Doing Business 2016

Measuring Regulatory Quality and Efficiency

Regional Profile 2016

Sub-Saharan Africa (SSA)

реестр залогового обеспечения של ולייבוע לייבוע אונים אונ

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 Sub-Saharan Africa (SSA). 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 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.

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.

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.

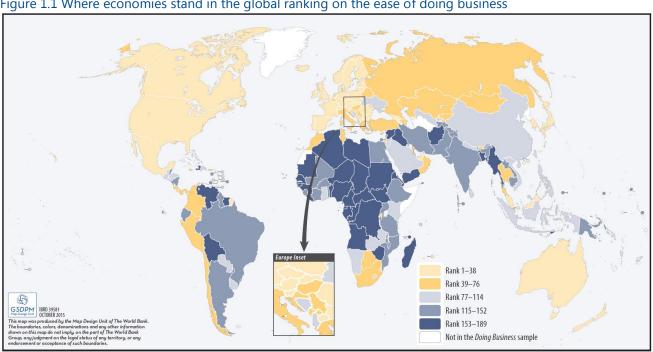
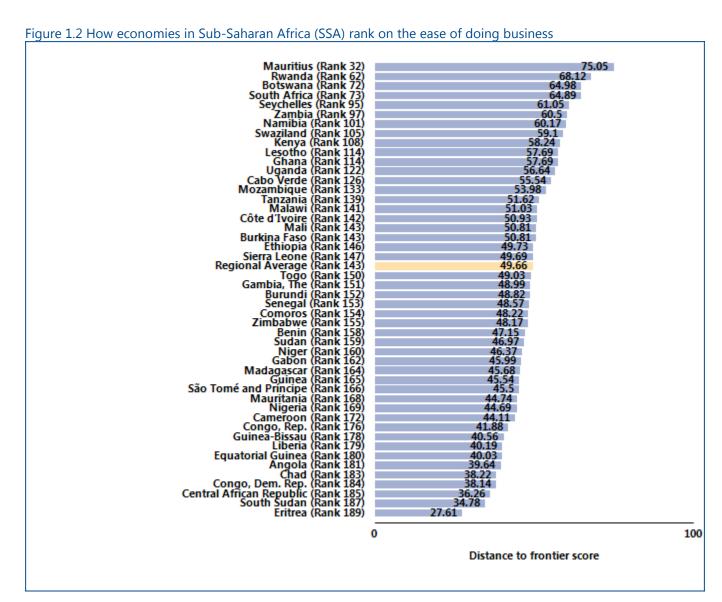


Figure 1.1 Where economies stand in the global ranking on the ease of doing business

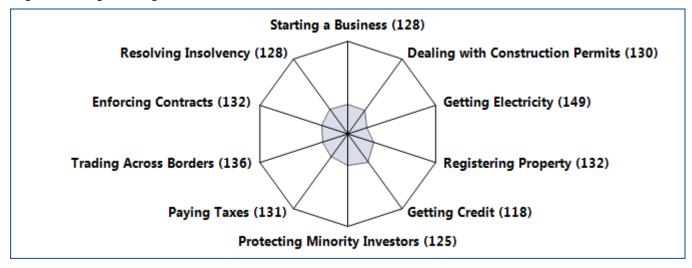
For policy makers, knowing where their economy stands in regional average (figure 1.2). Another perspective is the aggregate ranking on the ease of doing business is provided by the regional average rankings on the topics useful. Also useful is to know how it ranks compared with included in the ease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



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 populationweighted average for the 2 cities.

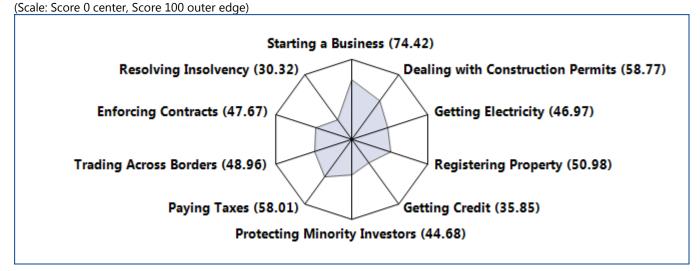
Figure 1.3 Rankings on Doing Business topics - Sub-Saharan Africa (SSA)

(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 - Sub-Saharan Africa (SSA)



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 Sub-Saharan Africa (SSA) 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.

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 Sub-Saharan Africa (SSA)

Indicator	Lowest regional performance	Best regional performance	Regional average	Best global performance
Starting a Business (rank)	189 (Central African Republic)	19 (Burundi)	128	1 (New Zealand)
Starting a Business (DTF Score)	31.36 (Central African Republic)	94.51 (Burundi)	74.42	99.96 (New Zealand)
Procedures (number)	18.0 (Equatorial Guinea)	3.0 (3 Economies*)	8.0	1.0 (New Zealand*)
Time (days)	135.0 (Equatorial Guinea)	4.0 (Burundi)	26.8	0.5 (New Zealand)
Cost (% of income per capita)	330.1 (South Sudan)	0.3 (South Africa)	53.4	0.0 (Slovenia)
Paid-in min. capital (% of income per capita)	540.1 (Central African Republic)	0.0 (25 Economies*)	45.1	0.0 (105 Economies*)
Dealing with Construction Permits (rank)	189 (Eritrea)	31 (Mozambique)	130	1 (Singapore)
Dealing with Construction Permits (DTF Score)	0.00 (Eritrea)	77.58 (Mozambique)	58.77	92.97 (Singapore)
Procedures (number)	27.0 (Guinea)	10.0 (8 Economies*)	14.3	7.0 (5 Economies*)
Time (days)	448.0 (Zimbabwe)	74.0 (Liberia)	162.2	26.0 (Singapore)
Cost (% of warehouse value)	30.8 (Madagascar)	0.3 (Botswana)	6.6	0.0 (Qatar)
Building quality control index (0-15)	1.0 (Equatorial Guinea)	13.0 (Mauritius)	6.9	15.0 (New Zealand)
Getting Electricity	188 (Madagascar)	41 (Mauritius)	149	1 (Korea, Rep.)

Indicator	Lowest regional performance	Best regional performance	Regional average	Best global performance
(rank)				
Getting Electricity (DTF Score)	18.27 (Madagascar)	81.93 (Mauritius)	46.97	99.88 (Korea, Rep.)
Procedures (number)	9.0 (Nigeria)	3.0 (Togo*)	5.4	3.0 (14 Economies*)
Time (days)	465.0 (Liberia)	34.0 (Rwanda)	130.1	18.0 (Korea, Rep.*)
Cost (% of income per capita)	16,315.4 (Burundi)	260.0 (Mauritius)	4,075.6	0.0 (Japan)
Reliability of supply and transparency of tariff index (0-8)	0.0 (33 Economies*)	6.0 (Mauritius)	0.9	8.0 (18 Economies*)
Registering Property (rank)	182 (Togo)	12 (Rwanda)	132	1 (New Zealand)
Registering Property (DTF Score)	30.93 (Togo)	87.75 (Rwanda)	50.98	94.46 (New Zealand)
Procedures (number)	12.1 (Nigeria)	3.0 (Rwanda)	6.2	1.0 (4 Economies*)
Time (days)	288.0 (Togo)	9.0 (Sudan)	57.5	1.0 (3 Economies*)
Cost (% of property value)	18.9 (Cameroon)	0.1 (Rwanda)	8.3	0.0 (Saudi Arabia)
Quality of the land administration index (0-30)	3.0 (Central African Republic)	25.0 (Rwanda)	8.4	28.5 (3 Economies*)
Getting Credit (rank)	185 (Eritrea*)	2 (Rwanda)	118	1 (New Zealand)
Getting Credit (DTF Score)	0.00 (Eritrea*)	95.00 (Rwanda)	35.85	100.00 (New Zealand)
Strength of legal rights index (0-12)	0.0 (Eritrea*)	11.0 (Rwanda)	4.9	12.0 (3 Economies*)
Depth of credit information index (0-8)	0.0 (26 Economies*)	8.0 (Rwanda*)	2.3	8.0 (26 Economies*)
Credit registry coverage (% of adults)	0.0 (Guinea)	82.6 (Mauritius)	5.8	100.0 (Portugal)
Credit bureau coverage (% of adults)	1.0 (Lesotho)	62.8 (Namibia)	7.1	100.0 (22 Economies*)
Protecting Minority Investors (rank)	185 (São Tomé and Príncipe)	14 (South Africa)	125	1 (3 Economies*)
Protecting Minority Investors (DTF Score)	25.00 (São Tomé and Príncipe)	71.67 (South Africa)	44.68	83.33 (3 Economies*)
Strength of minority investor protection	2.5 (São Tomé and	7.2 (South Africa)	4.5	8.3 (3 Economies*)

Indicator	Lowest regional performance	Best regional performance	Regional average	Best global performance
index (0-10)	Príncipe)			
Extent of conflict of interest regulation index (0-10)	2.3 (Ethiopia)	8.0 (South Africa)	4.9	9.3 (Singapore*)
Extent of shareholder governance index (0- 10)	1.7 (São Tomé and Príncipe)	6.7 (Nigeria)	4.1	8.0 (4 Economies*)
Paying Taxes (rank)	187 (Mauritania)	13 (Mauritius)	131	1 (United Arab Emirates*)
Paying Taxes (DTF Score)	17.71 (Mauritania)	91.92 (Mauritius)	58.01	99.44 (United Arab Emirates*)
Payments (number per year)	63.0 (Côte d'Ivoire)	7.0 (South Africa)	38.6	3.0 (Hong Kong SAR, China*)
Time (hours per year)	907.9 (Nigeria)	85.0 (Seychelles)	308.6	55.0 (Luxembourg)
Total tax rate (% of profit)	216.5 (Comoros)	13.6 (Lesotho)	46.5	25.9 (Ireland)
Trading Across Borders (rank)	189 (Eritrea)	30 (Swaziland)	136	1 (16 Economies*)
Trading Across Borders (DTF Score)	0.00 (Eritrea)	92.68 (Swaziland)	48.96	100.00 (16 Economies*)
Time to export: Border compliance (hours)	515 (Congo, Dem. Rep.)	3 (Swaziland)	108	0 (15 Economies*)
Cost to export: Border compliance (USD)	1,975 (Congo, Rep.)	17 (Mali)	542	0 (18 Economies*)
Time to export: Documentary compliance (hours)	698 (Congo, Dem. Rep.)	3 (Lesotho)	97	0 (Jordan)
Cost to export: Documentary compliance (USD)	2,500 (Congo, Dem. Rep.)	25 (Togo)	246	0 (20 Economies*)
Time to import: Border compliance (hours)	588 (Congo, Dem. Rep.)	4 (Botswana*)	160	0 (19 Economies*)
Cost to import: Border compliance (USD)	2,089 (Congo, Dem. Rep.)	98 (Botswana)	643	0 (28 Economies*)
Time to import: Documentary compliance (hours)	360 (South Sudan)	3 (3 Economies*)	123	1 (21 Economies*)
Cost to import: Documentary	1,025 (Burundi)	38 (Comoros)	351	0 (30 Economies*)

Indicator	Lowest regional performance	Best regional performance	Regional average	Best global performance
compliance (USD)				
Enforcing Contracts (rank)	185 (Angola)	27 (Mauritius)	132	1 (Singapore)
Enforcing Contracts (DTF Score)	26.26 (Angola)	70.50 (Mauritius)	47.67	84.91 (Singapore)
Time (days)	1,715.0 (Guinea-Bissau)	228.0 (South Sudan)	653.1	150.0 (Singapore)
Cost (% of claim)	119.0 (Mozambique)	14.3 (Tanzania)	44.9	9.0 (Iceland)
Quality of judicial processes index (0-18)	2.5 (Eritrea)	13.0 (Mauritius)	6.4	15.5 (3 Economies*)
Resolving Insolvency (rank)	189 (9 Economies*)	39 (Mauritius)	128	1 (Finland)
Resolving Insolvency (DTF Score)	0.00 (9 Economies*)	65.94 (Mauritius)	30.32	93.81 (Finland)
Recovery rate (cents on the dollar)	8.4 (Liberia)	67.4 (Mauritius)	19.9	92.9 (Japan)
Time (years)	6.2 (São Tomé and Príncipe)	1.5 (Mozambique)	3.0	0.4 (Ireland)
Cost (% of estate)	76.0 (Central African Republic)	8.0 (Guinea)	23.1	1.0 (Norway)
Strength of insolvency framework index (0-16)	9.0 (Central African Republic*)	14.5 (South Africa)	6.3	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.

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)

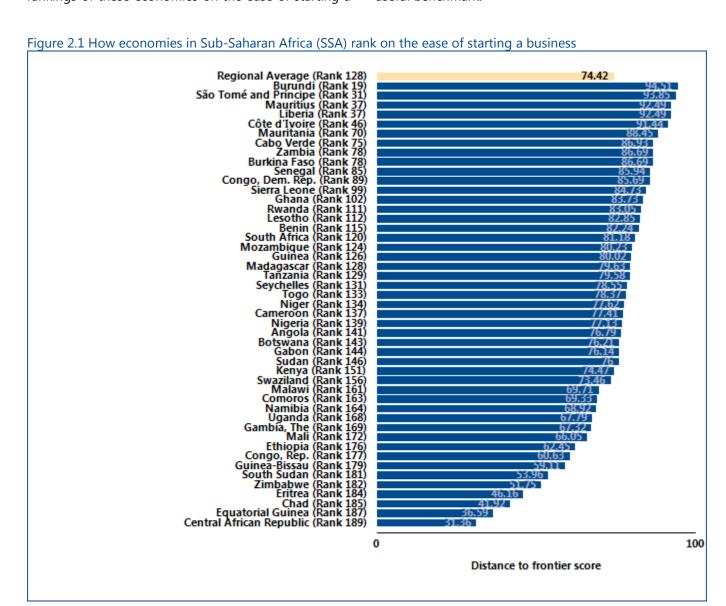
- Conducts general commercial or industrial activities.
- Has a start-up capital of 10 times income per capita.
- Has a turnover of at least 100 times income per capita.
- Does not qualify for any special benefits.
- Does not own real estate.

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

Where do the region's economies stand today?

How easy is it for entrepreneurs in economies in Sub-Saharan Africa (SSA) 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.

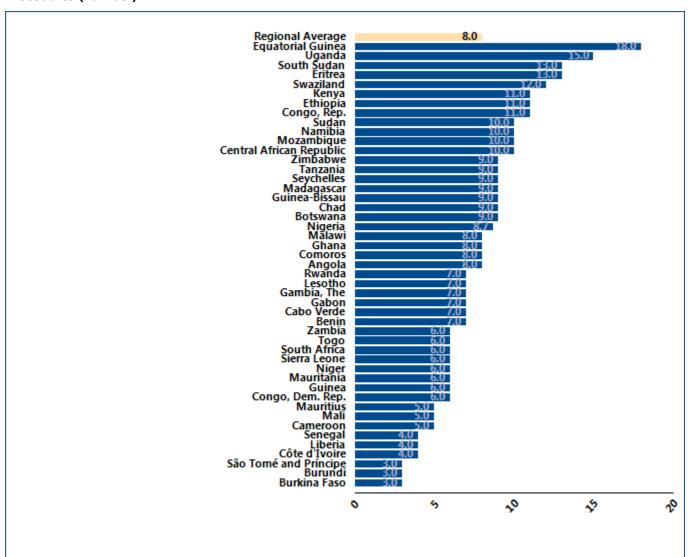


The indicators underlying the rankings may be more revealing. Data collected by *Doing Business* show what it takes to start a business in each economy in the region: the number of procedures, the time, the cost

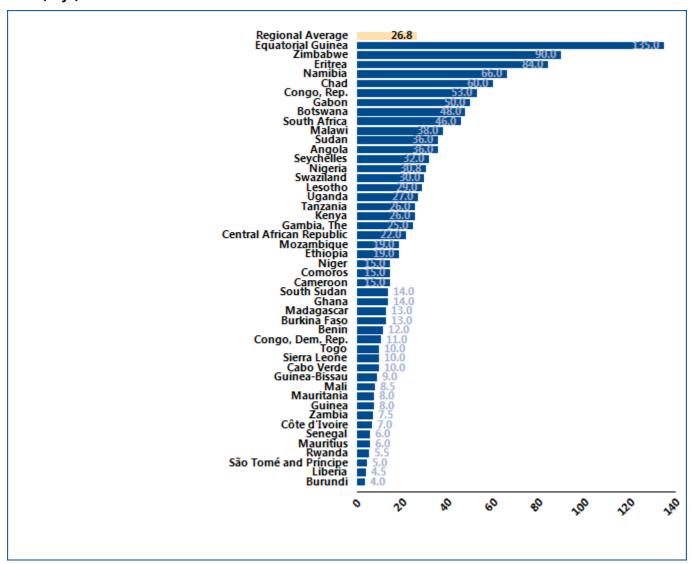
and the paid-in minimum capital requirement (figure 2.2). Comparing these indicators across the region and with averages both for the region and for comparator regions can provide useful insights.

