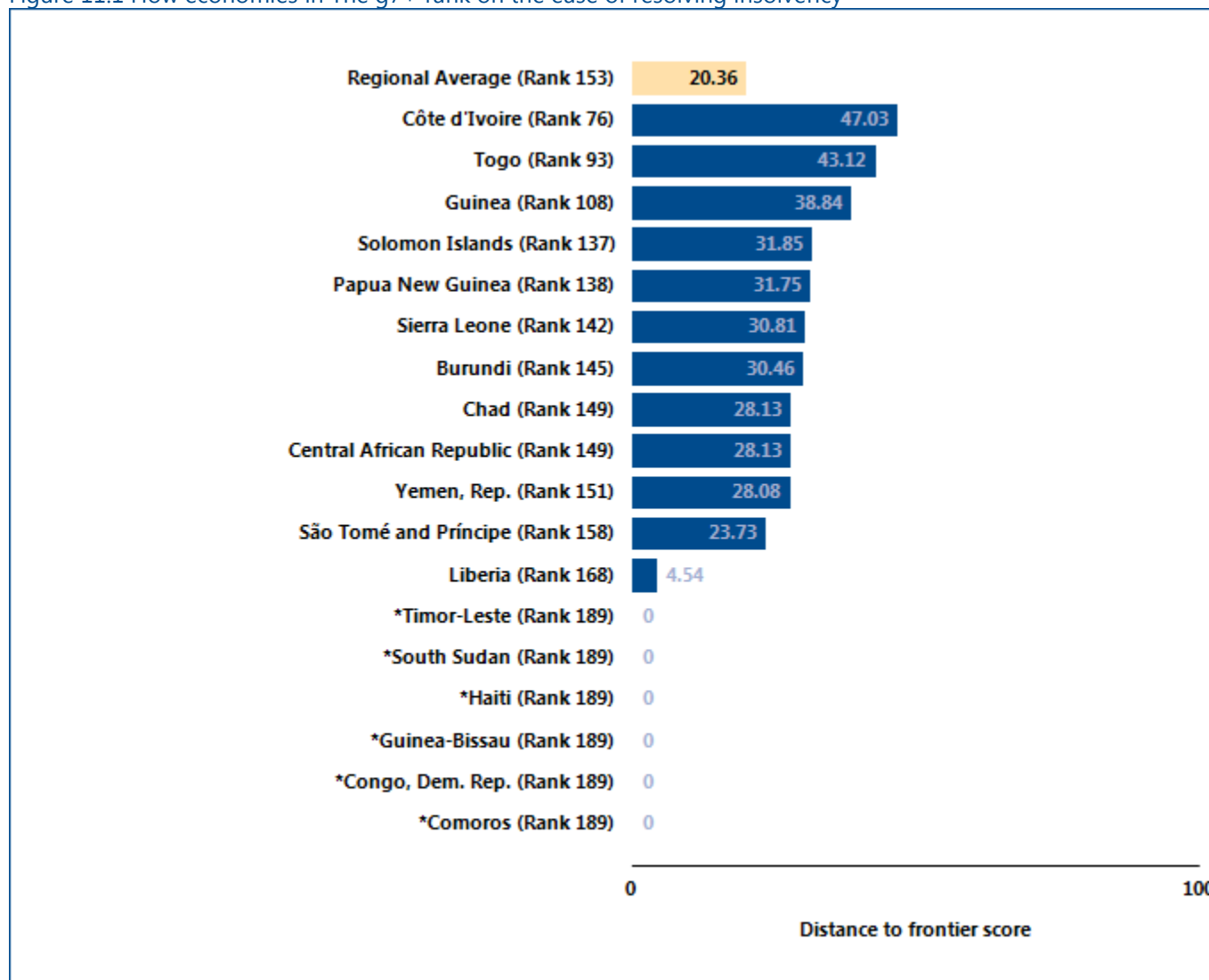
RESOLVING INSOLVENCY

Where do the region's economies stand today?

