

Doing Business in South Africa 2018





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Doing Business in South Africa 2018



Comparing Business Regulation for Domestic Firms in **9 Urban Areas and 4 Maritime Ports** with 189 Other Economies

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Doing Business in South Africa 2018

AT A GLANCE

The second subnational report of the Doing Business in South Africa series

Full report: www.doingbusiness.org/southafrica

Doing Business in South Africa 2018 focuses on business regulations and their enforcement across five Doing Business areas. It goes beyond Johannesburg to benchmark eight other South African urban areas across four regulatory areas. It also measures the process of trading across

borders through four of South Africa's maritime ports.

This report contains data current as of May 1, 2018 and includes comparisons with other economies based on data from *Doing Business* 2018: *Reforming to Create Jobs*.

Doing Business measures aspects of regulation that enable or hinder entrepreneurs in starting, operating or expanding a business—and provides recommendations and good practices for improving the business environment.

Five Doing Business indicator sets covering areas of local jurisdiction or practice



Dealing with construction permits

Records the procedures, time and cost required for a small or medium-size domestic business to obtain the approvals needed to build a commercial warehouse and connect it to water and sewerage; assesses the quality control and safety mechanisms in the construction permitting system.



Getting electricity

Records the procedures, time and cost required for a business to obtain a permanent commercial electricity connection for a standardized warehouse; assesses the reliability of the electricity supply and the transparency of tariffs.



Registering property

Records the procedures, time and cost required to transfer a property title from one domestic firm to another so that the buyer can use the property to expand its business, use it as collateral or, if necessary, sell it; assesses the quality of the land administration system; includes a gender dimension to account for any gender discriminatory practices.



Enforcing contracts

Records the time and cost for resolving a commercial dispute through a local first-instance court, which hears arguments on the merits of the case and appoints an expert to provide an opinion on the quality of the goods in dispute; assesses the existence of good practices in the court system.



Trading across borders

Records the time and cost (excluding tariffs) to import and export goods. Three sets of procedures are assessed—documentary compliance, border compliance and domestic transport—within the overall process of exporting and importing a shipment of goods.



Buffalo City (East London), Cape Town (Cape Town), Ekurhuleni (Germiston), eThekwini (Durban), Johannesburg (Johannesburg), Mangaung (Bloemfontein), Msunduzi (Pietermaritzburg), Nelson Mandela Bay (Port Elizabeth), Tshwane (Pretoria)

4 maritime ports Cape Town, Durban, Ngqura, Port Elizabeth

Advantages and limitations of the Doing Business methodology

Focus on the law and practice

Makes the indicators "actionable" because the law is what policy makers can change.

Use of standardized case scenarios

Enables comparability across locations, but reduces the scope of the data.

Reliance on expert respondents

Reflects knowledge of those with most experience.

Focus on domestic and formal sector

Keeps attention on the formal sector, where firms are most productive, but does not reflect the informal sector or foreign firms.

Doing Business does not cover:

- Security
- X Market size
- X Macroeconomic stability
- X State of the financial system
- Prevalence of bribery and corruption
- X Level of training and skills of the labor force

A collaboration of the World Bank Group (WBG) Global Indicators Group and the National Treasury of South Africa Cities Support Programme. Doing Business in South Africa 2018 was implemented as part of the WBG South Africa Urban Technical Assistance Program funded by the State Secretariat for Economic Affairs of Switzerland, SECO.

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Overview

MAIN FINDINGS

- This report—the second in the Doing Business in South Africa series—measures the same nine urban areas and four maritime ports covered in the 2015 study. It updates the data for the urban locations across four areas: dealing with construction permits, getting electricity, registering property and enforcing contracts. In so doing, it incorporates methodological enhancements designed to measure the quality of regulation. The study also applies the revised trading across borders methodology to the four maritime ports.
- Cape Town leads on two indicators and Mangaung on two others. However, none of the nine urban areas performs equally well across all indicators. That leaves room for all locations to learn from each other's good practices.
- Compared globally, South African locations' performance on the quality indices lags on most indicators. Because regulatory quality depends greatly on national instruments and actors, the central government can play a key role in improving local business conditions.
- Over the past three years, five locations implemented reforms making it easier to do business. Most reforms focused on getting electricity, with one related to registering property. The pace of reforms has been slow, but the successful reforms are notable for their significant impact.
- Good practices can be found in South Africa. As locations continue to engage in peer learning and take on new regulatory reforms, projects that address certain issues across indicators—such as internal coordination within the municipalities—will improve the prospect that reforms will bear fruit.