Figure 2.2 What it takes to start a business in economies in Sub-Saharan Africa (SSA)

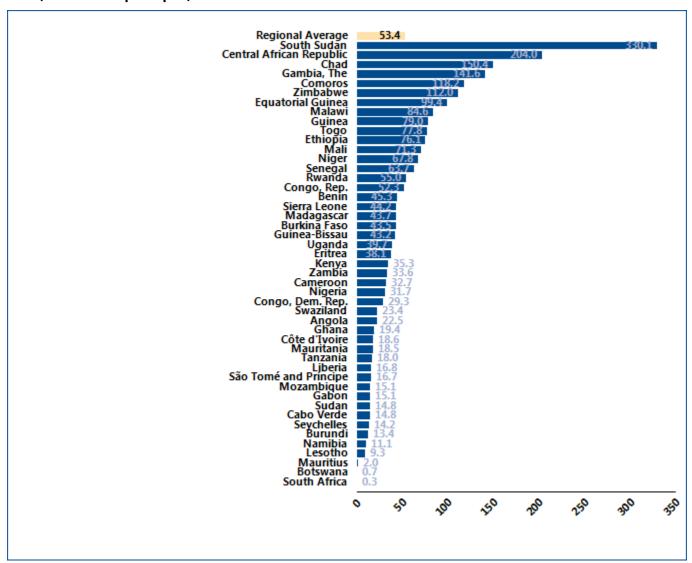
Procedures (number)



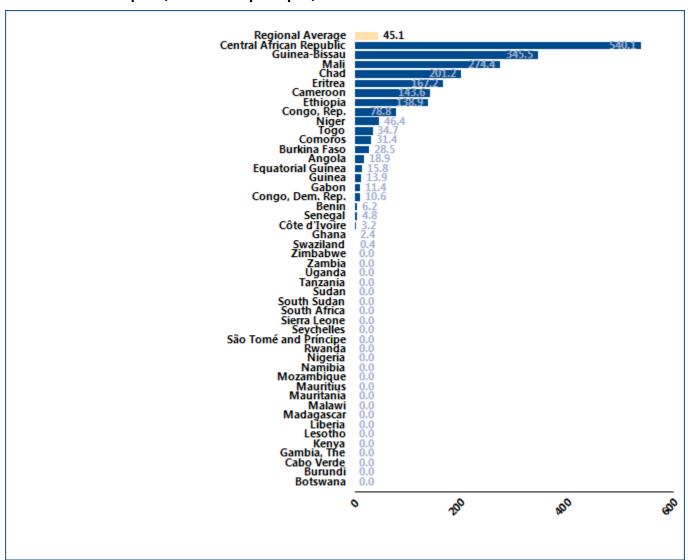
Time (days)



Cost (% of income per capita)



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



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 Sub-Saharan Africa (SSA) (table 2.1)?

Table 2.1 How have economies in Sub-Saharan Africa (SSA) made starting a business easier—or not? By *Doing Business* report year DB2011 to DB2016

DB year	Economy	Reform
DB2016	Angola	Angola made starting a business easier by improving registration procedures and reducing the fees to register a company.
DB2016	Benin	Benin made starting a business less costly by reducing the fees for filing company documents at the one-stop shop.
DB2016	Burkina Faso	Burkina Faso made starting a business easier by reducing the minimum capital requirement.
DB2016	Comoros	The Comoros made starting a business easier by reducing the minimum capital requirement.
DB2016	Gabon	Gabon made starting a business easier by reducing the paid- in minimum capital requirement.
DB2016	Guinea	Guinea made starting a business easier by reducing the minimum capital requirement.
DB2016	Kenya	Kenya made starting a business easier by reducing the time it takes to assess and pay stamp duty.
DB2016	Madagascar	Madagascar made starting a business more difficult by requiring a bank-certified check to pay the tax authority.
DB2016	Mauritania	Mauritania made starting a business easier by eliminating the minimum capital requirement.
DB2016	Niger	Niger made starting a business easier by reducing the minimum capital requirement.
DB2016	Rwanda	Rwanda made starting a business easier by eliminating the need for new companies to open a bank account in order to register for VAT.
DB2016	Senegal	Senegal made starting a business easier by reducing the minimum capital requirement.

DB year	Economy	Reform
DB2016	Тодо	Togo made starting a business less costly by reducing the fees to register with the tax authority.
DB2016	Uganda	Uganda made starting a business easier by introducing an online system for obtaining a trading license and by reducing business incorporation fees.
DB2016	Congo, Dem. Rep.	The Democratic Republic of Congo made starting a business easier by simplifying registration procedures and reducing the minimum capital requirement.
DB2016	Zambia	Zambia made starting a business more difficult by increasing the registration fees.
DB2015	Benin	Benin made starting a business easier by reducing the minimum capital requirement and the fees to be paid at the one-stop shop.
DB2015	Côte d'Ivoire	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	Gambia, The	The Gambia made starting a business easier by eliminating the requirement to pay stamp duty.
DB2015	Mauritania	Mauritania made starting a business easier by creating a one- stop shop and eliminating the publication requirement and the fee to obtain a tax identification number.
DB2015	Mauritius	Mauritius made starting a business easier by reducing trade license fees.
DB2015	Malawi	Malawi made starting a business easier by streamlining company name search and registration and by eliminating the requirement for inspection of company premises before issuance of a business license.
DB2015	Rwanda	Rwanda made starting a business more difficult by requiring companies to buy an electronic billing machine from a certified supplier, but also made it easier by launching free mandatory online registration.
DB2015	Senegal	Senegal made starting a business easier by reducing the minimum capital requirement.
DB2015	São Tomé and Príncipe	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	Swaziland	Swaziland made starting a business easier by shortening the notice and objection period for obtaining a new trade license.
DB2015	Togo	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	Congo, Dem. Rep.	The Democratic Republic of Congo made starting a business easier by creating a one-stop shop.

DB year	Economy	Reform
DB2014	Burundi	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.
DB2014	Benin	Benin made starting a business easier by creating a one-stop shop.
DB2014	Côte d'Ivoire	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	Congo, Rep.	The Republic of Congo made starting a business easier by reducing the registration costs and eliminating the merchant card.
DB2014	Comoros	The Comoros made starting a business easier by eliminating the requirement to deposit the minimum capital in a bank before incorporation.
DB2014	Cabo Verde	Cape Verde made starting a business easier by abolishing the minimum capital requirement.
DB2014	Gabon	Gabon made starting a business easier by replacing the requirement for a copy of the founders' criminal records with one for a sworn declaration.
DB2014	Ghana	Ghana made starting a business more difficult by requiring entrepreneurs to obtain a tax identification number prior to company incorporation.
DB2014	Guinea	Guinea made starting a business easier by enabling the one- stop shop to publish incorporation notices and by reducing the notary fees.
DB2014	Liberia	Liberia made starting a business easier by eliminating the business trade license fees.
DB2014	Madagascar	Madagascar made starting a business more difficult by increasing the cost to register with the National Center for Statistics.
DB2014	Mali	Mali made starting a business more difficult by ceasing to regularly publish the incorporation notices of new companies on the official website of the one-stop shop.
DB2014	Niger	Niger made starting a business easier by replacing the requirement for a copy of the founders' criminal records with one for a sworn declaration at the time of company registration.
DB2014	Rwanda	Rwanda made starting a business easier by reducing the time required to obtain a registration certificate.
DB2014	Swaziland	Swaziland made starting a business easier by shortening the administrative processing times for registering a new

DB year	Economy	Reform
		business and obtaining a trading license.
DB2014	Togo	Togo made starting a business easier by reducing the time required to register at the one-stop shop and by reducing registration costs.
DB2014	Congo, Dem. Rep.	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.
DB2014	Zambia	Zambia made starting a business easier by raising the threshold at which value added tax registration is required.
DB2013	Benin	Benin made starting a business easier by appointing a representative of the commercial registry at the one-stop shop and reducing some fees.
DB2013	Burundi	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	Chad	Chad made starting a business easier by setting up a one-stop shop.
DB2013	Comoros	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	Congo, Dem. Rep.	The Democratic Republic of Congo made starting a business easier by appointing additional public notaries.
DB2013	Congo, Rep.	The Republic of Congo made starting a business easier by eliminating or reducing several administrative costs associated with incorporation.
DB2013	Guinea	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	Lesotho	Lesotho made starting a business easier by creating a one- stop shop for company incorporation and by eliminating the requirements for paid-in minimum capital and for notarization of the articles of association.
DB2013	Madagascar	Madagascar made starting a business easier by allowing the one-stop shop to deal with the publication of the notice of incorporation.

DB year	Economy	Reform
DB2013	Tanzania	Tanzania made starting a business easier by eliminating the requirement for inspections by health, town and land officers as a prerequisite for a business license.
DB2013	Togo	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 registration.
DB2012	Uganda	Uganda introduced changes that added time to the process of obtaining a business license, slowing business start-up. But it simplified registration for a tax identification number and for value added tax by introducing an online system.
DB2012	Madagascar	Madagascar eased the process of starting a business by eliminating the minimum capital requirement, but also made it more difficult by introducing the requirement of obtaining a tax identification number.
DB2012	South Africa	South Africa made starting a business easier by implementing its new company law, which eliminated the requirement to reserve a company name and simplified the incorporation documents.
DB2012	Mali	Mali made starting a business easier by adding to the services provided by the one-stop shop.
DB2012	Rwanda	Rwanda made starting a business easier by reducing the business registration fees.
DB2012	São Tomé and Príncipe	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	Senegal	Senegal made starting a business easier 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	Liberia	Liberia made starting a business easier by introducing a one-stop shop.
DB2012	Guinea-Bissau	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	Congo, Dem. Rep.	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	Ghana	Ghana increased the cost to start a business by 70%.

DB year	Economy	Reform
DB2012	Côte d'Ivoire	Côte d'Ivoire made starting a business easier by reorganizing the court clerk's office where entrepreneurs file their company documents.
DB2012	Comoros	Comoros made the process of starting a business more difficult by increasing the minimum capital requirement.
DB2012	Central African Republic	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	Chad	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.
DB2012	Burkina Faso	Burkina Faso made starting a business easier 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	Cameroon	Cameroon made starting a business easier 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 publication fees.
DB2012	Benin	Benin made starting a business easier 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
DB2011	Cameroon	Cameroon made starting a business easier by establishing a new one-stop shop and abolishing the requirement for verifying business premises and its corresponding fees.
DB2011	Cabo Verde	Cape Verde made business start-up easier by eliminating the need for a municipal inspection before a business begins operations and computerizing the system for delivering the municipal license.
DB2011	Congo, Dem. Rep.	The Democratic Republic of Congo eased business start-up by eliminating procedures, including the company seal.
DB2011	Kenya	Kenya eased business start-up by reducing the time it takes to get the memorandum and articles of association stamped, merging the tax and value added tax registration procedures and digitizing records at the registrar.
DB2011	São Tomé and Príncipe	São Tomé and Principe made starting a business more difficult by introducing a minimum capital requirement for limited liability companies.
DB2011	Mozambique	Mozambique eased business start-up by introducing a simplified licensing process.

DB year	Economy	Reform
DB2011	Zambia	Zambia eased business start-up by eliminating the minimum capital requirement.
DB2011	Zimbabwe	Zimbabwe eased business start-up by reducing registration fees and speeding up the name search process and company and tax registration.
DB2011	Uganda	Uganda made it more difficult to start a business by increasing the trade licensing fees.
DB2010	Тодо	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	Niger	Niger made starting a business easier by eliminating the procedures to register with the Conseil Nigérien des Utilisateurs des Transports Publics (CNUT) and with the chamber of commerce.
DB2010	Rwanda	Rwanda made starting a business easier by eliminating the notarization requirement; introducing standardized memoranda of association; putting publication online; consolidating name-checking, registration fee payment, tax registration and company registration procedures; and reducing the time required to process completed applications.
DB2010	Mozambique	Mozambique made starting a business easier by eliminating the minimum capital and bank deposit requirements.
DB2010	Sierra Leone	Sierra Leone made starting a business easier by establishing a one-stop shop for company registration.
DB2010	Liberia	Liberia made starting a business easier by eliminating the requirement to obtain an environmental impact assessment when forming a general trading company.
DB2010	Madagascar	Madagascar made starting a business easier by streamlining procedures at the one-stop shop and eliminating the stamp duty and the minimum capital requirement.
DB2010	Mali	Mali made starting a business easier by creating a one-stop shop where all registration procedures can be completed, including registering a company with the registrar and tax agency, applying for online publication and obtaining a national identification number.
DB2010	Ethiopia	Ethiopia made starting a business easier by streamlining registration procedures.
DB2010	Ghana	Ghana simplified business start-up by further streamlining registration procedures through the creation of a customer service desk at the one-stop shop.
DB2010	Guinea-Bissau	Guinea-Bissau simplified business start-up by making the company name search electronic, introducing some computers and flash drives and reducing the registration fees.

DB year	Economy	Reform
DB2010	Central African Republic	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	Cabo Verde	Cape Verde made starting a business easier by implementing an online company registration system.
DB2010	Cameroon	Cameroon made starting a business easier by exempting newly formed companies from paying the business license tax for their first 2 years of existence.
DB2010	Botswana	Botswana made starting a business easier by simplifying the process to obtain a business license and the process to register for taxes.
DB2010	Burkina Faso	Burkina Faso made starting a business easier by allowing online publication of the articles of incorporation directly on the website of the one-stop shop, by reducing registration fees and by streamlining tax 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.

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.

Assumptions about the warehouse

- The warehouse:
- Will be used for general storage activities, such as storage of books or stationery. The warehouse will not be used for any goods requiring special conditions, such as food, chemicals or pharmaceuticals.
- Will have 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.

- 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

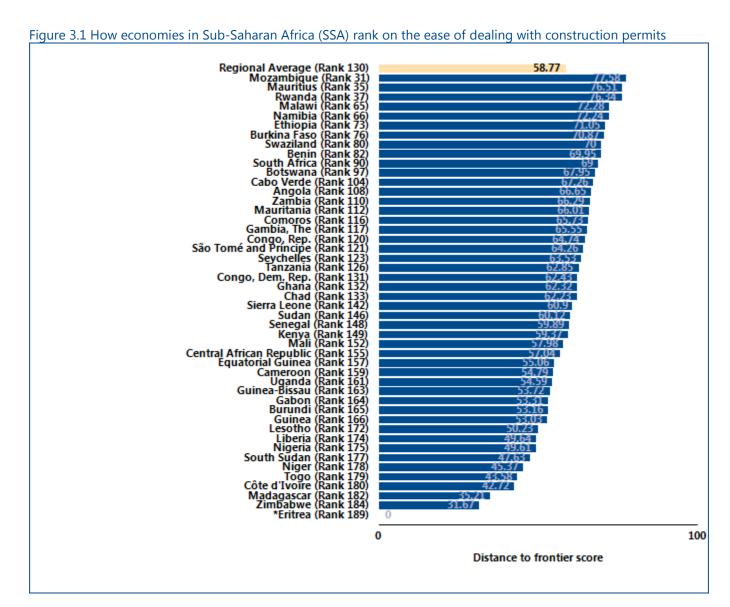
The water and sewerage connections:

- 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.

Where do the region's economies stand today?

How easy it is for entrepreneurs in economies in Sub-Saharan Africa (SSA) to legally build a warehouse? The global rankings of these economies on the ease of

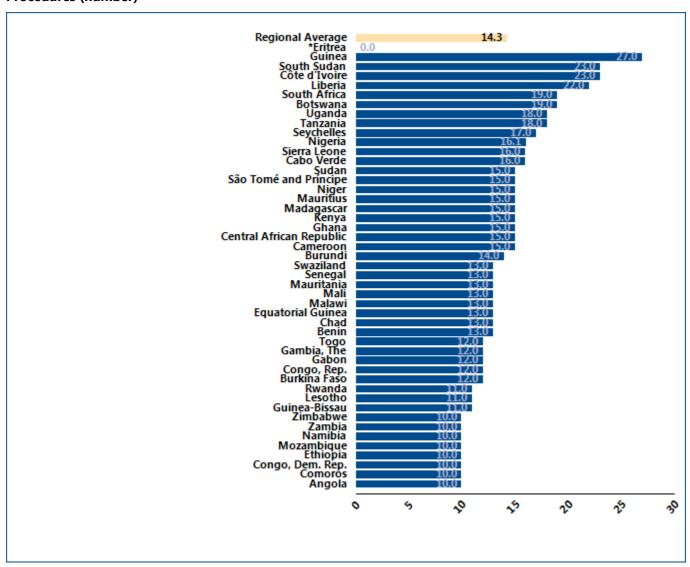
dealing with construction permits suggest an answer (figure 3.1). The average ranking of the region and comparator regions provide a useful benchmark.



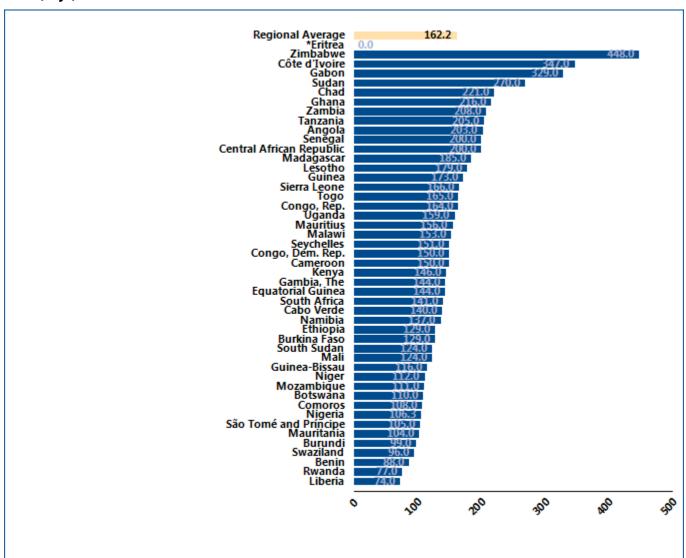
The indicators underlying the rankings may be more revealing. Data collected by *Doing Business* show what it takes to comply with formalities to build a warehouse in each economy in the region: the number of procedures,

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.