How efficient are insolvency proceedings in economies in The g7+? The global rankings of these economies on the ease of resolving insolvency suggest an answer (figure 11.1). The average ranking of the region and comparator

regions provide a useful benchmark for assessing the efficiency of insolvency proceedings. Speed, low costs and continuation of viable businesses characterize the top-performing economies.

Figure 11.1 How economies in The g7+ rank on the ease of resolving insolvency



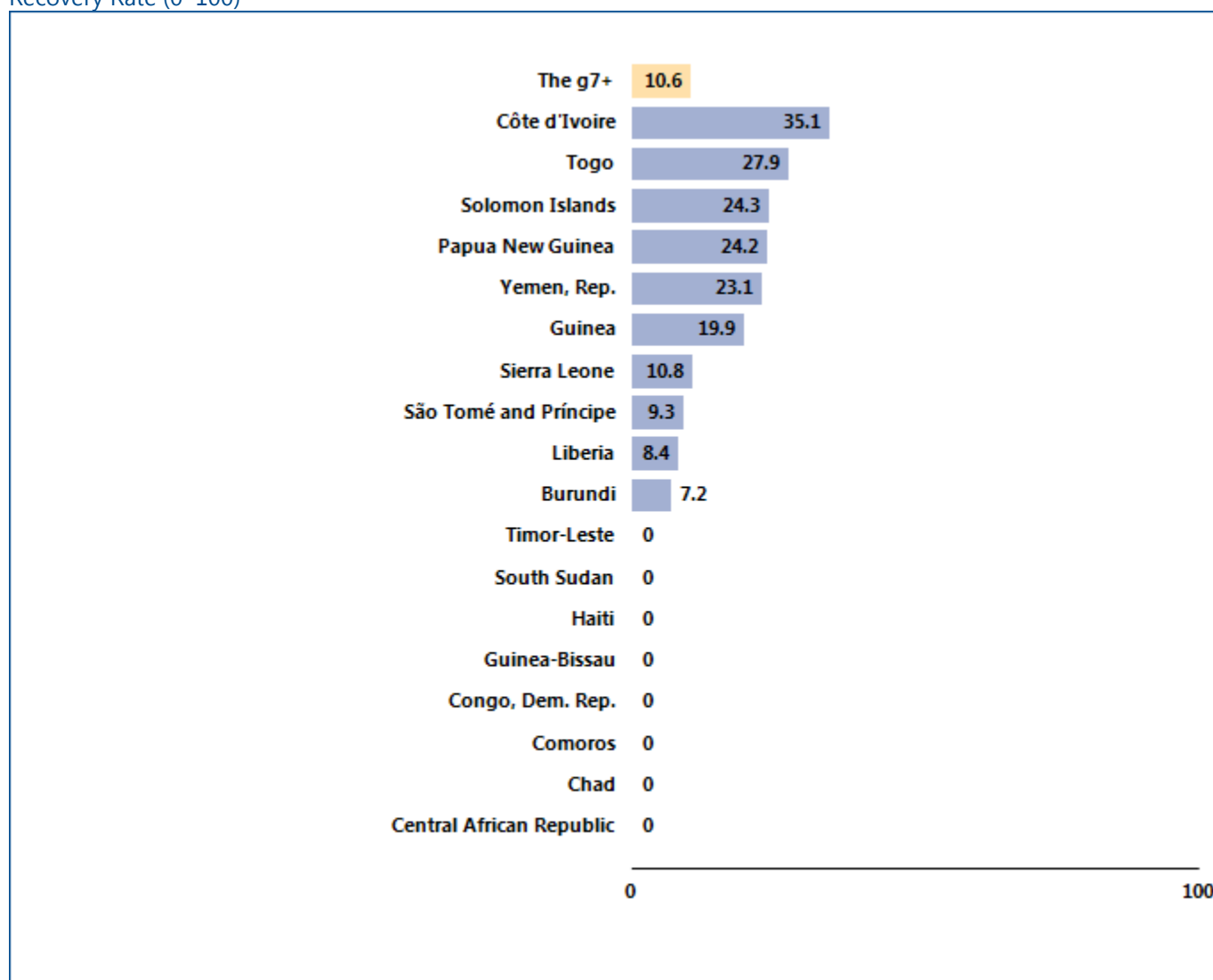
Source: Doing Business database.