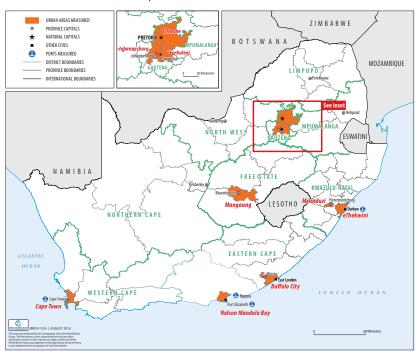
wave of optimism continues to wash across South Africa as the country benefits from renewed political stability and improved global economic conditions. Since the end of the commodity super-cycle and the severe drought between 2005 and 2006, inflation has remained low. The South African rand has also strengthened, and investor confidence improved after the recent change in government leadership.¹ Add to this an economy that is already globally positioned, sophisticated and diversified,² and the case for optimism is sound.

However, South Africa faces significant challenges if it is to turn this optimism into meaningful change. More than half of the population lives in poverty, while 6 million people are without jobs.³ South Africa is one of the most unequal countries in the world, where the top 1% of households own 70.9% of the wealth.⁴ While South Africa's growth rate has been revised upward, to 1.9% for 2018,⁵ it remains well below the level needed to tackle absolute poverty, unemployment and income inequality.

In addressing these challenges to growth, entrepreneurship can play a crucial role in creating jobs and tackling unemployment.⁶ South Africa's entrepreneurship levels are well below those found in many emerging markets. Moreover, government policies and bureaucracy—as they affect small and medium-size enterprises—are among the lowest-performing factors in an assessment of South Africa's entrepreneurship environment.⁷

Reforms to improve the regulatory environment for businesses have been slow to take hold in the last three years. Additionally, the potential for improvement has been limited by other changes making it more difficult to do business—such as national and local fee increases. Of the nine urban locations measured (figure 1.1), only five have recorded improvements and only in two regulatory areas assessed—with reforms centering on more efficient property transfers and electricity

FIGURE 1.1 The second *Doing Business in South Africa* study measures the same nine urban areas and four maritime ports as the first



connections and more reliable electricity supply. However, the locations that reformed show that significant improvement is within the reach of all locations. Where reforms have been implemented, results have been striking. Mangaung, for example, automated municipal processes and slashed the time to transfer property by more than half, from roughly seven and a half to three weeks, moving from lowest to best performer on the registering property indicator.

By highlighting good practices found within the country and benchmarking locations with others across the globe, *Doing Business in South Africa 2018* aims to inspire better regulatory practices to improve the experiences of small

businesses and encourage entrepreneurship (box 1.1). Ultimately, progress made on this front will help build a more prosperous and inclusive society.

WHAT ARE THE MAIN FINDINGS?

The results show that business regulations and their implementation vary across the locations, and no location does equally well across all areas measured. Six locations (Cape Town, eThekwini, Johannesburg, Mangaung, Msunduzi and Tshwane) make the top third of the ranking in two areas measured (table 1.1), yet they are also in the bottom third on at least one indicator. Buffalo City and Nelson

By highlighting good practices found within the country and benchmarking locations with others across the globe, Doing Business in South Africa 2018 aims to inspire better regulatory practices to improve the experiences of small businesses and encourage entrepreneurship.

BOX 1.1 What is Doing Business in South Africa 2018 and what does it measure?