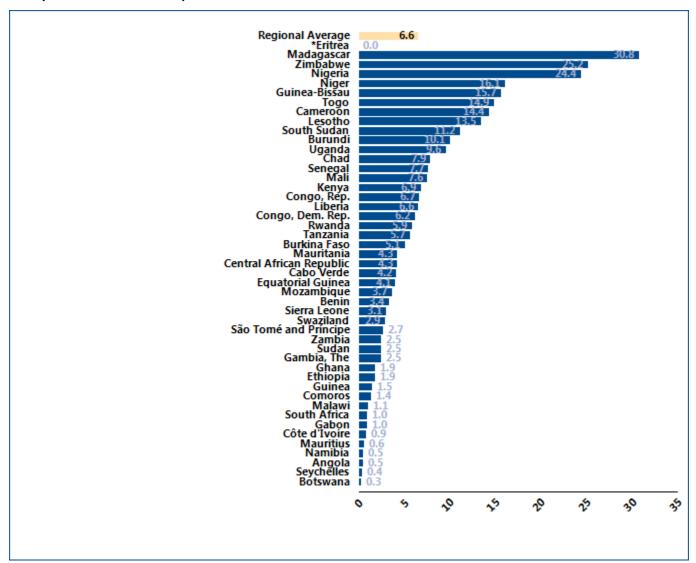
Figure 3.2 What it takes to comply with formalities to build a warehouse in economies in Sub-Saharan Africa (SSA) **Procedures (number)**



Time (days)



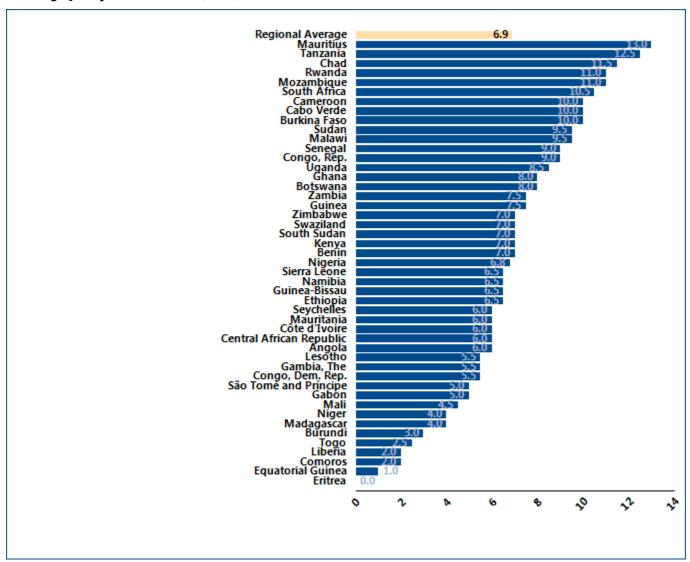
Cost (% of warehouse value)



^{*}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.

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.

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 Sub-Saharan Africa (SSA) (table 3.1)?

Table 3.1 How have economies in Sub-Saharan Africa (SSA) made dealing with construction permits easier—or not? By *Doing Business* report year DB2011 to DB2016

DB year	Economy	Reform
DB2016	Benin	Benin made dealing with construction permits less time- consuming by establishing a one-stop shop and by reducing the number of signatories required on building permits.
DB2016	Gabon	Gabon made dealing with construction permits more complicated by increasing the time required for obtaining a building permit.
DB2016	Kenya	Kenya made dealing with construction permits more difficult by requiring an additional approval before issuance of the building permit and by increasing the costs for both water and sewerage connections
DB2016	Mauritius	In Mauritius the time required for dealing with construction permits was reduced by the hiring of a more efficient subcontractor to establish sewerage connections.
DB2016	Namibia	In Namibia the process of dealing with construction permits became more time-consuming as a result of inefficiency at the municipality.
DB2016	Niger	Niger made dealing with construction permits easier by reducing the time required for companies to obtain a water connection.
DB2016	Rwanda	Rwanda made dealing with construction permits easier by adopting a new building code and new urban planning regulations.
DB2016	Congo, Dem. Rep.	The Democratic Republic of Congo made dealing with construction permits less expensive by halving the cost to obtain a building permit.

DB year	Economy	Reform
DB2015	Ghana	Ghana made dealing with construction permits less time- consuming by streamlining the process to obtain a building permit.
DB2015	Kenya	Kenya made dealing with construction permits more costly by increasing the building permit fees.
DB2015	Madagascar	Madagascar made dealing with construction permits easier by reducing the time needed to obtain a building permit.
DB2015	Mali	Mali made dealing with construction permits easier by reducing the time needed to obtain a geotechnical study.
DB2015	Rwanda	Rwanda made dealing with construction permits easier by eliminating the fee for obtaining a freehold title and by streamlining the process for obtaining an occupancy permit.
DB2015	Senegal	Senegal made dealing with construction permits less time- consuming by reducing the time for processing building permit applications.
DB2015	Congo, Dem. Rep.	The Democratic Republic of Congo made dealing with construction permits more costly by increasing the building permit fee.
DB2014	Burundi	Burundi made dealing with construction permits easier by establishing a one-stop shop for obtaining building permits and utility connections.
DB2014	Botswana	Botswana made dealing with construction permits easier by eliminating the requirement for an environmental impact assessment for low-risk projects.
DB2014	Côte d'Ivoire	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	Cameroon	Cameroon made dealing with construction permits more complex by introducing notification and inspection requirements. At the same time, Cameroon made it easier by decentralizing the process for obtaining a building permit and by introducing strict time limits for processing the application and issuing the certificate of conformity.
DB2014	Gabon	Gabon made dealing with construction permits easier by

DB year	Economy	Reform
		reducing the time required to obtain a building permit and by eliminating the requirement for an on-site inspection before construction starts.
DB2014	Mozambique	Mozambique made dealing with construction permits easier by improving internal processes at the Department of Construction and Urbanization—though it also increased the fees for building permits and occupancy permits.
DB2014	Rwanda	Rwanda made dealing with construction permits easier and less costly by reducing the building permit fees, implementing an electronic platform for building permit applications and streamlining procedures.
DB2014	Togo	Togo made dealing with construction permits easier by improving internal operations at the City Hall of Lomé.
DB2013	Benin	Benin reduced the time required to obtain a construction permit by speeding up the processing of applications.
DB2013	Burundi	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	Central African Republic	The Central African Republic made obtaining a construction permit more costly.
DB2013	Congo, Rep.	The Republic of Congo made dealing with construction permits less expensive by reducing the cost of registering a new building at the land registry.
DB2013	Guinea	Guinea made obtaining a building permit less expensive by clarifying the method for calculating the cost.
DB2013	Malawi	Malawi made dealing with construction permits more expensive by increasing the cost to obtain the plan approval and to register the property.
DB2013	São Tomé and Príncipe	São Tomé and Príncipe made obtaining a construction permit more expensive by increasing the fees.
DB2013	Tanzania	Tanzania made dealing with construction permits more expensive by increasing the cost to obtain a building permit.
DB2012	São Tomé and Príncipe	São Tomé and Príncipe made dealing with construction permits easier by reducing the time required to process building permit applications.

DB year	Economy	Reform
DB2012	Senegal	Senegal made obtaining a building permit more expensive by increasing the cost.
DB2012	Mauritania	Mauritania made dealing with construction permits easier by opening a one-stop shop.
DB2012	Congo, Dem. Rep.	The Democratic Republic of Congo reduced the administrative costs of obtaining a construction permit.
DB2012	Burkina Faso	Burkina Faso made dealing with construction permits less costly by reducing the fees to obtain a fire safety study.
DB2012	Burundi	Burundi made dealing with construction permits easier by reducing the cost to obtain a geotechnical study.
DB2011	Burkina Faso	Burkina Faso made dealing with construction permits easier by cutting the cost of the soil survey in half and the time to process a building permit application by a third.
DB2011	Congo, Dem. Rep.	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	Rwanda	Rwanda made dealing with construction permits easier by passing new building regulations at the end of April 2010 and implementing new time limits for the issuance of various permits.
DB2011	Côte d'Ivoire	Côte d'Ivoire eased construction permitting by eliminating the need to obtain a preliminary approval.
DB2011	Guinea	Guinea increased the cost of obtaining a building permit.
DB2011	Benin	Benin created a new municipal commission to streamline construction permitting and set up an ad hoc commission to deal with the backlog in permit applications.
DB2011	Sierra Leone	Sierra Leone made dealing with construction permits easier by streamlining the issuance of location clearances and building permits.
DB2011	Mali	Mali eased construction permitting by implementing a simplified environmental impact assessment for noncomplex commercial buildings.

DB year	Economy	Reform
DB2010	Tanzania	Tanzania made dealing with construction permits more difficult by introducing changes that resulted in additional procedures and cost.
DB2010	Kenya	Kenya made dealing with construction permits more costly by raising fees.
DB2010	Liberia	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.
DB2010	Mali	Mali made dealing with construction permits easier by speeding up the process for obtaining a water connection.
DB2010	Burkina Faso	Burkina Faso made dealing with construction permits easier by establishing a one-stop shop for processing building permits in Ouagadougou.

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.

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 mediumvoltage 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.

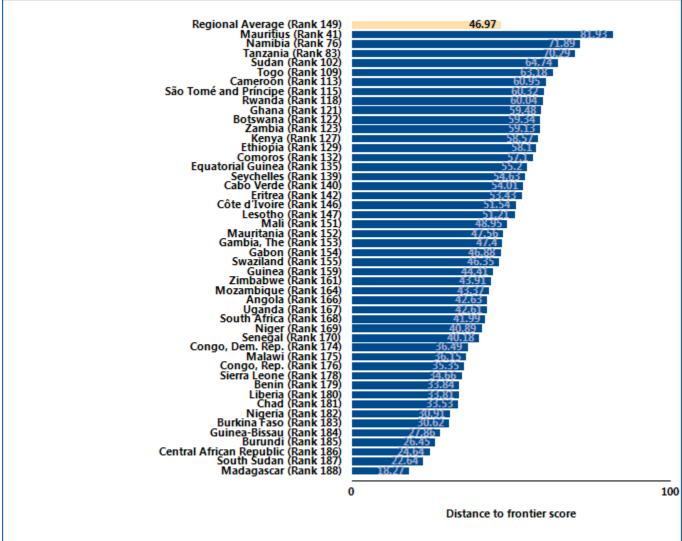
Assumptions about the monthly consumption

- 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.

Where do the region's economies stand today?

How easy is it for entrepreneurs in economies in Sub-Saharan Africa (SSA) 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.



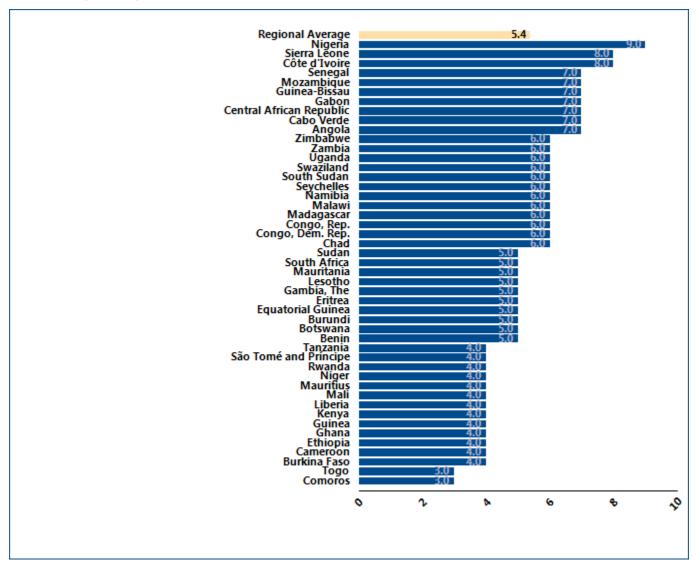


The indicators underlying the rankings may be more revealing. Data collected by *Doing Business* show what it takes to get a new electricity connection in each economy in the region: the number of procedures, the

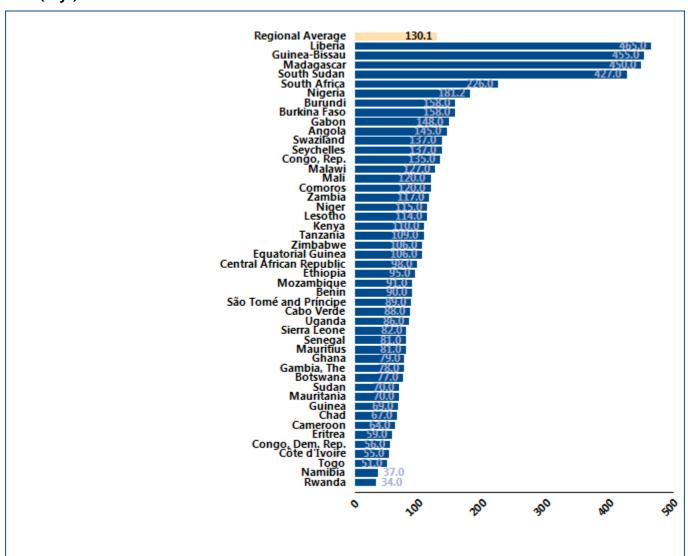
time and the cost (figure 4.2). Comparing these indicators across the region and with averages both for the region and for comparator regions can provide useful insights.

Figure 4.2 What it takes to get an electricity connection in economies in Sub-Saharan Africa (SSA)

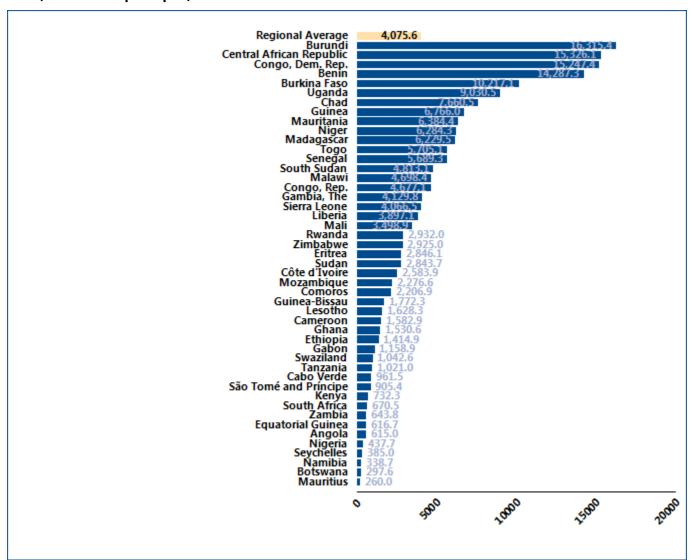
Procedures (number)



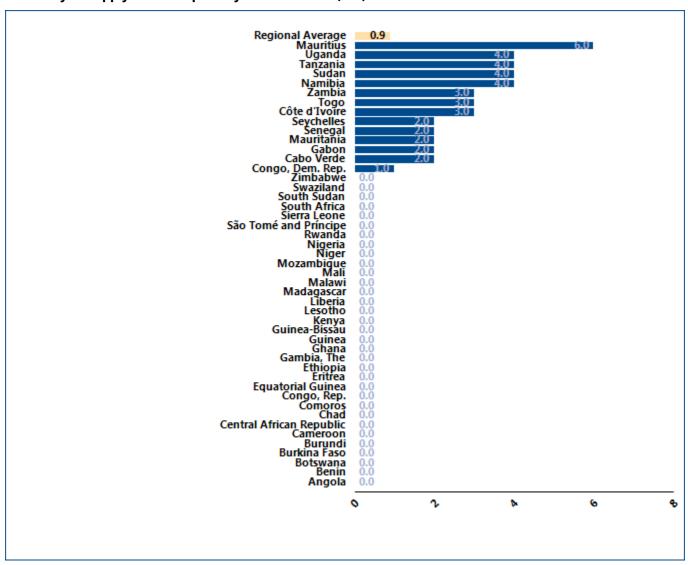
Time (days)



Cost (% of income per capita)



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.

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 Sub-Saharan Africa (SSA) (table 4.1)?

Table 4.1 How have economies in Sub-Saharan Africa (SSA) made getting electricity easier—or not? By *Doing Business* report year DB2011 to DB2016

DB year	Economy	Reform
DB2016	Botswana	The utility in Botswana made getting electricity easier by enforcing service delivery timelines for new connections and improving the stock of materials for connection works.
DB2016	Kenya	The utility in Kenya reduced delays for new connections by enforcing service delivery timelines and hiring contractors for meter installation.
DB2016	Senegal	The utility in Senegal made getting an electricity connection less time-consuming by streamlining the review of applications and the process for the final connection as well as by reducing the time needed to issue an excavation permit. It also made getting electricity less costly by reducing the security deposit.
DB2016	Тодо	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.
DB2016	Uganda	The utility in Uganda reduced delays for new electricity connections by deploying more customer service engineers and reducing the time needed for the inspection and meter installation.
DB2015	Malawi	Malawi reduced the time required to get electricity by engaging subcontractors to carry out external connection works.
DB2015	Rwanda	In Rwanda the electricity company made getting electricity less costly by eliminating several fees.
DB2015	Sierra Leone	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.

DB year	Economy	Reform
DB2015	Congo, Dem. Rep.	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	Burundi	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	Angola	Angola made getting electricity easier by eliminating the requirement for customers applying for an electricity connection to obtain authorizations from the 2 utility companies.
DB2013	Guinea	Guinea made getting electricity easier by simplifying the process for connecting new customers to the distribution network.
DB2013	Liberia	In Liberia obtaining an electricity connection became easier thanks to the adoption of better procurement practices by the Liberia Electricity Corporation.
DB2013	Namibia	Namibia made getting electricity easier by reducing the time required to provide estimates and external connection works and by lowering the connection costs.
DB2013	Rwanda	Rwanda made getting electricity easier by reducing the cost of obtaining a new connection.
DB2012	Mozambique	Mozambique made getting electricity more difficult by requiring authorization of a connection project by the Ministry of Energy and by adding an inspection of the completed external works.
DB2012	Ethiopia	In Ethiopia delays in providing new connections made getting electricity more difficult.
DB2012	Gambia, The	The Gambia made getting electricity faster by allowing customers to choose private contractors to carry out the external connection works.

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)

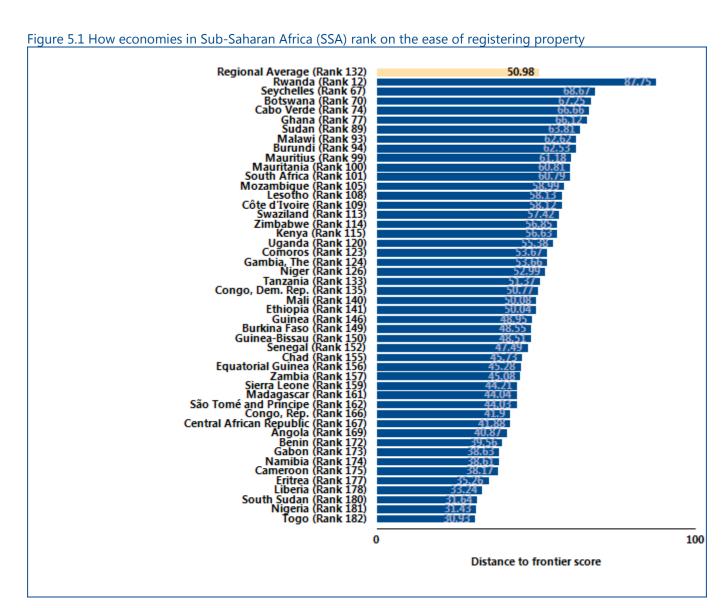
- Is located in a periurban commercial zone, and no rezoning is required.
- Has no mortgages attached, has been under the same ownership for the past 10 years.
- Consists of 557.4 square meters (6,000 square feet) of land and a 10-year-old, 2-story warehouse of 929 square meters (10,000 square feet). 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.