RESOLVING INSOLVENCY

The indicators underlying the rankings may be more revealing. Data collected by *Doing Business* show the average recovery rate and the average strength of insolvency framework index (figure 11.2). Comparing

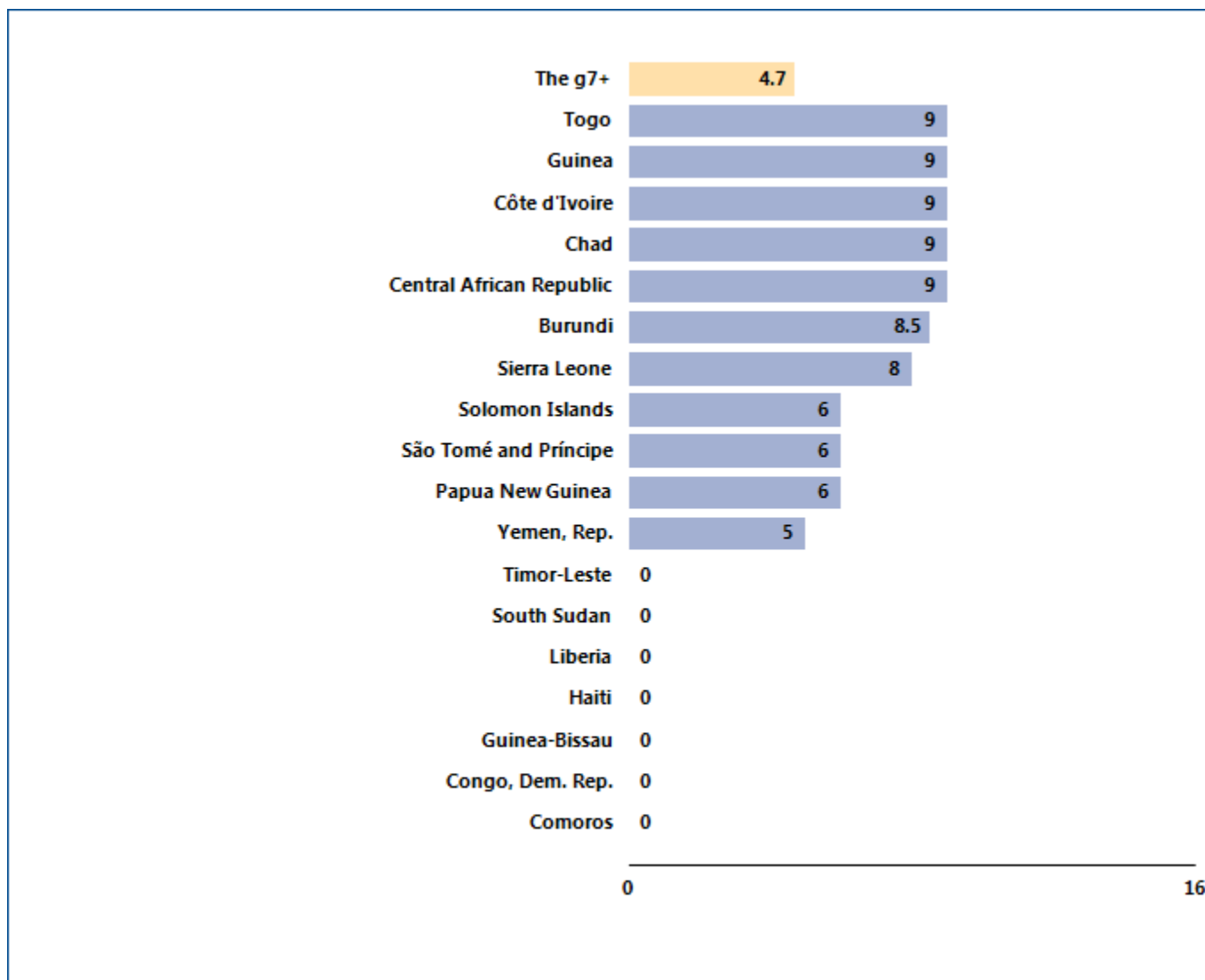
these indicators across the region and with averages both for the region and for comparator regions can provide useful insights.