Doing Business measures the regulatory business environment for small and medium-size enterprises. It assesses whether an economy has good rules and processes to yield positive outcomes for entrepreneurs and increased economic activity. Recognizing that governments play a vital role in bolstering private sector development, it promotes smart regulation. The key premise is simple: clear laws and regulations afford entrepreneurs the confidence and the opportunities to invest. Rules should be efficient, transparent, accessible and enforceable.

In the annual Doing Business assessment measuring 190 economies globally, Johannesburg represents South Africa as its largest business city. However, Johannesburg does not tell the full story. South Africa has 257 local governments.^a Entrepreneurs thus face different local regulations and practices depending on where they operate their business.

Doing Business in South Africa 2018, the second subnational Doing Business study for the country, helps tell the story beyond Johannesburg. It applies the Doing Business measurement to seven other metropolitan municipalities and the Msunduzi local municipality. This study updates the findings for these locations across four regulatory areas: dealing with construction permits, getting electricity, registering property and enforcing contracts. It also measures trading across borders through four of South Africa's maritime ports (Cape Town, Durban, Nggura and Port Elizabeth). These 13 locations are the same ones measured in the first study.

The indicators measure the complexity and cost of regulatory processes and the strength of legal institutions. These indicators were selected because they relate to regulatory areas that are governed locally or that depend on local implementation of national regulations. In South Africa local governments have almost exclusive competence in some areas—such as dealing with construction permits and getting electricity. Registering property, for its part, falls under a hybrid of national and local authority. Yet even in those areas where national regulation reigns—enforcing contracts and trading across borders—actions taken locally by a court or a port authority can determine the complexity and efficiency of the regulatory process.

Doing Business in South Africa 2018 also introduces some methodological changes (see figure). First, the four indicators applied across the nine urban locations now include indices designed to systematically capture aspects of regulatory quality. For example, in the getting electricity indicator, Doing Business now measures the reliability of electricity supply and the transparency

of tariffs through an index. These new components emphasize the importance of having the right kind of regulation.

Second, this report introduces the new Doing Business approach to measuring trade processes across the maritime ports assessed.^c The changes to the trading across borders indicator increase its policy and strategic relevance for each economy. For example, the new case study assumes that economies export their product of comparative advantage, instead of one of six preselected products under the former methodology. Because the indicator has been overhauled, this study creates a new baseline for the four South African seaports

measured.d

Changes to what the *Doing Business in South Africa* series measures

What the **Doing Business** in South Africa series continues to measure

What this

- Procedures, time and cost to complete all the formalities to build a warehouse and connect it to water and sewerage
- Procedures, time and cost to obtain a permanent electricity connection
- Procedures, time and cost to transfer a property
- Time and cost to resolve a commercial dispute

report adds and changes

Additions:

- Quality of building regulation and its implementation
- Reliability of electricity supply, transparency of tariffs and price of electricity
- Quality of the land administration system
- Quality of judicial processes

- Time and cost to export the product of comparative advantage and import auto parts

Note: See the chapter "About Doing Business and Doing Business in South Africa 2018" for more information on the additions and changes to the indicators. All indicator chapters also include a box on the corresponding methodological additions or changes.

a. This figure comes from the South African Local Government Association (https://www.salga.org.za/).

b. The seven other metropolitan municipalities are Buffalo City, Cape Town, Ekurhuleni, eThekwini, Mangaung, Nelson Mandela Bay and Tshwane.

c. The revised trading across borders methodology had been applied to the port of Durban since Doing Business 2016, as that port is measured annually as part of the global Doing Business trading across borders assessment.

d. World Bank. 2016. Doing Business 2016: Measuring Regulatory Quality and Efficiency. Washington, DC: World Bank. For more information on new quality indices and the trading across borders methodology, see the chapter "About Doing Business and Doing Business in South Africa 2018" and the indicator chapters.