Where do the region's economies stand today?

How easy is it for entrepreneurs in economies in Sub-Saharan Africa (SSA) 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.

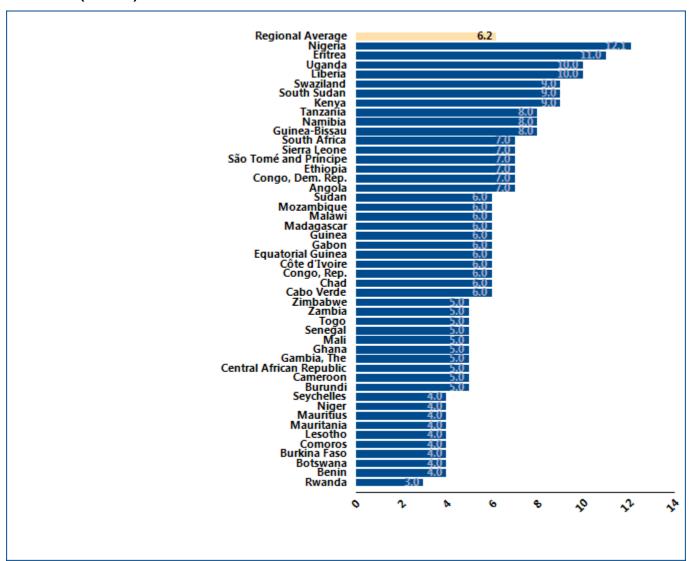


The indicators underlying the rankings may be more revealing. Data collected by *Doing Business* show what it takes to complete a property transfer in each economy in the region: the number of procedures, the

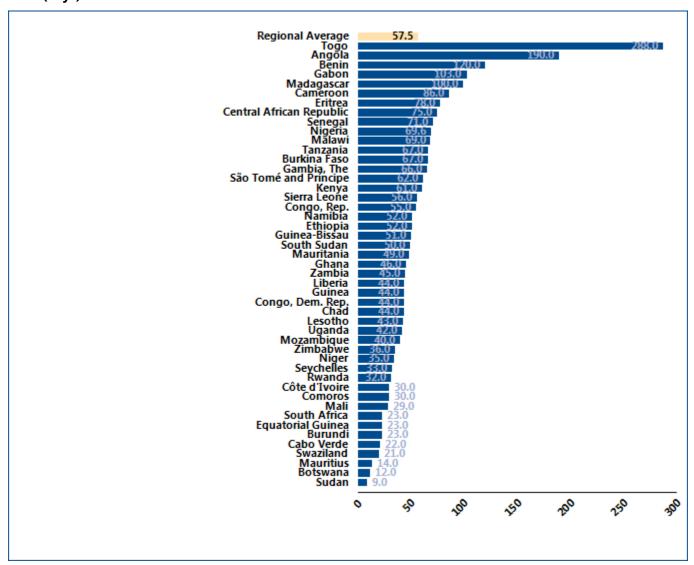
time and the cost (figure 5.2). Comparing these indicators across the region and with averages both for the region and for comparator regions can provide useful insights.

Figure 5.2 What it takes to register property in economies in Sub-Saharan Africa (SSA)

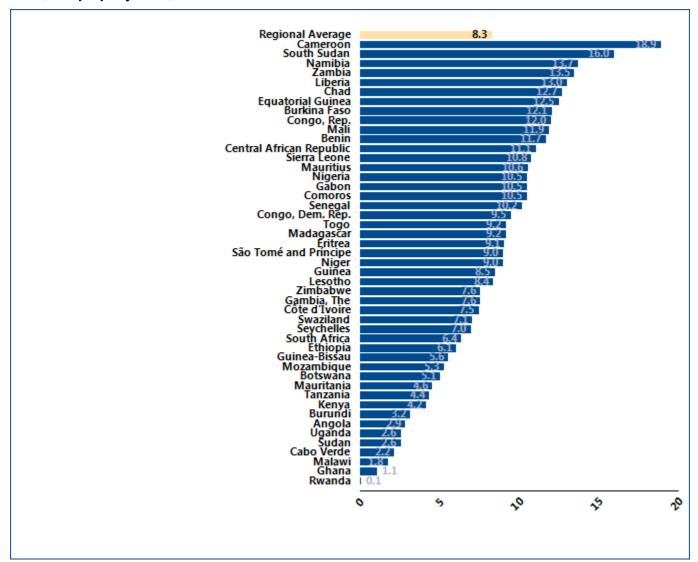
Procedures (number)



Time (days)



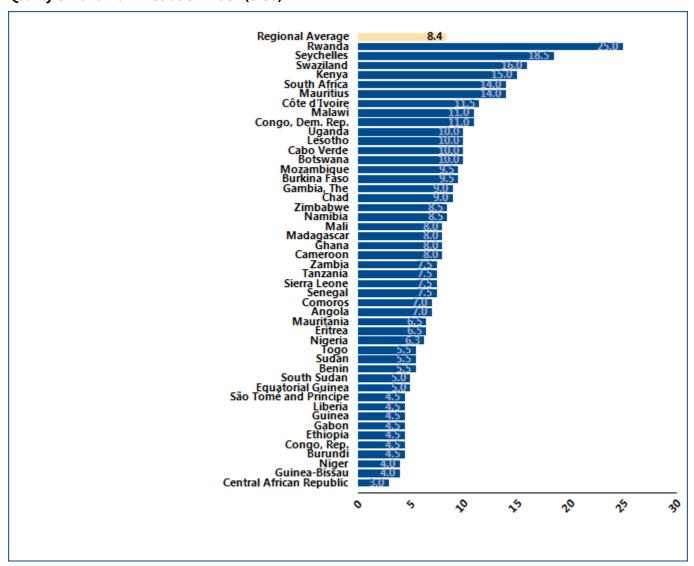
Cost (% of property value)



^{*} 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.

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.

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 Sub-Saharan Africa (SSA) (table 5.1)?

Table 5.1 How have economies in Sub-Saharan Africa (SSA) made registering property easier—or not? By *Doing Business* report year DB2011 to DB2016

DB year	Economy	Reform
DB2016	Côte d'Ivoire	Côte d'Ivoire made transferring property less costly by lowering the property transfer tax rate.
DB2016	Congo, Rep.	The Republic of Congo made transferring property less costly by lowering the property transfer tax rate.
DB2016	Cabo Verde	Cabo Verde made transferring property less costly by lowering the property registration tax.
DB2016	Gabon	Gabon made transferring property less costly by lowering the property registration tax.
DB2016	Guinea-Bissau	Guinea-Bissau made transferring property easier by lowering the property registration tax.
DB2016	Kenya	Kenya made property transfers faster by improving electronic document management at the land registry and introducing a unified form for registration.
DB2016	Madagascar	Madagascar made transferring property less costly by lowering the property transfer tax.
DB2016	Nigeria	Nigeria made transferring property in Lagos less costly by reducing fees for property transactions.
DB2016	Senegal	Senegal made transferring property less costly by lowering the property transfer tax.
DB2016	Chad	Chad made transferring property less costly by lowering the property transfer tax.

DB year	Economy	Reform
DB2015	Côte d'Ivoire	Côte d'Ivoire made transferring property easier by digitizing its land registry system and lowering the property registration tax.
DB2015	Gabon	Gabon made transferring property more costly by increasing the property registration tax rate.
DB2015	Guinea	Guinea made registering property easier by reorganizing the records at the land registry and reducing the notary fees.
DB2015	Mozambique	Mozambique made registering property easier by streamlining procedures at the land registry and municipality.
DB2015	Senegal	Senegal made it easier to transfer property by replacing the authorization from the tax authority with a notification and setting up a single step at the land registry.
DB2015	Sierra Leone	Sierra Leone made registering property easier by introducing a fast-track procedure.
DB2015	Тодо	Togo made transferring property easier by lowering the property registration tax rate.
DB2015	Zambia	Zambia made transferring property more difficult by increasing the property transfer tax rate.
DB2014	Burundi	Burundi made transferring property easier by creating a one- stop shop for property registration.
DB2014	Côte d'Ivoire	Côte d'Ivoire made transferring property easier by streamlining procedures and reducing the property transfer tax.
DB2014	Cabo Verde	Cape Verde made property transfers faster by digitizing its land registry.
DB2014	Guinea	Guinea made transferring property easier by reducing the property transfer tax.
DB2014	Guinea-Bissau	Guinea-Bissau made transferring property easier by increasing the number of notaries dealing with property transactions.

DB year	Economy	Reform
DB2014	Liberia	Liberia made transferring property easier by digitizing the records at the land registry.
DB2014	Lesotho	Lesotho made transferring property easier by streamlining procedures and increasing administrative efficiency.
DB2014	Malawi	Malawi made transferring property easier by reducing the stamp duty.
DB2014	Namibia	Namibia made transferring property more expensive by increasing the transfer and stamp duties.
DB2014	Niger	Niger made transferring property easier by reducing the registration fees.
DB2014	Rwanda	Rwanda made transferring property easier by eliminating the requirement to obtain a tax clearance certificate and by implementing the web-based Land Administration Information System for processing land transactions.
DB2014	Senegal	Senegal made transferring property easier by reducing the property transfer tax.
DB2014	Chad	Chad made transferring property easier by lowering the property transfer tax.
DB2014	Uganda	Uganda made transferring property easier by eliminating the need to have instruments of land transfer physically embossed to certify payment of the stamp duty.
DB2013	Burundi	Burundi made property transfers faster by establishing a statutory time limit for processing property transfer requests at the land registry.
DB2013	Comoros	The Comoros made it easier to transfer property by reducing the property transfer tax.
DB2013	Gabon	In Gabon registering property became more difficult because of longer administrative delays at the land registry.
DB2013	Mauritius	Mauritius made property transfers faster by implementing an electronic information management system at the Registrar-

DB year	Economy	Reform
		General's Department.
DB2013	Namibia	Namibia made transferring property more difficult by requiring conveyancers to obtain a building compliance certificate beforehand.
DB2013	Sierra Leone	Sierra Leone made registering property easier by computerizing the Ministry of Lands, Country Planning and the Environment.
DB2013	Uganda	Uganda made transferring property more difficult by introducing a requirement for property purchasers to obtain an income tax certificate before registration, resulting in delays at the Uganda Revenue Authority and the Ministry of Finance. At the same time, Uganda made it easier by digitizing records at the title registry, increasing efficiency at the assessor's office and making it possible for more banks to accept the stamp duty payment.
DB2012	Zambia	Zambia made registering property more costly by increasing the property transfer tax rate.
DB2012	South Africa	South Africa made transferring property less costly and more efficient by reducing the transfer duty and introducing electronic filing.
DB2012	Swaziland	Swaziland made transferring property quicker by streamlining the process at the land registry.
DB2012	Uganda	Uganda increased the efficiency of property transfers by establishing performance standards and recruiting more officials at the land office.
DB2012	Rwanda	Rwanda made transferring property more expensive by enforcing the checking of the capital gains tax.
DB2012	São Tomé and Príncipe	São Tomé and Príncipe made registering property less costly by lowering property transfer taxes.
DB2012	Namibia	Namibia made transferring property more expensive for companies.

DB year	Economy	Reform
DB2012	Malawi	Malawi made property registration slower by no longer sustaining last year's time improvement in Compliance Certificate processing times at the Ministry of Lands.
DB2012	Congo, Rep.	The Republic of Congo made registering property more expensive by reversing a previous law that reduced the registration fee.
DB2012	Cabo Verde	Cape Verde made registering property faster by implementing time limits for the notaries and the land registry.
DB2012	Central African Republic	The Central African Republic halved the cost of registering property.
DB2012	Angola	Angola made transferring property less costly by reducing transfer taxes.
DB2011	Cabo Verde	Cape Verde eased property registration by switching from fees based on a percentage of the property value to lower fixed rates.
DB2011	Congo, Dem. Rep.	The Democratic Republic of Congo reduced by half the property transfer tax to 3% of the property value.
DB2011	Mali	Mali eased property transfers by reducing the property transfer tax for firms from 15% of the property value to 7%.
DB2011	Malawi	Malawi eased property transfers by cutting the wait for consents and registration of legal instruments by half.
DB2011	Sierra Leone	Sierra Leone lifted a moratorium on sales of privately owned properties.
DB2010	Zimbabwe	Zimbabwe made transferring property less costly by introducing a new policy on the capital gains tax that resulted in a reduction in the actual amount paid.
DB2010	Sierra Leone	Sierra Leone made transferring property more difficult by reinstating a moratorium on the authorization of property transfers by the director of surveys and lands.

DB year	Economy	Reform
DB2010	Rwanda	Rwanda reduced the time required to transfer property through ongoing improvements in the property registration process.
DB2010	Mauritius	Mauritius made registering property easier by setting a statutory time limit of 15 days for issuance of the final property title by the land registry.
DB2010	Ethiopia	Ethiopia made transferring property easier by decentralizing administrative tasks and merging procedures at the land registry and municipality.
DB2010	Madagascar	Madagascar made transferring property more costly by making the use of a notary mandatory for property transactions.
DB2010	Botswana	Botswana made registering property more difficult by adding a requirement to notify the tax agency of the value added tax payment.
DB2010	Burkina Faso	Burkina Faso streamlined property registration by allowing the payment of transfer taxes at the land registry, reorganizing the land registry, setting statutory time limits for procedures and simplifying property valuation by government officials through the use of tables of values based on materials used.
DB2010	Angola	Angola speeded up property transfers by digitizing the land registry in Luanda and splitting it into 2 units, each responsible for half the land covered by the registry.

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.

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

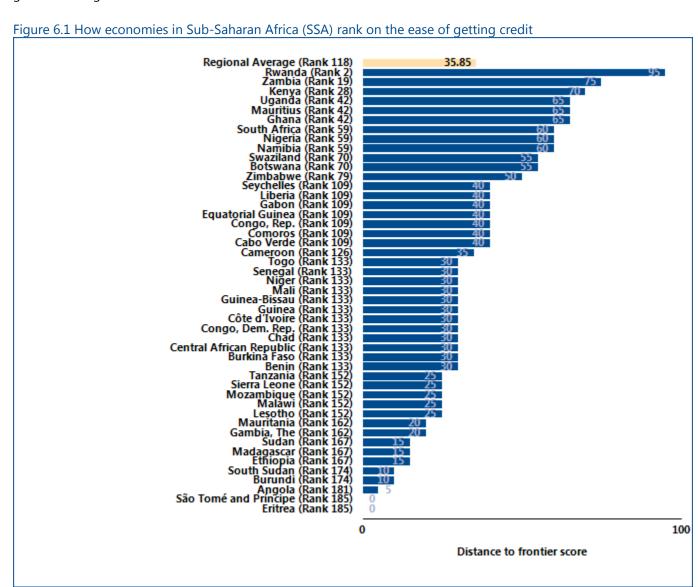
- Has up to 50 employees.
- Is 100% domestically owned, as is the lender.

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.

Where do the region's economies stand today?

How well do the credit information systems and collateral and bankruptcy laws in economies in Sub-Saharan Africa (SSA) facilitate access to credit? The global rankings of these economies on the ease of

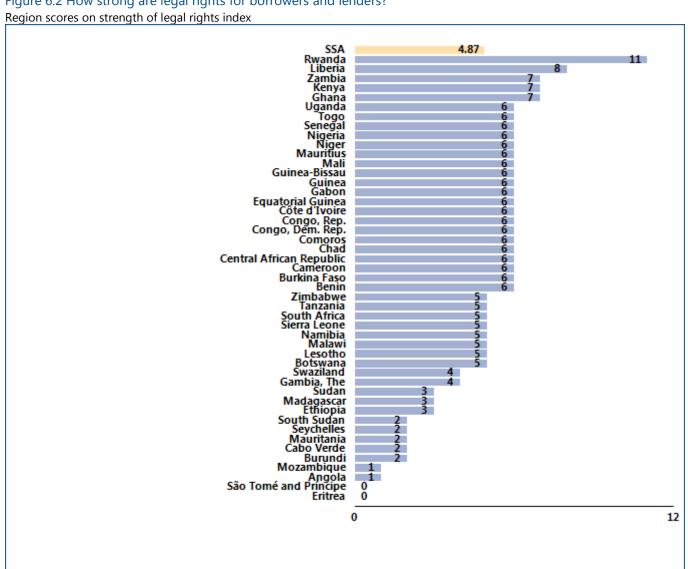
getting credit suggest an answer (figure 6.1). The average ranking of the region and comparator regions provide a useful benchmark.



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

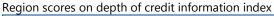
the strength of legal rights index for Sub-Saharan Africa (SSA) and comparators on the strength of legal rights index. Figure 6.3 shows the same thing for the depth of credit information index.

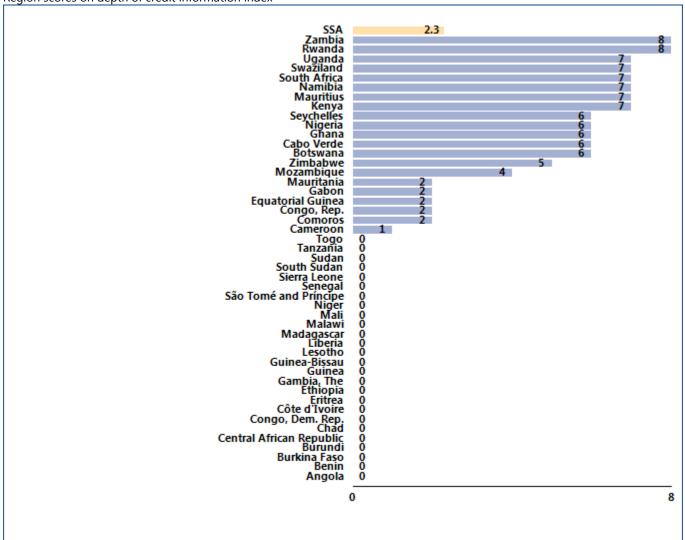
Figure 6.2 How strong are legal rights for borrowers and lenders?