Figure 11.2 How efficient is the insolvency process in economies in The g7+ Recovery Rate (0–100)



Source: *Doing Business* database.

Total Strength of Insolvency Framework index (0-16)



Source: *Doing Business* database.

* Indicates a "no practice" mark. See the data notes for details. If an economy has no laws or regulations covering a specific area—for example, insolvency—it receives a "no practice" mark. Similarly, an economy receives a "no practice" or "not possible" mark if regulation exists but is never used in practice or if a competing regulation prohibits such practice. Either way, a "no practice" mark puts the economy at the bottom of the ranking on the relevant indicator.

Source: *Doing Business* database.

Note: Higher values indicate insolvency legislation that is better designed for rehabilitating viable firms and liquidating nonviable ones.

RESOLVING INSOLVENCY

What are the changes over time?

A well-balanced bankruptcy system distinguishes companies that are financially distressed but economically viable from inefficient companies that should be liquidated. But in some insolvency systems even viable businesses are liquidated. This is starting to

change. Many recent reforms of bankruptcy laws have been aimed at helping more of the viable businesses survive. What insolvency reforms has *Doing Business* recorded in The g7+ (table 11.1)?

Table 11.1 How have economies in The g7+ made resolving insolvency easier—or not?
By *Doing Business* report year DB2011 to DB2016

DB year	Economy	Reform
DB2014	<i>Congo, Dem. Rep.</i>	The Democratic Republic of Congo made resolving insolvency easier by adopting the OHADA Uniform Act Organizing Collective Proceedings for Wiping Off Debts. The law allows an insolvent debtor to file for preventive settlement, legal redress or liquidation and sets out clear rules on the steps and procedures for each of the options available.
DB2012	<i>Burundi</i>	Burundi amended its commercial code to establish foreclosure procedures.
DB2012	<i>Sierra Leone</i>	Sierra Leone established a fast-track commercial court in an effort to expedite commercial cases, including insolvency proceedings.
DB2012	<i>Solomon Islands</i>	The Solomon Islands adopted a new law that simplified insolvency proceedings.
DB2010	<i>Sierra Leone</i>	Sierra Leone improved its insolvency process through a new company act that encourages financially distressed companies to first try to reorganize rather than going straight into liquidation.

Note: For information on reforms in earlier years (back to DB2005), see the *Doing Business* reports for these years, available at <http://www.doingbusiness.org>.

Source: *Doing Business* database.

DISTANCE TO FRONTIER AND EASE OF DOING BUSINESS RANKING

Doing Business presents results for two aggregate measures: the distance to frontier score and the ease of doing business ranking, which is based on the distance to frontier score. The ease of doing business ranking compares economies with one another; the distance to frontier score benchmarks economies with respect to regulatory best practice, showing the absolute distance to the best performance on each *Doing Business* indicator. When compared across years, the distance to frontier score shows how much the regulatory environment for local entrepreneurs in an economy has changed over time in absolute terms, while the ease of doing business ranking can show only how much the regulatory environment has changed relative to that in other economies.

Distance to Frontier

The distance to frontier score captures the gap between an economy's performance and a measure of best practice across the entire sample of 36 indicators for 10 *Doing Business* topics (the labor market regulation indicators are excluded). For starting a business, for example, the former Yugoslav Republic of Macedonia and New Zealand have the smallest number of procedures required (1), and New Zealand the shortest time to fulfill them (0.5 days). Slovenia has the lowest cost (0.0), and Australia, Colombia and 103 other economies have no paid-in minimum capital requirement (table 14.1 in the *Doing Business 2016* report).

Calculation of the distance to frontier score

Calculating the distance to frontier score for each economy involves two main steps. In the first step individual component indicators are normalized to a common unit where each of the 36 component indicators y (except for the total tax rate) is rescaled using the linear transformation $(\text{worst} - y)/(\text{worst} - \text{frontier})$. In this formulation the frontier represents the best performance on the indicator across all economies since 2005 or the third year in which data for the indicator were collected. Both the best performance and the worst performance are established every five years based on the *Doing Business* data for the year in which they are established, and remain at that level for the five years regardless of any changes in data in interim years. Thus an economy may set the frontier for an indicator

even though it is no longer at the frontier in a subsequent year.

For scores such as those on the strength of legal rights index or the quality of land administration index, the frontier is set at the highest possible value. For the total tax rate, consistent with the use of a threshold in calculating the rankings on this indicator, the frontier is defined as the total tax rate at the 15th percentile of the overall distribution for all years included in the analysis up to and including *Doing Business 2015*. For the time to pay taxes the frontier is defined as the lowest time recorded among all economies that levy the three major taxes: profit tax, labor taxes and mandatory contributions, and value added tax (VAT) or sales tax. For the different times to trade across borders, the frontier is defined as 1 hour even though in many economies the time is less than that.

In the same formulation, to mitigate the effects of extreme outliers in the distributions of the rescaled data for most component indicators (very few economies need 700 days to complete the procedures to start a business, but many need 9 days), the worst performance is calculated after the removal of outliers. The definition of outliers is based on the distribution for each component indicator. To simplify the process two rules were defined: the 95th percentile is used for the indicators with the most dispersed distributions (including minimum capital, number of payments to pay taxes, and the time and cost indicators), and the 99th percentile is used for number of procedures. No outlier is removed for component indicators bound by definition or construction, including legal index scores (such as the depth of credit information index, extent of conflict of interest regulation index and strength of insolvency framework index) and the recovery rate (figure 14.1).

In the second step for calculating the distance to frontier score, the scores obtained for individual indicators for each economy are aggregated through simple averaging into one distance to frontier score, first for each topic and then across all 10 topics: starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting minority investors, paying taxes, trading across borders, enforcing contracts and resolving insolvency. More complex aggregation methods—such as principal components and unobserved components—yield a ranking nearly

identical to the simple average used by *Doing Business*⁴. Thus *Doing Business* uses the simplest method: weighting all topics equally and, within each topic, giving equal weight to each of the topic components⁵.

An economy's distance to frontier score is indicated on a scale from 0 to 100, where 0 represents the worst performance and 100 the frontier. All distance to frontier calculations are based on a maximum of five decimals. However, indicator ranking calculations and the ease of doing business ranking calculations are based on two decimals.

The difference between an economy's distance to frontier score in any previous year and its score in 2015 illustrates the extent to which the economy has closed the gap to the regulatory frontier over time. And in any given year the score measures how far an economy is from the best performance at that time.

Treatment of the total tax rate

The total tax rate component of the paying taxes indicator set enters the distance to frontier calculation in a different way than any other indicator. The distance to frontier score obtained for the total tax rate is transformed in a nonlinear fashion before it enters the distance to frontier score for paying taxes. As a result of the nonlinear transformation, an increase in the total tax rate has a smaller impact on the distance to frontier score for the total tax rate—and therefore on the distance to frontier score for paying taxes—for economies with a below-average total tax rate than it would have had before this approach was adopted in *Doing Business 2015* (line B is smaller than line A in figure 14.2 of the *Doing Business 2016* report). And for economies with an extreme total tax rate (a rate that is very high relative to the average), an increase has a greater impact on both these distance to frontier scores

than it would have had before (line D is bigger than line C in figure 14.2 of the *Doing Business 2016* report).