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?





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.

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 Sub-Saharan Africa (SSA) (table 6.1)?

Table 6.1 How have economies in Sub-Saharan Africa (SSA) 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	Kenya	Kenya improved access to credit information by passing legislation that allows the sharing of positive information and by expanding borrower coverage.
DB2016	Liberia	Liberia improved access to credit by adopting new laws on secured transactions that establish a modern, unified and notice-based collateral registry.
DB2016	Lesotho	Lesotho improved access to credit information by establishing its first credit bureau.
DB2016	Madagascar	Madagascar improved access to credit by broadening the range of assets that can be used as collateral (including future assets), by allowing a general description of assets granted as collateral and by allowing a general description of debts and obligations.
DB2016	Mali	Mali improved its credit information system by introducing regulations that govern the licensing and functioning of credit bureaus in the member states of the West African Economic and Monetary Union (UEMOA).
DB2016	Mauritania	Mauritania improved access to credit information by lowering the threshold for the minimum size of loans to be included in the credit registry's database and by expanding borrower coverage.
DB2016	Namibia	Namibia improved access to credit information by guaranteeing by law borrowers' right to inspect their own data.

DB year	Economy	Reform
DB2016	Niger	Niger improved its credit information system by introducing regulations that govern the licensing and functioning of credit bureaus in the member states of the West African Economic and Monetary Union (UEMOA).
DB2016	Rwanda	In Rwanda the credit bureau started to provide credit scores to banks and other financial institutions while the credit registry expanded borrower coverage, strengthening the credit reporting system.
DB2016	Seychelles	The Seychelles improved access to credit information by establishing a credit registry.
DB2016	Uganda	In Uganda the credit bureau expanded borrower coverage, improving access to credit information.
DB2016	Zambia	In Zambia the credit bureau began to provide credit scores.
DB2016	Zimbabwe	In Zimbabwe the credit bureau began to provide credit scores.
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	Cameroon	Cameroon improved its credit information system by passing regulations that provide for the establishment and operation of a credit registry database.
DB2015	Cabo Verde	Cabo Verde improved its credit information system by adopting a new law providing for the establishment of credit bureaus.
DB2015	Kenya	Kenya improved its credit information system by passing legislation that allows the sharing of both positive and negative credit information and establishes guidelines for the treatment of historical data.
DB2015	Mauritania	Mauritania improved its credit information system by lowering the minimum threshold for loans to be included in the registry's database.
DB2015	Rwanda	Rwanda improved access to credit by establishing clear priority rules outside bankruptcy for secured creditors and establishing clear grounds for relief from a stay of enforcement actions by secured creditors during

DB year	Economy	Reform
		reorganization procedures.
DB2015	Senegal	Senegal improved its credit information system by introducing regulations developed by the West African Economic and Monetary Union 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	Tanzania	Tanzania improved access to credit information by creating credit bureaus.
DB2015	South Africa	South Africa made access to credit information more difficult by introducing regulations requiring credit bureaus to remove negative credit information from their databases, such as adverse information on consumer behavior or enforcement action accumulated on a consumer's record before April 1, 2014.
DB2015	Congo, Dem. Rep.	The Democratic Republic of Congo improved access to credit information by establishing a credit registry.
DB2015	Zambia	In Zambia, the credit bureau improved access to credit information by starting to exchange credit information with retailers and utilities.
DB2014	Mauritius	Mauritius improved access to credit information by expanding the scope of credit information and increasing the coverage of the historical data distributed from 2 years to 3.
DB2014	Rwanda	Rwanda strengthened its secured transactions system by providing more flexibility on the types of debts and obligations that can be secured through a collateral agreement.
DB2014	Tanzania	Tanzania improved its credit information system through new regulations that provide for the licensing of credit reference bureaus and outline the functions of the credit reference data bank.
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)

DB year	Economy	Reform
		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	Ethiopia	Ethiopia improved access to credit information by establishing an online platform for sharing such information and by guaranteeing borrowers' right to inspect their personal data.
DB2013	Mauritius	Mauritius improved access to credit information by starting to collect payment information from retailers and beginning to distribute both positive and negative information.
DB2013	Nigeria	Nigeria improved access to credit information by distributing credit information from retail companies.
DB2013	Seychelles	Seychelles improved access to credit information by adopting new regulations that provide for the establishment and operation of a credit registry database.
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.
DB2013	Sudan	Sudan improved access to credit information by establishing a private credit bureau.
DB2012	Togo	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	Rwanda	In Rwanda the private credit bureau started to collect and distribute information from utility companies and also started to distribute more than 2 years of historical information, improving the credit information system.
DB2012	Senegal	Access to credit in Senegal 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.

DB year	Economy	Reform
DB2012	Sierra Leone	Sierra Leone improved its credit information system by enacting a new law providing for the creation of a public credit registry.
DB2012	Niger	Access to credit in Niger 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	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 the proceeds of the original asset.
DB2012	Madagascar	Madagascar improved its credit information system by eliminating the minimum threshold for loans included in the database and making it mandatory for banks to share credit information with the credit bureau.
DB2012	Malawi	Malawi improved its credit information system by passing a new law allowing the creation of a private credit bureau.
DB2012	Mali	Access to credit in Mali 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	Gabon	Access to credit in Gabon 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	Guinea	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 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.

DB year	Economy	Reform
DB2012	Guinea-Bissau	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.
DB2012	Cabo Verde	Cape Verde improved its credit information system by introducing a new online platform and by starting to provide 5 years of historical data.
DB2012	Central African Republic	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	Chad	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	Comoros	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	Congo, Rep.	Access to credit in the Republic of Congo 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	Côte d'Ivoire	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.

DB year	Economy	Reform
DB2012	Equatorial Guinea	Access to credit in Equatorial Guinea 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	Angola	Angola strengthened its credit information system by adopting new rules for credit bureaus and guaranteeing the right of borrowers to inspect their data.
DB2012	Benin	Access to credit in Benin was improved through amendments to the OHADA (Organization for the Harmonization of Business Law in Africa) 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	Burkina Faso	Access to credit in Burkina Faso 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	Cameroon	Access to credit in Cameroon 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	Ghana	Ghana strengthened access to credit by establishing a centralized collateral registry and by granting an operating license to a private credit bureau that began operations in April of 2010.
DB2011	Rwanda	Rwanda enhanced access to credit by allowing borrowers the right to inspect their own credit report and mandating that loans of all sizes be reported to the central bank's public credit registry.
DB2011	Uganda	Uganda enhanced access to credit by establishing a new private credit bureau.

DB year	Economy	Reform
DB2010	Zambia	Zambia improved its credit information system by making it mandatory for banks and nonbank financial institutions registered with the central bank to use credit reference reports and to provide data to the credit bureau.
DB2010	Sierra Leone	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	Kenya	Kenya improved access to credit information through a new law on credit bureaus providing a framework for a regulated and reliable system of credit information sharing.
DB2010	Mauritius	Mauritius improved access to credit information by allowing the licensing of private credit information bureaus and by expanding the coverage of the Mauritius Credit Information Bureau to all institutions offering credit facilities.
DB2010	Nigeria	Nigeria improved its credit information system through a central bank guideline defining the licensing, operational and regulatory requirements for a privately owned credit bureau.
DB2010	Rwanda	Rwanda strengthened its secured transactions system by allowing a wider range of assets to be used as collateral, permitting a general description of debts and obligations in the security agreement, allowing out-of-court enforcement of collateral, granting secured creditors absolute priority within bankruptcy and creating a new collateral registry.
DB2010	Cabo Verde	Cape Verde improved access to credit information by allowing online access to the central bank's credit information database for financial institutions providing and retrieving information. At the same time, Cape Verde raised the minimum threshold for personal loans included in the database from 1,000 to 5,000 escudos.

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.

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)

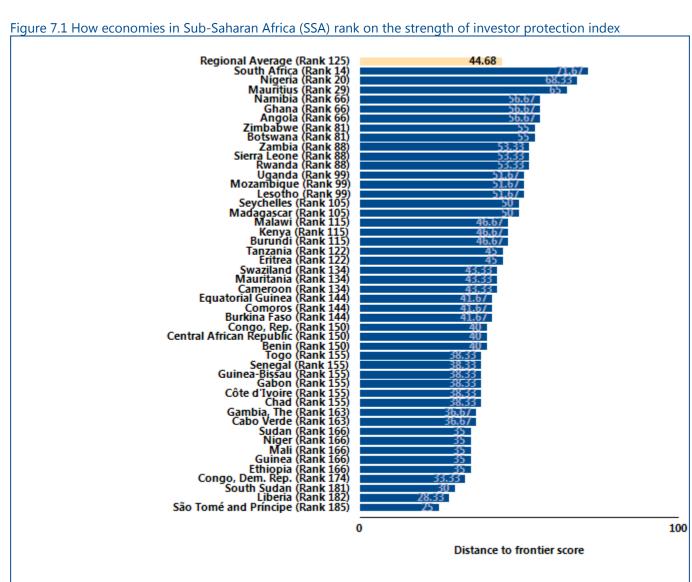
Simple average of the extent of shareholders rights, extent of ownership and control and extent of corporate transparency indices

Strength of investor protection index (0-10)

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

Where do the region's economies stand today?

How strong are investor protections against self-dealing in economies in Sub-Saharan Africa (SSA)? 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.

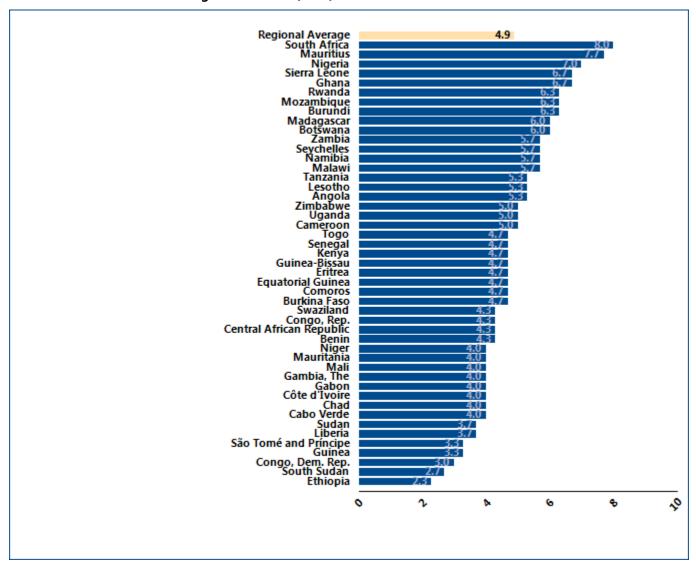


The strength of minority investor protection index is the average of the extent of conflict of interest regulation index and the extent of shareholder governance index. The index ranges from 0 to 10, rounded to the nearest decimal place, with higher values indicating stronger minority investor protections. Figures 7.2 and 7.3

highlight the scores on the various minority investor protection indices for Sub-Saharan Africa (SSA). 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?

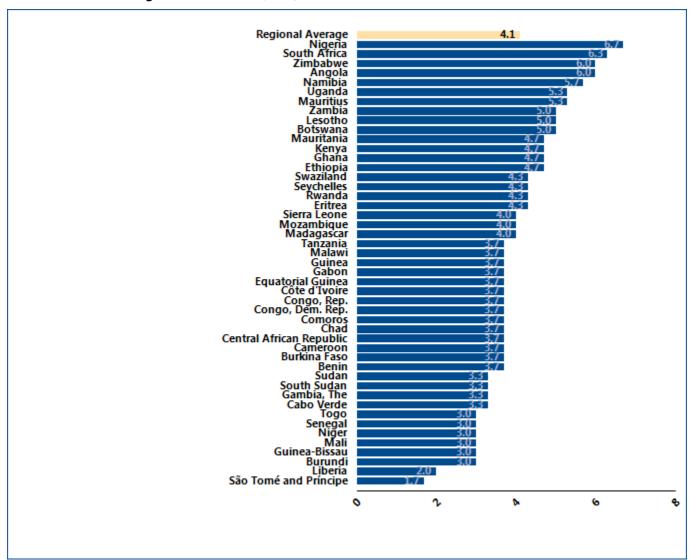
Extent of conflict of interest regulation index (0-10)



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.

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 Sub-Saharan Africa (SSA) (table 7.1)?

Table 7.1 How have economies in Sub-Saharan Africa (SSA) strengthened minority investor protections—or not? By *Doing Business* report year DB2011 to DB2016

DB year	Economy	Reform
DB2016	Madagascar	Madagascar strengthened minority investor protections by requiring that directors with a conflict of interest fully disclose the nature of their interest to the board of directors.
DB2016	Nigeria	Nigeria strengthened minority investor protections by requiring that related-party transactions be subject to external review and to approval by disinterested shareholders. This reform applies to both Kano and Lagos.
DB2016	Rwanda	Rwanda strengthened minority investor protections by introducing provisions allowing holders of 10% of a company's shares to call for an extraordinary meeting of shareholders, requiring holders of special classes of shares to vote on decisions affecting their shares, requiring board members to disclose information about their directorships and primary employment and requiring that audit reports for listed companies be published in a newspaper.
DB2016	Zimbabwe	Zimbabwe strengthened minority investor protections by introducing provisions allowing legal practitioners to enter into contingency fee agreements with clients.
DB2015	Benin	Benin 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	Burkina Faso	Burkina Faso 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	Central African Republic	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	Côte d'Ivoire	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	Cameroon	Cameroon 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	Congo, Rep.	The 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.
DB2015	Comoros	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.

DB year	Economy	Reform
DB2015	Gabon	Gabon 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	Guinea	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.
DB2015	Gambia, The	The Gambia strengthened minority investor protections by clarifying the duties of directors and providing new venues and remedies for minority shareholders seeking redress for oppressive conduct.
DB2015	Guinea-Bissau	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	Equatorial Guinea	Equatorial 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.
DB2015	Mali	Mali 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	Niger	Niger 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

DB year	Economy	Reform
		pertaining to related-party transactions and to appoint auditors to conduct an inspection of such transactions.
DB2015	Senegal	Senegal strengthened minority investor protections by introducing greater requirements for disclosure of related-party transactions to the board of directors; 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; and by making it possible for shareholder plaintiffs to request from the other party, and from witnesses, documents relevant to the subject matter of the claim during the trial.
DB2015	Chad	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	Togo	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	Congo, Dem. Rep.	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	Rwanda	Rwanda strengthened investor protections through a new law allowing plaintiffs to cross-examine defendants and witnesses with prior approval of the questions by the court.
DB2014	Congo, Dem. Rep.	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

DB year	Economy	Reform
		directors when such transactions harm the company.
DB2013	Lesotho	Lesotho strengthened investor protections by increasing the disclosure requirements for related-party transactions and improving the liability regime for company directors in cases of abusive related-party transactions.
DB2012	Burundi	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.
DB2011	Swaziland	Swaziland strengthened investor protections by requiring greater corporate disclosure, higher standards of accountability for company directors and greater access to corporate information for minority investors. Swaziland reduced the time to import by implementing an electronic data interchange system for customs at its border posts.
DB2010	Mali	Mali strengthened investor protections through an amendment to its civil procedure code increasing shareholders' access to corporate information during trial.
DB2010	Rwanda	Rwanda strengthened investor protections through a new company law requiring greater corporate disclosure, increasing director liability and improving shareholders' access to information.
DB2010	Sierra Leone	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.

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 mediumsize 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.

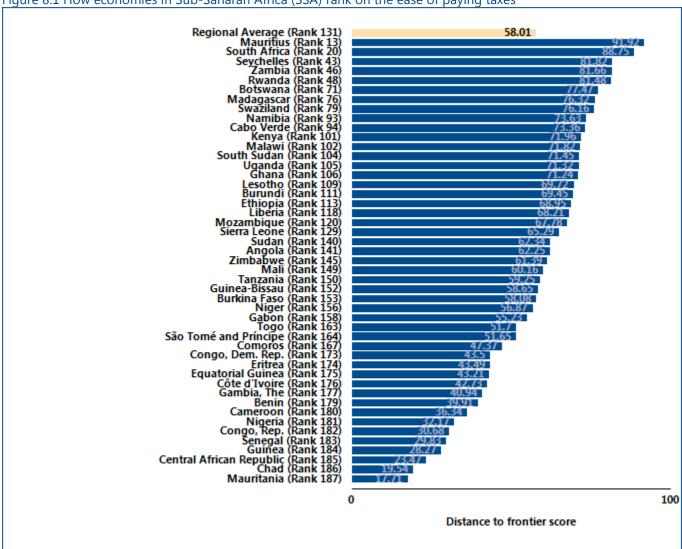
³ The nonlinear distance to frontier for the total tax rate is equal to the distance to frontier for the total tax rate to the power of 0.8. The threshold is defined as the total tax rate at the 15th percentile of the overall distribution for all years included in the analysis up to and including *Doing 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.

Where do the region's economies stand today?

What is the administrative burden of complying with taxes in economies in Sub-Saharan Africa (SSA)—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.



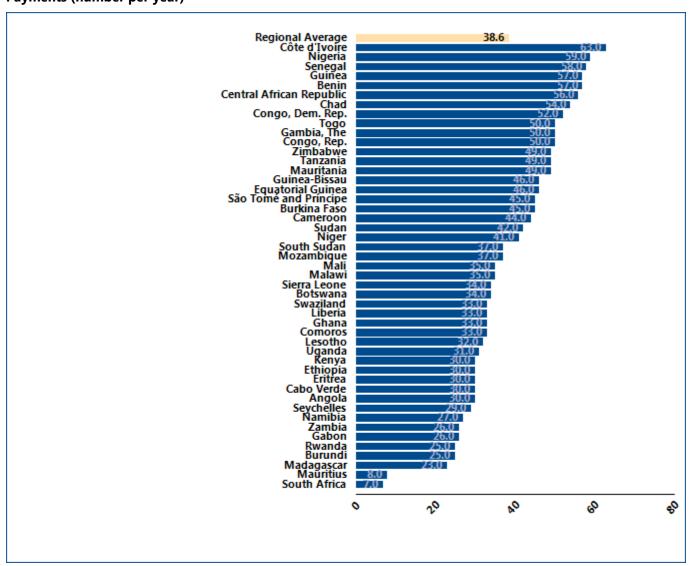


Note: All economies with a total tax rate below the threshold of 26.1% applied in DB2015, receive the same distance to frontier score for the total tax rate (a distance to frontier score of 100 for the total tax rate) for the purpose of calculating the ranking on the ease of paying taxes.

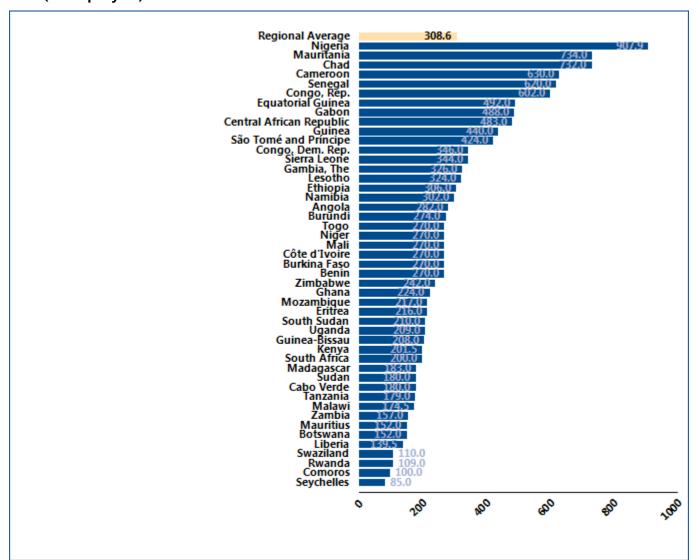
The indicators underlying the rankings may be more revealing. Data collected by *Doing Business* show what it takes to comply with tax regulations in each economy in the region—the number of payments per year and the time required to prepare, and file and pay taxes the 3

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.

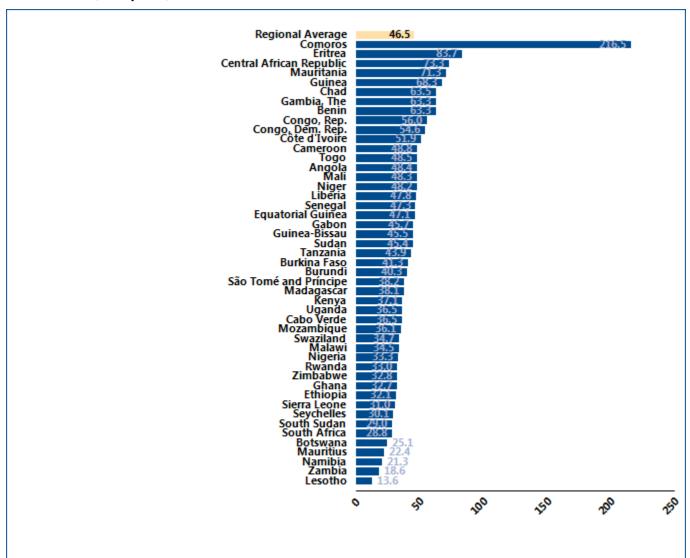
Figure 8.2 How easy is it to pay taxes in economies in Sub-Saharan Africa (SSA)—and what are the total tax rates? **Payments (number per year)**



Time (hours per year)



Total tax rate (% of profit)



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 Sub-Saharan Africa (SSA) (table 8.1)?

Table 8.1 How have economies in Sub-Saharan Africa (SSA) made paying taxes easier—or not? By *Doing Business* report year DB2011 to DB2016

DB year	Economy	Reform
DB2016	Angola	Angola made paying taxes less costly for companies by reducing the corporate income tax rate.
DB2016	Gabon	Gabon made paying taxes more costly for companies by reducing the depreciation rates for some types of fixed assets.
DB2016	Gambia, The	The Gambia made paying taxes easier for companies by introducing a VAT system that is less complicated than the previous sales tax system—and made paying taxes less costly by reducing the corporate income tax rate.
DB2016	Liberia	Liberia made paying taxes more complicated for companies by introducing a minimum corporate income tax.
DB2016	Mozambique	Mozambique made paying taxes easier and less costly for companies by implementing an online system for filing social security contributions and by increasing the depreciation rate for copying machines.
DB2016	Rwanda	Rwanda made paying taxes easier for companies by introducing electronic filing and making its use compulsory.
DB2016	Swaziland	Swaziland made paying taxes less costly for companies by reducing the corporate income tax rate. On the other hand, Swaziland raised the ceiling for the National Provident Fund contribution.
DB2016	Congo, Dem. Rep.	The Democratic Republic of Congo made paying taxes more complicated for companies by introducing a new social

DB year	Economy	Reform
		security contribution paid by employers, though it subsequently reduced the rate of the contribution.
DB2016	Zambia	Zambia made paying taxes easier for companies by implementing electronic filing and payment for VAT. At the same time, Zambia made paying taxes more costly by increasing the property transfer tax rate.
DB2015	Congo, Rep.	The Republic of Congo made paying taxes easier for companies by reducing the corporate income tax rate and by abolishing the tax on the rental value of business premises and the tax on company-owned cars.
DB2015	Gabon	Gabon made paying taxes easier for companies by introducing an electronic system for filing and paying VAT.
DB2015	Kenya	Kenya made paying taxes more costly for companies by increasing employers' social security contribution rate.
DB2015	Namibia	Namibia made paying taxes more complicated for companies by introducing a new vocational education and training levy.
DB2015	Senegal	Senegal made paying taxes easier for companies by abolishing the vehicle tax and making it possible to download the declaration forms for VAT online.
DB2015	Sierra Leone	Sierra Leone made paying taxes more complicated for companies by introducing a capital gains tax.
DB2015	Swaziland	Swaziland made paying taxes less costly for companies by reducing the corporate income tax rate.
DB2015	Seychelles	The Seychelles made paying taxes easier for companies by reducing the business tax rate applicable to income above 1 million Seychelles rupees (\$77,700) and by introducing a simplified new tax return allowing joint filing and payment of the business tax, VAT and corporate social responsibility tax. On the other hand, it increased employers' pension fund contribution rate.
DB2015	Togo	Togo made paying taxes less costly for companies by reducing the payroll tax rate.

DB year	Economy	Reform
DB2015	Tanzania	Tanzania made paying taxes more complicated for companies by introducing an excise tax on money transfers. On the other hand, it made paying taxes less costly by reducing the rate of the skill and development levy.
DB2015	Congo, Dem. Rep.	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.
DB2015	Zambia	Zambia made paying taxes easier for companies by abolishing the medical levy and by introducing an online system for filing corporate income tax, VAT and some labor taxes. At the same time, it also increased the property transfer tax.
DB2014	Burundi	Burundi made paying taxes less costly for companies by reducing corporate income tax rate.
DB2014	Burkina Faso	Burkina Faso made paying taxes easier for companies by abolishing the separate capital gains tax on real estate properties.
DB2014	Côte d'Ivoire	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	Congo, Rep.	The Republic of Congo made paying taxes easier and less costly for companies by merging several employment taxes into a single tax and lowering the tax rate on rental value.
DB2014	Gabon	Gabon made paying taxes less costly for companies by reducing the corporate income tax rate.
DB2014	Gambia, The	The Gambia made paying taxes easier for companies by replacing the sales tax with a value added tax.
DB2014	Madagascar	Madagascar made paying taxes easier and less costly for companies by training taxpayers in the use of the online system for value added tax declarations and by reducing the

DB year	Economy	Reform
		corporate income tax rate.
DB2014	Mauritania	Mauritania made paying taxes more costly for companies by introducing a new health insurance contribution for employers that is levied on gross salaries.
DB2014	Rwanda	Rwanda made paying taxes easier and less costly for companies by rolling out its electronic filing system to the majority of businesses and by reducing the property tax rate and business trading license fee.
DB2014	Senegal	Senegal made paying taxes more costly by increasing the corporate income tax rate. At the same time, Senegal facilitated tax payments by making tax forms available online and creating the Center for Medium Enterprises.
DB2014	South Sudan	South Sudan made paying taxes more costly for companies by increasing the corporate income tax rate.
DB2014	Seychelles	The Seychelles made paying taxes more complicated for companies by introducing a value added tax.
DB2014	Togo	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	South Africa	South Africa made paying taxes easier for companies by replacing the secondary tax on companies with a dividend tax borne by shareholders.
DB2014	Congo, Dem. Rep.	The Democratic Republic of Congo made paying taxes more costly for companies by increasing the employers' social security contribution rate.
DB2013	Botswana	Botswana made paying taxes more costly for companies by increasing the profit tax rate.
DB2013	Kenya	Kenya made paying taxes faster for companies by enhancing electronic filing systems.
DB2013	Liberia	Liberia made paying taxes easier for companies by reducing

DB year	Economy	Reform
		the profit tax rate and abolishing the turnover tax.
DB2013	Malawi	Malawi introduced a mandatory pension contribution for companies.
DB2013	Mali	Mali made paying taxes less costly for companies by reducing the corporate income tax rate—though it also introduced a new tax on land. At the same time, Mali simplified the processes of paying taxes by introducing a single form for joint filing and payment of several taxes.
DB2013	Ethiopia	Ethiopia introduced a social insurance contribution.
DB2013	Nigeria	Nigeria introduced a new compulsory labor contribution paid by the employer.
DB2013	Swaziland	Swaziland introduced value added tax.
DB2012	Тодо	Togo reduced its corporate income tax rate.
DB2012	Seychelles	The Seychelles made paying taxes less costly for firms by eliminating the social security tax.
DB2012	Rwanda	Rwanda reduced the frequency of value added tax filings by companies from monthly to quarterly.
DB2012	Gambia, The	The Gambia reduced the minimum turnover tax and corporate income tax rates.
DB2012	Côte d'Ivoire	Côte d'Ivoire eliminated a tax on firms, the contribution for national reconstruction (contribution pour la reconstruction nationale).
DB2012	Burundi	Burundi made paying taxes easier for companies by reducing the payment frequency for social security contributions from monthly to quarterly.
DB2012	Congo, Dem. Rep.	The Democratic Republic of Congo made paying taxes easier for firms by replacing the sales tax with a value added tax.
DB2011	Congo, Rep.	The Republic of Congo reduced its corporate income tax rate from 38% to 36% in 2010.
DB2011	Côte d'Ivoire	Côte d'Ivoire made paying taxes less costly for companies by

DB year	Economy	Reform
		reducing the corporate income tax rate.
DB2011	Cabo Verde	Cape Verde abolished the stamp duties on sales and checks.
DB2011	Chad	Chad increased taxes on business through changes to its social security contribution rates.
DB2011	Burkina Faso	Burkina Faso reduced the statutory tax rate and the number of taxes for business and introduced simpler, uniform compliance procedures.
DB2011	Burundi	Burundi made paying taxes simpler by replacing the transactions tax with a value added tax.
DB2011	Mauritius	Mauritius introduced a new corporate social responsibility tax.
DB2011	Madagascar	Madagascar continued to reduce corporate tax rates.
DB2011	Niger	Niger reduced its corporate income tax rate.
DB2011	Kenya	Kenya increased the administrative burden of paying taxes by requiring quarterly filing of payroll taxes.
DB2011	São Tomé and Príncipe	São Tomé and Principe reduced the corporate income tax rate to a standard 25%.
DB2011	Seychelles	The Seychelles removed the tax-free threshold limit and lowered corporate income tax rates.
DB2011	Sierra Leone	Sierra Leone replaced sales and service taxes with a goods and service tax.
DB2011	Zimbabwe	Zimbabwe reduced the corporate income tax rate from 30% to 25%, lowered the capital gains tax from 20% to 5% and simplified the payment of corporate income tax by allowing quarterly payment through commercial banks.
DB2010	South Africa	South Africa made paying taxes less costly for companies by abolishing the stamp duty.
DB2010	Sudan	Sudan made paying taxes less costly for companies by reducing the corporate income and capital gains tax rates and abolishing the labor tax.

DB year	Economy	Reform
DB2010	Sierra Leone	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	Uganda	Uganda reduced the time required for companies to prepare, file and pay value added tax through improved efficiency of taxpayer services and banks.
DB2010	Тодо	Togo made paying taxes less costly for companies by reducing the corporate income tax rate.
DB2010	Malawi	Malawi made paying taxes less time consuming for companies by encouraging the use of electronic systems.
DB2010	Niger	Niger made paying taxes easier for companies by eliminating the tax on interest.
DB2010	Cameroon	To encourage business start-ups, Cameroon exempted new businesses from the business license tax for their first 2 years of existence.
DB2010	Cabo Verde	Cape Verde made paying taxes less costly for companies by reducing the corporate income tax rate.
DB2010	Congo, Dem. Rep.	The Democratic Republic of Congo made paying taxes more costly for companies by raising the sales tax rate.
DB2010	Angola	Angola made paying taxes easier for companies by introducing mandatory electronic filing for social security contributions for those with more than 20 employees.
DB2010	Benin	Benin made paying taxes less costly for companies by reducing the corporate income and payroll tax rates.

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.

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 × 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

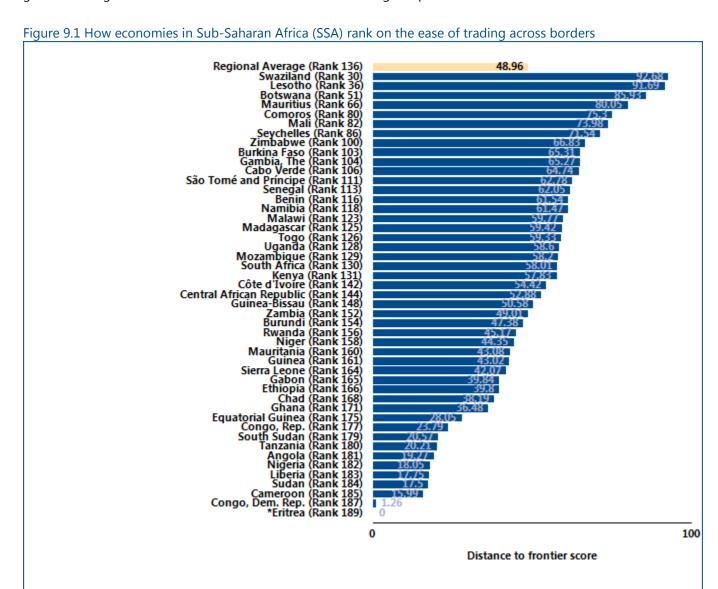
- For each of the 189 economies covered by Doing Business, it is assumed that a shipment travels from a warehouse in the largest business city of the exporting economy to a warehouse in the largest business city of the importing economy. For 11 economies the data are also collected, under the same case 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.

Where do the region's economies stand today?

How easy it is for businesses in economies in Sub-Saharan Africa (SSA) to export and import goods? The global rankings of these economies on the ease of

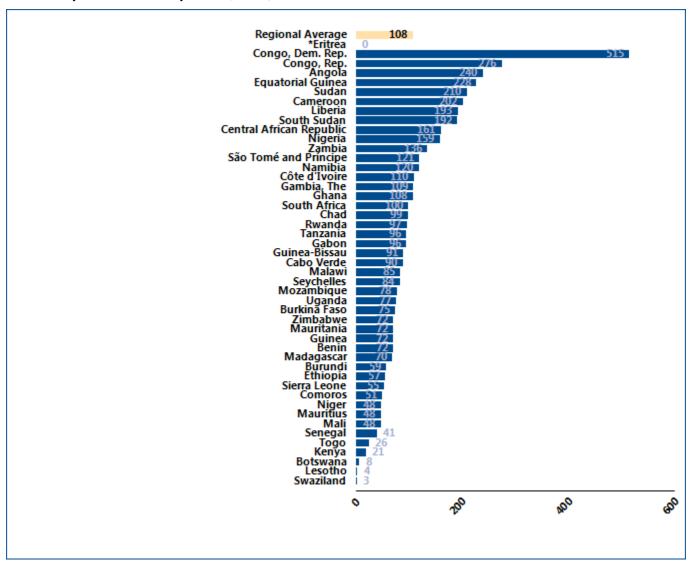
trading across borders suggest an answer (figure 9.1). The average ranking of the region and comparator regions provide a useful benchmark.