The nonlinear transformation 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. The nonlinear transformation along with the threshold reduces the bias in the 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). In addition, it acknowledges the need of economies to collect taxes from firms.

Calculation of scores for economies with 2 cities covered

For each of the 11 economies in which *Doing Business* collects data for the second largest business city as well as the largest one, the distance to frontier score is calculated as the population-weighted average of the distance to frontier scores for these two cities (table 13.1). This is done for the aggregate score, the scores for each topic and the scores for all the component indicators for each topic.

⁴ See Djankov, Manraj and others (2005). Principal components and unobserved components methods yield a ranking nearly identical to that from the simple average method because both these methods assign roughly equal weights to the topics, since the pairwise correlations among indicators do not differ much. An alternative to the simple average method is to give different weights to the topics, depending on which are considered of more or less importance in the context of a specific economy.

⁵ For getting credit, indicators are weighted proportionally, according to their contribution to the total score, with a weight of 60% assigned to the strength of legal rights index and 40% to the depth of credit information index. Indicators for all other topics are assigned equal weights

Table 13.1 Weights used in calculating the distance to frontier scores for economies with 2 cities covered

Economy	City	Weight (%)
Bangladesh	Dhaka	78
	Chittagong	22
Brazil	São Paulo	61
	Rio de Janeiro	39
China	Shanghai	55
	Beijing	45
India	Mumbai	47
	Delhi	53
Indonesia	Jakarta	78
	Surabaya	22
Japan	Tokyo	65
	Osaka	35
Mexico	Mexico City	83
	Monterrey	17
Nigeria	Lagos	77
	Kano	23
Pakistan	Karachi	65
	Lahore	35
Russian Federation	Moscow	70
	St. Petersburg	30
United States	New York	60
	Los Angeles	40

Source: United Nations, Department of Economic and Social Affairs, Population Division, World Urbanization Prospects, 2014 Revision. <http://esa.un.org/unpd/wup/CD-ROM/Default.aspx>.

Economies that improved the most across 3 or more *Doing Business* topics in 2014/15

Doing Business 2016 uses a simple method to calculate which economies improved the ease of doing business the most. First, it selects the economies that in 2014/15

implemented regulatory reforms making it easier to do business in 3 or more of the 10 topics included in this year's aggregate distance to frontier score. Changes making it more difficult to do business are subtracted from the total number of those making it easier to do business. Twenty-four economies meet this criterion: Armenia; Azerbaijan; Benin; Costa Rica; Côte d'Ivoire; Cyprus; Hong Kong SAR, China; Indonesia; Jamaica; Kazakhstan; Kenya; Lithuania; Madagascar; Mauritania; Morocco; Romania; the Russian Federation; Rwanda; Senegal; Togo; Uganda; the United Arab Emirates; Uzbekistan; and Vietnam. Second, *Doing Business* sorts these economies on the increase in their distance to frontier score from the previous year using comparable data.

Selecting the economies that implemented regulatory reforms in at least three topics and had the biggest improvements in their distance to frontier scores is intended to highlight economies with ongoing, broad-based reform programs. The improvement in the distance to frontier score is used to identify the top improvers because this allows a focus on the absolute improvement—in contrast with the relative improvement shown by a change in rankings—that economies have made in their regulatory environment for business.

Ease of *Doing Business* ranking

The ease of doing business ranking ranges from 1 to 189. The ranking of economies is determined by sorting the aggregate distance to frontier scores, rounded to 2 decimals.

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Doing Business 2016 is the 13th in a series of annual reports investigating the regulations that enhance business activity and those that constrain it. The report provides quantitative indicators covering 11 areas of the business environment in 189 economies. The goal of the *Doing Business* series is to provide objective data for use by governments in designing sound business regulatory policies and to encourage research on the important dimensions of the regulatory environment for firms.

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