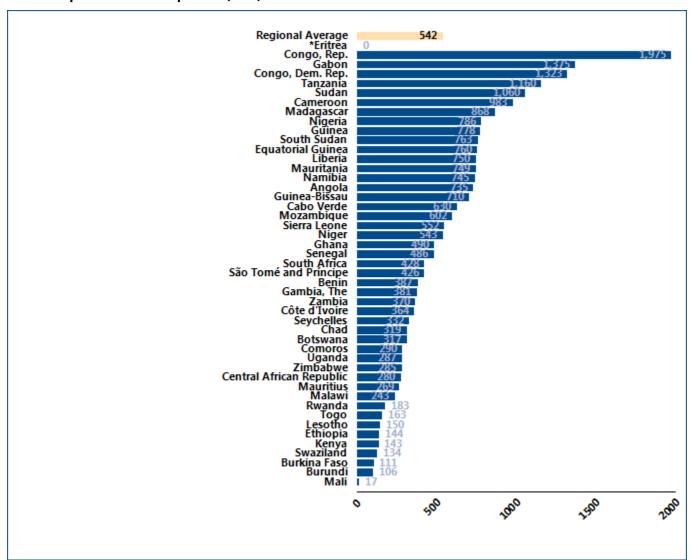
The indicators reported here are for trading a shipment of goods by the most widely used mode of transport (whether sea, land, air or some combination of these). The information on the time and cost to complete export and import is collected from local freight forwarders, customs brokers and traders. 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 Sub-Saharan Africa (SSA)

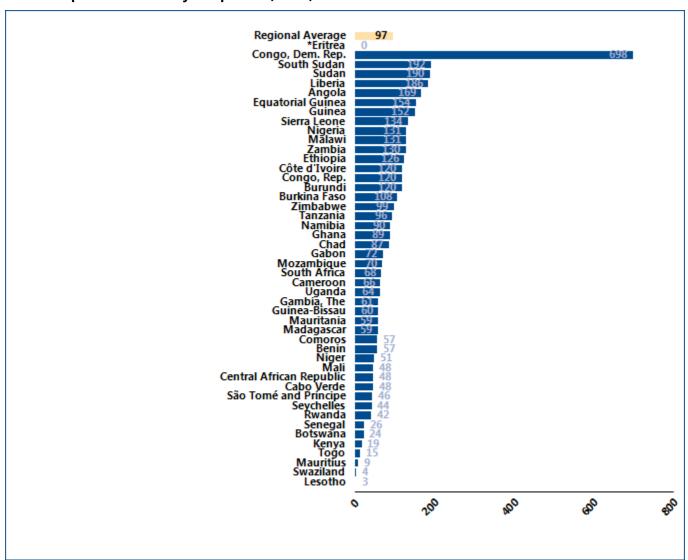
Time to export: Border compliance (hours)



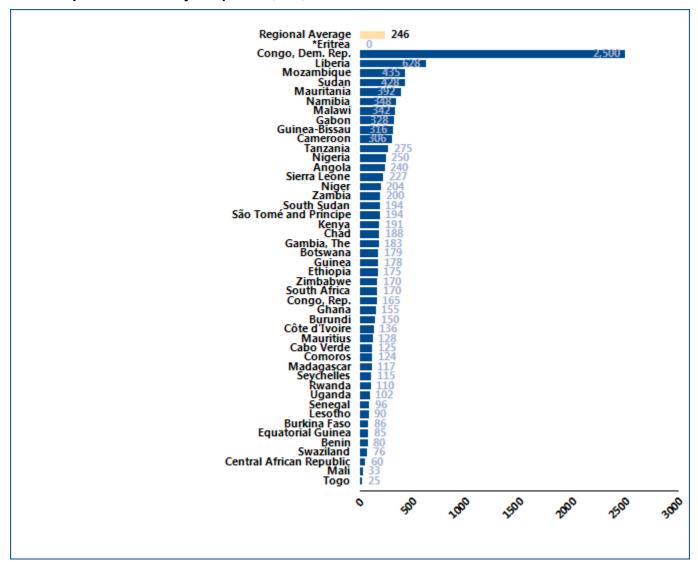
Cost to export: Border compliance (USD)



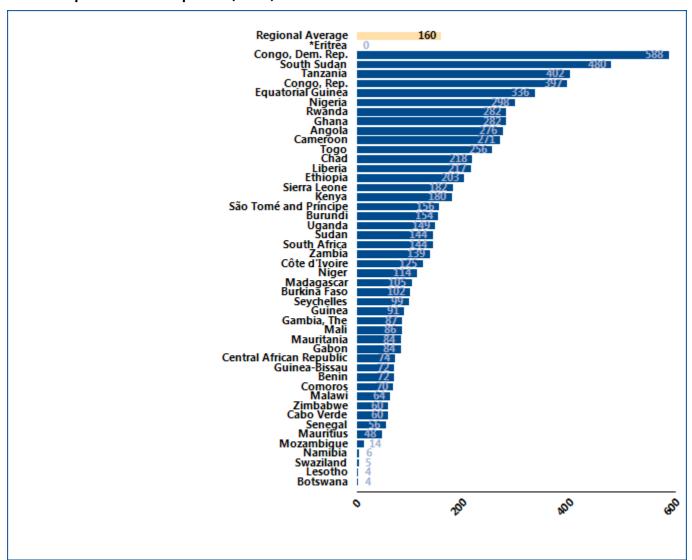
Time to export: Documentary compliance (hours)



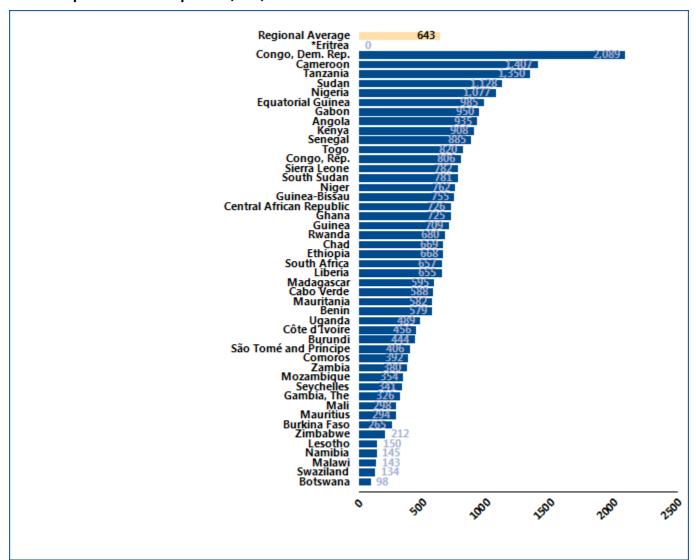
Cost to export: Documentary compliance (USD)



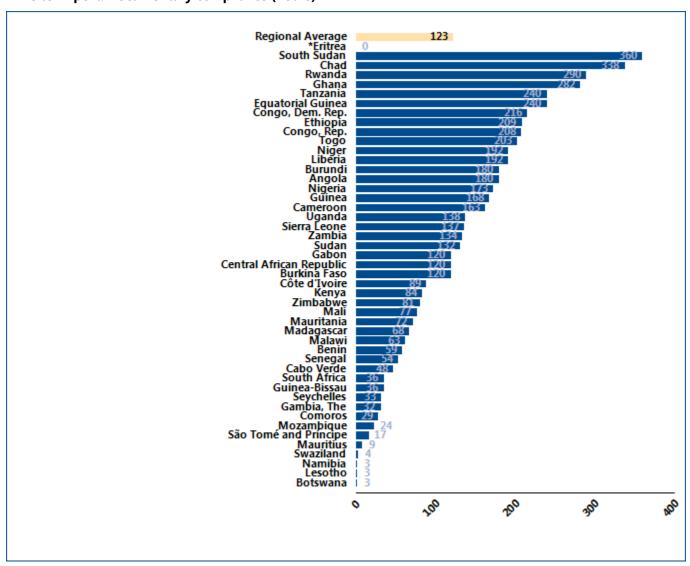
Time to import: Border compliance (hours)



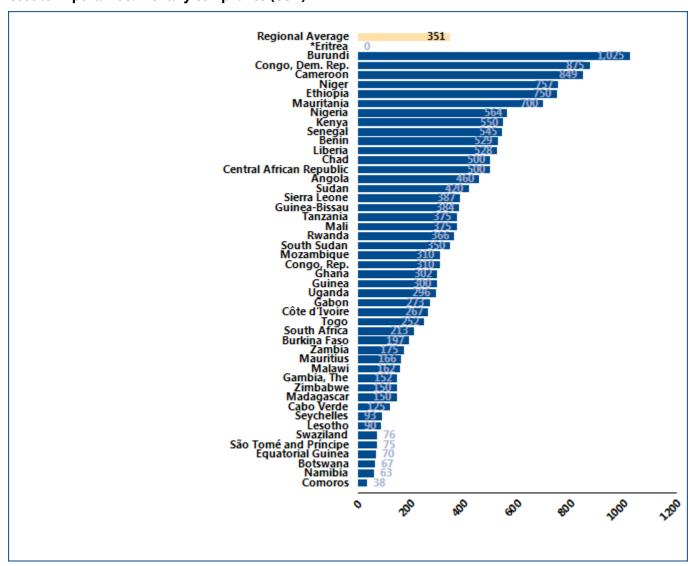
Cost to import: Border compliance (USD)



Time to import: Documentary compliance (hours)



Cost to import: Documentary compliance (USD)



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, riskbased 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 Sub-Saharan Africa (SSA) (table 9.1)?

Table 9.1 How have economies in Sub-Saharan Africa (SSA) made trading across borders easier—or not? By *Doing Business* report year DB2011 to DB2016

DB year	Economy	Reform
DB2016	Benin	Benin made trading across borders easier by further developing its electronic single-window system, which reduced the time for border compliance for both exporting and importing.
DB2016	Côte d'Ivoire	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	Ghana	Ghana reduced the documentary and border compliance time for importing by developing electronic channels for submitting and collecting the final classification and valuation report.
DB2016	Madagascar	Madagascar reduced the time for border compliance for both exporting and importing by upgrading port infrastructure—and also reduced the time for documentary compliance for importing.
DB2016	Mali	Mali reduced the time for documentary compliance for both exporting and importing by introducing an electronic data interchange system.
DB2016	Mauritania	Mauritania reduced the documentary and border compliance time for importing by eliminating the preimport declaration and value attestation and making the manifest electronic.

DB year	Economy	Reform
DB2016	Niger	Niger increased the time and cost for documentary and border compliance for importing by making a preshipment inspection mandatory.
DB2016	Rwanda	Rwanda increased the time and cost for documentary and border compliance for importing by making preshipment inspection mandatory for all imported products.
DB2016	Тодо	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	Tanzania	Tanzania reduced the time for both exporting and importing by implementing the Tanzania Customs Integrated System (TANCIS), an online system for downloading and processing customs documents.
DB2016	Congo, Dem. Rep.	The Democratic Republic of Congo made trading across borders more difficult by increasing the port handling time and cost for exporting and importing.
DB2016	Zambia	Zambia increased the documentary and border compliance time for both exporting and importing by shifting all clearance authority to a central processing center at the initial stage of implementing a web-based customs platform (ASYCUDA World).
DB2015	Benin	Benin made trading across borders easier by reducing the number of documents needed for imports.
DB2015	Central African Republic	The Central African Republic made trading across borders more difficult by increasing border checks and security controls at the border post with Cameroon.
DB2015	Côte d'Ivoire	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	Ghana	Ghana made trading across borders easier by upgrading

DB year	Economy	Reform
		infrastructure at the port of Tema.
DB2015	Tanzania	Tanzania made trading across borders easier by upgrading infrastructure at the port of Dar es Salaam.
DB2015	Uganda	Uganda made trading across borders easier by implementing the ASYCUDA World electronic system for the submission of export and import documents.
DB2014	Angola	Angola increased documentation requirements for cross- border trade by introducing a mandatory registration for all traders and a new license for export and import transactions.
DB2014	Burundi	Burundi made trading across borders easier by eliminating the requirement for a preshipment inspection clean report of findings.
DB2014	Benin	Benin made trading across borders easier by improving port management systems, enhancing the infrastructure around the port and putting in place new rules for the transit of trucks.
DB2014	Central African Republic	The Central African Republic made trading across borders easier by rehabilitating the key transit road at the border with Cameroon.
DB2014	Congo, Rep.	The Republic of Congo made trading across borders easier by implementing prearrival processing of ship manifests and making improvements in customs administration.
DB2014	Guinea	Guinea made trading across borders easier by improving port management systems.
DB2014	Madagascar	Madagascar made trading across borders easier by rolling out an online platform linking trade operators with government agencies involved in the trade process and customs clearance.
DB2014	Mozambique	Mozambique made trading across borders easier by implementing an electronic single-window system.
DB2014	Mauritania	Mauritania made trading across borders easier by introducing a new riskbased inspection system with scanners.

DB year	Economy	Reform
DB2014	Rwanda	Rwanda made trading across borders easier by introducing an electronic single-window system at the border.
DB2014	Swaziland	Swaziland made trading across borders easier by streamlining the process for obtaining a certificate of origin.
DB2014	Chad	Chad made trading across borders more difficult by introducing a new export and import document.
DB2014	Togo	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	Benin	Benin reduced the time required to trade across borders by implementing an electronic single-window system integrating customs, control agencies, port authorities and other service providers at the Cotonou port.
DB2013	Botswana	In Botswana exporting and importing became faster thanks to the introduction of a scanner by the country's customs authority and an upgrade of South Africa's customs declaration system, both at the Kopfontein–Tlokweng border post.
DB2013	Burundi	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.
DB2013	Ghana	Ghana added to the time required to import by increasing its scanning of imports and changing its customs clearance system.
DB2013	Malawi	Trading across borders in Malawi became easier thanks to improvements in customs clearance procedures and transport links between the port of Beira in Mozambique and Blantyre.
DB2013	Niger	Niger reduced the time to import by expanding and optimizing the use of an electronic data interchange system for customs clearance.

DB year	Economy	Reform	
DB2013	South Africa	South Africa reduced the time and documents required to export and import through its ongoing customs modernization program.	
DB2013	Tanzania	Tanzania made importing more difficult by introducing a requirement to obtain a certificate of conformity before the imported goods are shipped.	
DB2012	Tanzania	Tanzania made trading across borders faster by implementing the Pre-Arrival Declaration (PAD) system and electronic submission of customs declaration.	
DB2012	Sierra Leone	Sierra Leone made trading across borders faster by implementing the Automated System for Customs Data (ASYCUDA).	
DB2012	Gambia, The	The Gambia made trading across borders faster by implementing the Automated System for Customs Data (ASYCUDA).	
DB2012	São Tomé and Príncipe	São Tomé and Príncipe made trading across borders faster by adopting legislative, administrative and technological improvements.	
DB2012	Senegal	Senegal made trading across borders less costly by opening the market for transport, which increased competition.	
DB2012	Seychelles	The Seychelles made trading across borders faster by introducing electronic submission of customs documents.	
DB2012	Liberia	Liberia made trading across borders faster by implementing online submission of customs forms and enhancing risk-based inspections.	
DB2011	Madagascar	Madagascar improved communication and coordination between customs and the terminal port operators through its single-window system (GASYNET), reducing both the time and the cost to export and import.	
DB2011	Kenya	Kenya speeded up trade by implementing an electronic cargo tracking system and linking this system to the Kenya Revenue Authority's electronic data interchange system for customs	

DB year	Economy	Reform	
		clearance.	
DB2011	Mali	Mali eliminated redundant inspections of imported goods, reducing the time for trading across borders.	
DB2011	Burkina Faso	Burkina Faso reduced documentation requirements for importers and exporters, making it easier to trade.	
DB2011	Ethiopia	Ethiopia made trading easier by addressing internal bureaucratic inefficiencies.	
DB2011	Angola	Angola reduced the time for trading across borders by making investments in port infrastructure and administration.	
DB2011	Rwanda	Rwanda reduced the number of trade documents required and enhanced its joint border management procedures with Uganda and other neighbors, leading to an improvement in the trade logistics environment.	
DB2011	Swaziland	Swaziland reduced the import time of trading across borders by implementing an electronic data interchange system for customs at its border posts.	
DB2011	Zambia	Zambia eased trade by implementing a one-stop border post with Zimbabwe, launching web-based submission of customs declarations and introducing scanning machines at border posts.	
DB2010	Uganda	Uganda reduced the time required for trading across borders through expanded operating hours at the port of Mombasa and improvements in customs processes and in border cooperation.	
DB2010	Sudan	Sudan reduced the time required for trading across borders by making it easier to file customs declarations online, by connecting 10 additional customs offices to the electronic system and by adding 2 new scanners at the port of Sudan.	
DB2010	Rwanda	Rwanda reduced the time required for trading across borders by introducing administrative changes such as expanded operating hours and enhanced border cooperation and by eliminating some documentation requirements.	

DB year	Economy	Reform	
DB2010	Sierra Leone	Sierra Leone made trading across borders more costly through an increase in some fees, though it also reduced the time required for trade.	
DB2010	Senegal	Senegal made trading across borders easier and less time consuming by introducing improvements at the container terminal at the port of Dakar and increasing the number of agencies involved in trade facilitation.	
DB2010	Benin	Benin reduced the time needed to clear goods through customs by implementing an electronic data interchange system.	
DB2010	Burkina Faso	Burkina Faso reduced the time needed for trading across borders by creating a one-stop shop for commercial trade documents.	
DB2010	Cameroon	Cameroon reduced the time for exporting and importing, and enhanced the security of goods transiting within the country, by improving the single-window system (Guichet Unique du Commerce Extérieur) at Douala port and implementing a GPS tracking system and scanners for cargo.	
DB2010	Congo, Dem. Rep.	In the Democratic Republic of Congo the participation of private companies in the terminal handling process at the port of Matadi has reduced cargo handling time by improving the quality of service.	
DB2010	Mauritius	Mauritius reduced the time for trading across borders by introducing electronic submission for customs declarations and bills of lading with no requirement for physical copies.	
DB2010	Mozambique	Mozambique reduced the time required to clear goods by introducing administrative improvements at customs.	
DB2010	Mali	Mali reduced the time required for trading across borders by implementing an electronic data interchange system, improving the terminals used by Malian traders and streamlining documentation requirements.	
DB2010	Liberia	Liberia reduced the time needed for trading across borders by creating a one-stop shop that brings together government	

DB year	Economy	Reform
		ministries and agencies and by streamlining the inspection process.
DB2010	Malawi	Malawi reduced delays in clearing goods by implementing a risk-based inspection system and a postdestination clearance program for preapproved traders.
DB2010	Angola	Angola made trading across borders easier through a customs improvement program that streamlined procedures and reduced the time and cost of trade.

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.

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)

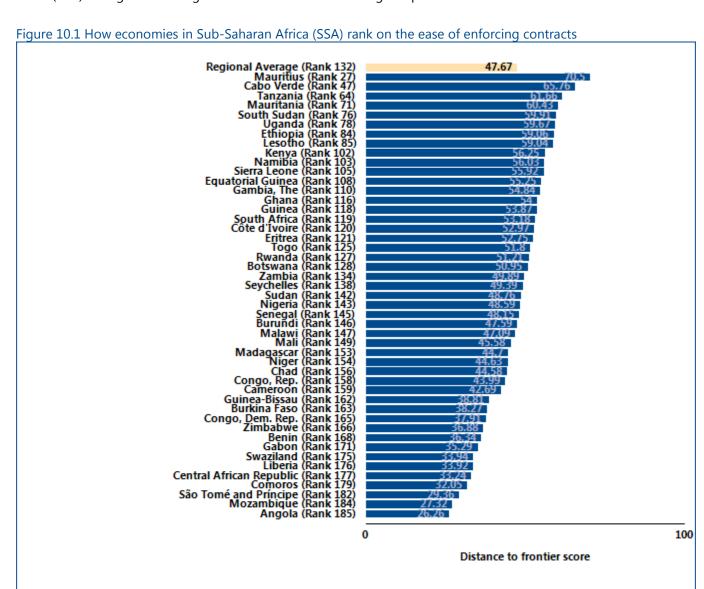
Alternative dispute resolution (0-3)

- 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.

Where do the region's economies stand today?

How efficient is the process of resolving a commercial dispute through the courts in economies in Sub-Saharan Africa (SSA)? 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.

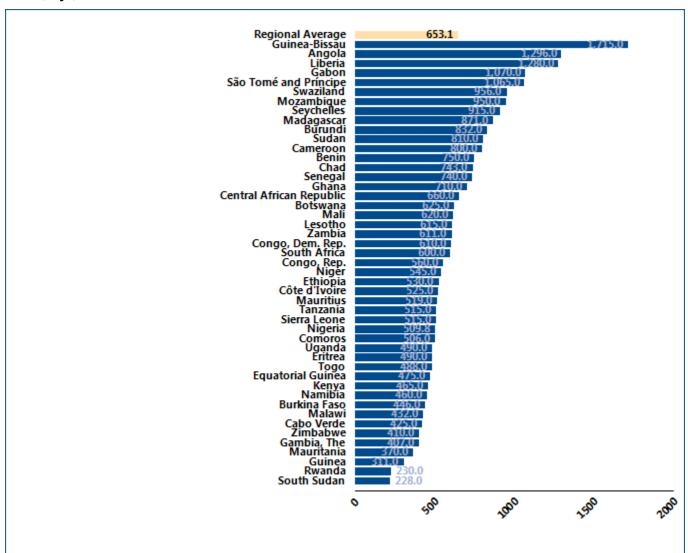


The indicators underlying the rankings may also be revealing. Data collected by *Doing Business* show what it takes to enforce a contract through the courts in each economy in the region: the time, the cost and quality of

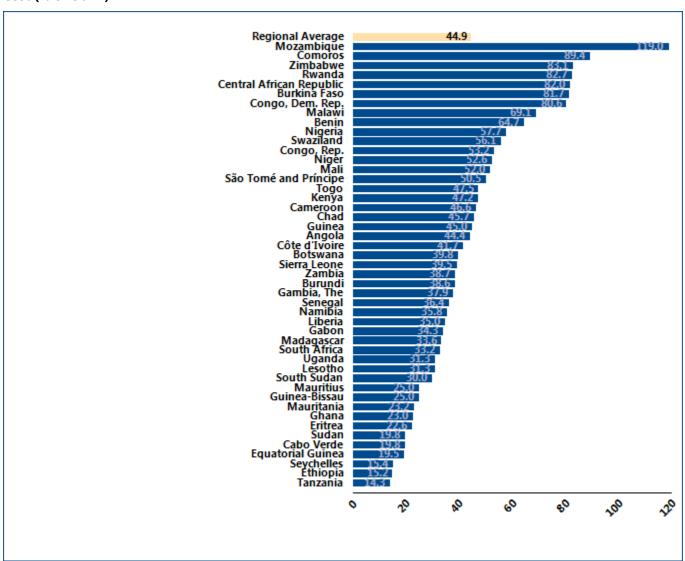
judicial processes index (figure 10.2). Comparing these indicators across the region and with averages both for the region and for comparator regions can provide useful insights.

Figure 10.2 What it takes to enforce a contract through the courts in economies in Sub-Saharan Africa (SSA)

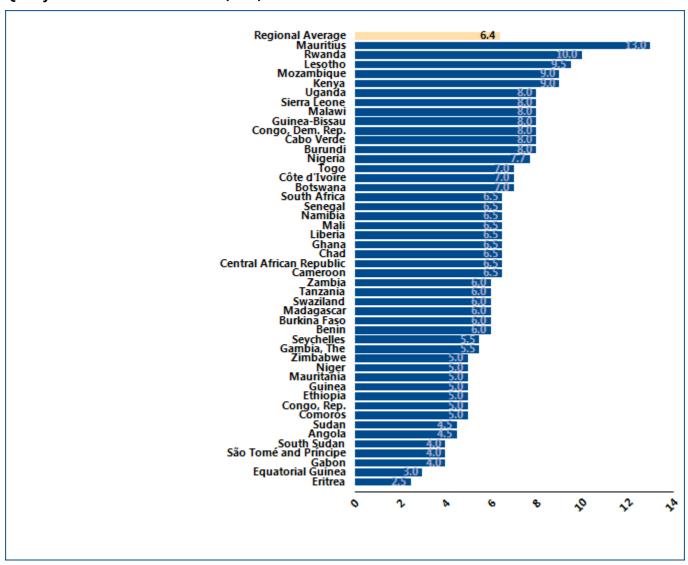
Time (days)



Cost (% of claim)



Quality of Judicial Processes Index (0-18)



Source: Doing Business database.

Note: Higher values indicate more efficient judicial processes.

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 Sub-Saharan Africa (SSA) (table 10.1)?

Table 10.1 How have economies in Sub-Saharan Africa (SSA) made enforcing contracts easier—or not?

By Doing Business report year DB2011 to DB2016

DB year	Economy	Reform	
DB2016	Côte d'Ivoire	Côte d'Ivoire made enforcing contracts easier by introducing new provisions on voluntary mediation.	
DB2016	Senegal	Senegal made enforcing contracts easier by introducing a law regulating voluntary mediation.	
DB2015	Benin	Benin made enforcing contracts easier by creating a commercial section within its court of first instance.	
DB2015	Mauritius	Mauritius made enforcing contracts easier by introducing an electronic filing system for court users.	
DB2015	Seychelles	Seychelles made enforcing contracts easier by establishing a commercial court, implementing and refining its case management system, introducing court-annexed mediation, and addressing scheduling conflicts within the courts.	
DB2015	South Africa	South Africa made enforcing contracts easier by amending the monetary jurisdiction of its lower courts and introducing voluntary mediation.	
DB2014	Côte d'Ivoire	Côte d'Ivoire made enforcing contracts easier by creating a specialized commercial court.	
DB2014	Mauritius	Mauritius made enforcing contracts easier by liberalizing the profession of court ushers, including by allowing registered ushers to serve as bailiffs in carrying out enforcement proceedings.	
DB2014	Togo	Togo made enforcing contracts easier by creating specialized commercial divisions within the court of first instance.	
DB2013	Benin	Benin made enforcing contracts easier by introducing a new code of civil, administrative and social procedures.	
DB2013	Cameroon	Cameroon made enforcing contracts easier by creating specialized commercial divisions within its courts of first	

DB year	Economy	Reform
		instance.
DB2013	Liberia	Liberia made enforcing contracts easier by creating a specialized commercial court.
DB2013	Rwanda	Rwanda made enforcing contracts easier by implementing an electronic filing system for initial complaints.
DB2012	Senegal	Senegal made enforcing contracts easier by launching specialized commercial chambers in the court.
DB2012	Seychelles	The Seychelles expanded the jurisdiction of the lower court, increasing the time required to enforce contracts.
DB2012	Sierra Leone	Sierra Leone made enforcing contracts easier by launching a fast-track commercial court.
DB2012	Kenya	Kenya introduced a case management system that will help increase the efficiency and cost-effectiveness of commercial dispute resolution.
DB2012	Lesotho	Lesotho made enforcing contracts easier by launching a specialized commercial court.
DB2011	Mauritius	Mauritius speeded up the resolution of commercial disputes by recruiting more judges and adding more courtrooms.
DB2011	Uganda	Uganda continues to improve the efficiency of its court system, greatly reducing the time to file and serve a claim.
DB2011	Zambia	Zambia improved contract enforcement by introducing an electronic case management system in the courts that provides electronic referencing of cases, a database of laws, real-time court reporting and public access to court records.
DB2011	Malawi	Malawi simplified the enforcement of contracts by raising the ceiling for commercial claims that can be brought to the magistrates court.
DB2011	Burkina Faso	Burkina Faso made enforcing contracts easier by setting up a specialized commercial court and abolishing the fee to register judicial decisions.
DB2011	Guinea-Bissau	Guinea-Bissau established a specialized commercial court, speeding up the enforcement of contracts.
DB2010	Ethiopia	Ethiopia made enforcing contracts easier by reducing delays in the courts—through backlog reduction, improved case management and internal training, and an expanded role for the enforcement judge.
DB2010	Mali	Mali improved its contract enforcement process through amendments to its civil procedure code introducing case time

DB year	Economy	Reform
		limits and allowing a summons to be served, with no intervention by the judge, upon the filing of the complaint at the competent court.
DB2010	Mauritius	Mauritius made enforcing contracts easier by setting up a specialized commercial division in its supreme court.
DB2010	Botswana	Botswana made resolution of commercial disputes more efficient by introducing case management and improving the use of information technology.
DB2010	Burkina Faso	Burkina Faso improved its contract enforcement system by reducing court fees and introducing alternative dispute mechanisms.

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.

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)

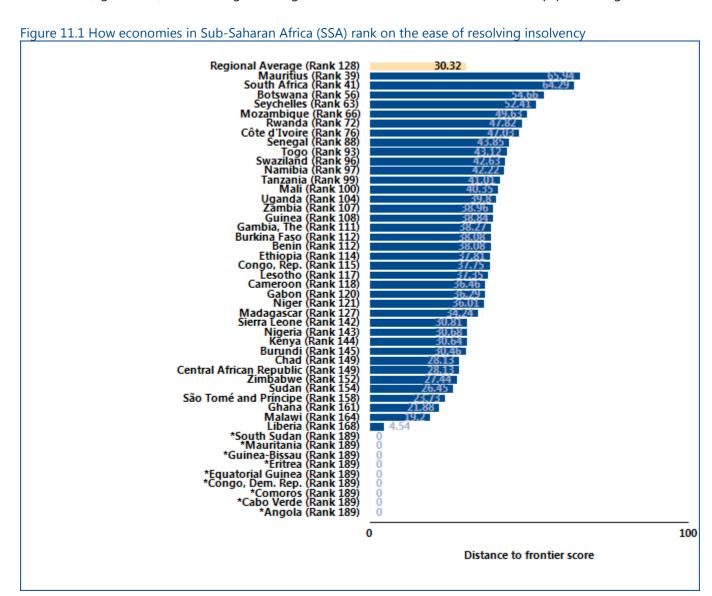
Management of debtor's assets index (0-6)

Reorganization proceedings index (0-3)

Creditor participation index (0-4)

Where do the region's economies stand today?

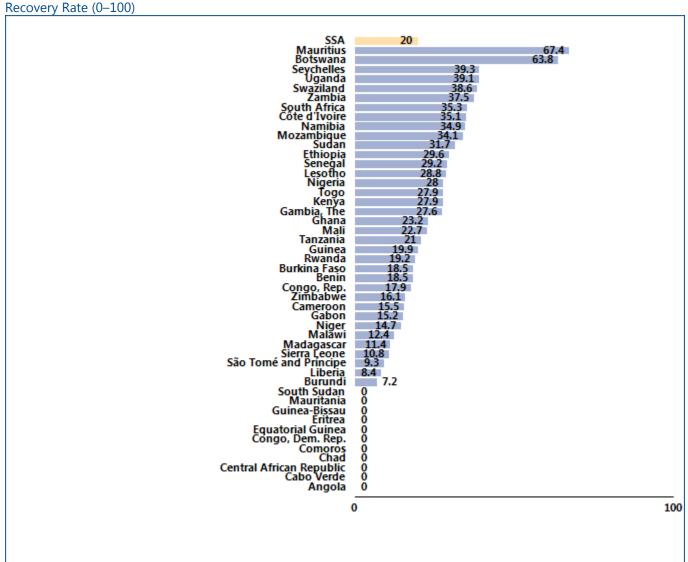
How efficient are insolvency proceedings in economies in Sub-Saharan Africa (SSA)? The global rankings of these economies on the ease of resolving insolvency suggest an answer (figure 11.1). The average ranking of the region and comparator regions provide a useful benchmark for assessing the efficiency of insolvency proceedings. Speed, low costs and continuation of viable businesses characterize the top-performing economies.



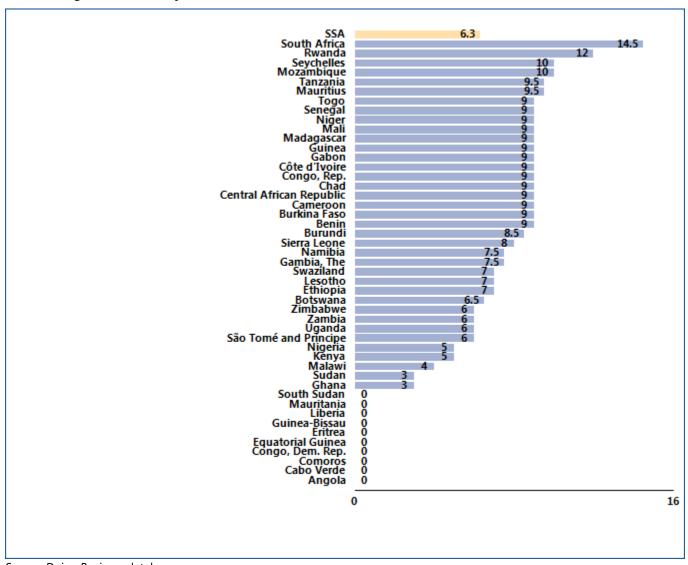
The indicators underlying the rankings may be more revealing. Data collected by *Doing Business* show the average recovery rate and the average strength of insolvency framework index (figure 11.2). Comparing

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 Sub-Saharan Africa (SSA)



Total Strength of Insolvency Framework index (0-16)



Source: Doing Business database.

Source: Doing Business database.

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

^{*} 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.

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 Sub-Saharan Africa (SSA) (table 11.1)?

Table 11.1 How have economies in Sub-Saharan Africa (SSA) made resolving insolvency easier—or not? By *Doing Business* report year DB2011 to DB2016

DB year	Economy	Reform
DB2016	Rwanda	Rwanda improved its insolvency system by introducing provisions on voidable transactions and the approval of reorganization plans and by establishing additional safeguards for creditors in reorganization proceedings.
DB2015	Mozambique	Mozambique made resolving insolvency easier by introducing a court-supervised reorganization procedure and a mechanism for prepackaged reorganizations, by clarifying rules on the appointment and qualifications of insolvency administrators and by strengthening creditors' rights.
DB2015	Seychelles	The Seychelles made resolving insolvency easier by introducing a reorganization procedure, provisions on the avoidance of undervalued transactions and the possibility to request post-commencement financing during the reorganization.
DB2015	Uganda	Uganda made resolving insolvency easier by consolidating all provisions related to corporate insolvency in one law, establishing provisions on the administration of companies (reorganization), clarifying standards on the professional qualifications of insolvency practitioners and introducing provisions allowing the avoidance of undervalued transactions.
DB2014	Mauritius	Mauritius made resolving insolvency easier by introducing guidelines for out-of-court restructuring and standardizing the process of registration, suspension and removal of insolvency practitioners.
DB2014	Rwanda	Rwanda made resolving insolvency easier through a new law clarifying the standards for beginning insolvency proceedings; preventing the separation of the debtor's assets during reorganization proceedings; setting clear time limits for the submission of a reorganization plan; and implementing an automatic stay of creditors' enforcement actions.

DB year	Economy	Reform	
DB2014	Tanzania	Tanzania made resolving insolvency easier through new rules clearly specifying the professional requirements and remuneration for insolvency practitioners, promoting reorganization proceedings and streamlining insolvency proceedings.	
DB2014	Congo, Dem. Rep.	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.	
DB2013	Uganda	Uganda strengthened its insolvency process by clarifying rules on the creation of mortgages, establishing the duties of mortgagors and mortgagees, defining priority rules, providing remedies for mortgagors and mortgagees and establishing the powers of receivers.	
DB2013	Zambia	Zambia strengthened its insolvency process by introducing further qualification requirements for receivers and liquidators and by establishing specific duties and remuneration rules for them.	
DB2012	Sierra Leone	Sierra Leone established a fast-track commercial court in an effort to expedite commercial cases, including insolvency proceedings.	
DB2012	South Africa	South Africa introduced a new reorganization process to facilitate the rehabilitation of financially distressed companies.	
DB2012	Malawi	Malawi adopted new rules providing clear procedural requirements and time frames for winding up a company.	
DB2012	Namibia	Namibia adopted a new company law that established clear procedures for liquidation.	
DB2012	Burundi	Burundi amended its commercial code to establish foreclosure procedures.	
DB2012	Cabo Verde	Cape Verde introduced qualification requirements for insolvency administrators and a shorter time frame for liquidation proceedings.	
DB2010	Malawi	Malawi enhanced its insolvency process through a new law limiting the liquidator's fees.	
DB2010	Rwanda	Rwanda improved its insolvency process through a new law aimed at streamlining reorganization procedures.	
DB2010	Sierra Leone	Sierra Leone improved its insolvency process through a new company act that encourages financially distressed	

DB year	Economy	Reform	
companies to first try to reorganize rather than ginto liquidation.		companies to first try to reorganize rather than going straight into liquidation.	
DB2010	Mauritius	Mauritius enhanced its insolvency system through a new law introducing a rehabilitation procedure for companies as an alternative to winding up, defining the rights and obligations of creditors and debtors and setting out sanctions for those who abuse the system.	

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.

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 (worst – y)/(worst – 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 (%)
Panaladach	Dhaka	78
Bangladesh	Chittagong	22
Brazil	São Paulo	61
Bidzii	Rio de Janeiro	39
China	Shanghai	55
Cilila	Beijing	45
India	Mumbai	47
Iliula	Delhi	53
Indonesia	Jakarta	78
indonesia	Surabaya	22
lanan	Tokyo	65
Japan	Osaka	35
Mexico	Mexico City	83
Iviexico	Monterrey	17
Nigoria	Lagos	77
Nigeria	Kano	23
Pakistan	Karachi	65
Fakistaii	Lahore	35
Russian Federation	Moscow	70
Russian rederation	St. Petersburg	30
United States	New York	60
Officed States	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, broadbased 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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Data benchmarking 189 economies to the frontier in regulatory practice and a distance to frontier calculator

http://www.doingbusiness.org/data/distance-to-frontier

Information on good practices

Showing where the many good practices identified by *Doing Business* have been adopted http://www.doingbusiness.org/data/good-practice 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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