TABLE 1.1 Doing Business in South Africa 2018—where is it easier?								
	Dealing with construction permits		Getting electricity		Registering property		Enforcing contracts	
Location	Distance to frontier score (0–100)	Ranking (1–9)						
Buffalo City (East London)	71.66	6	59.40	5	57.81	6	1 51.48	9
Cape Town (Cape Town)	75.48	1	1 79.81	1	54.69	7	54.71	7
Ekurhuleni (Germiston)	71.81	4	52.09	6	58.48	4	55.58	5
eThekwini (Durban)	73.65	2	1 69.40	2	54.58	8	55.74	4
Johannesburg (Johannesburg)	1 68.16	8	★ 68.77	3	59.68	2	54.10	8
Mangaung (Bloemfontein)	1 71.25	7	59.82	4	1 59.73	1	59.01	1
Msunduzi (Pietermaritzburg)	1 73.17	3	1 47.59	8	52.78	9	58.78	2
Nelson Mandela Bay (Port Elizabeth)	1 71.70	5	4 2.19	9	57.93	5	54.85	6
Tshwane (Pretoria)	★ 66.25	9	51.24	7	59.39	3	56.14	3

Note: Rankings are based on the distance to frontier score (DTF), which shows how far a location is from the best performance achieved by any economy on each *Doing Business* indicator. The score is normalized to range from 0 to 100, with 100 representing the frontier of best practices (the higher the score, the better). Arrows indicate an improvement in the DTF score between 2015 and 2018. For more information, see the chapter "About *Doing Business* and *Doing Business in South Africa 2018*" and the data notes.

Mandela Bay are in the middle of the ranking for three indicators and lag on the last. Meanwhile, Ekurhuleni is in the middle of the ranking across all indicators. Uneven performance across indicators points to opportunities for peer learning.

However, some top performers do stand out. Cape Town leads on two indicators—dealing with construction permits and getting electricity—and Mangaung on the other two, registering property and enforcing contracts.

In terms of the construction permitting process, Cape Town continues to lead because it is the fastest place to obtain construction approvals and is among the four most procedurally efficient locations.⁸ It is also at the top of the getting electricity ranking, followed by eThekwini in second place and Johannesburg in third. These are the only locations to score any points on the new quality measure for this indicator—the reliability of supply and transparency of tariffs index.⁹

Mangaung leads on registering property, narrowly outperforming Johannesburg and Tshwane. In these three locations, as in Ekurhuleni, it takes only seven steps to transfer property. Mangaung is also among the fastest locations, along with

Every location has something to share with its peers, and good practices can be found even in lower-performing locations. This means that top performers also have room to improve and learn.

Nelson Mandela Bay, Buffalo City and Johannesburg. And Mangaung keeps its first-place standing in enforcing contracts. It is where attorney fees are lowest for commercial litigation. Like Msunduzi, it also remains one of the places where contract enforcement takes just under 16 months—the fastest countrywide.

Every location has something to share with its peers, and good practices can be found even in lower-performing locations. This means that top performers also have room to improve and learn. For example, Tshwane brings up the rear on construction permitting. However, obtaining a construction approval there is less expensive than in Cape Town. Similarly, Buffalo City is in the middle of the ranking on getting electricity, yet it is the fastest place to obtain a connection. Requiring only 76 days to connect to the power grid, it is two weeks faster than the next fastest location, Cape Town.

A few additional observations complement the rankings. First, against a global

backdrop, South African locations' performance varies widely within each area measured. This is especially true for the two areas where municipalities have the most authority—dealing with construction permits and getting electricity. With some South African locations performing on par with OECD high-income economies and others lagging among the bottom 20% globally, there is a need to share and replicate local good practices (figure 1.2). This will not only improve individual locations' performance but will make the whole of South Africa more globally competitive.

The uneven performance among locations is best illustrated by the distance to frontier measure, which shows how far a location is from recorded global best practices—the "frontier." For example, in construction permitting, Cape Town and eThekwini's distance to frontier scores (75.48 and 73.65, respectively) place them among the top 25% of economies globally. Cape Town performs as well as Belgium and

FIGURE 1.2 Globally, South African locations' performance is most widely dispersed on dealing with construction permits and getting electricity—highlighting the need to replicate local good practices





Note: The distance to frontier score (DTF) for each indicator shows how far a location is from the best performance achieved by any economy on each *Doing Business* indicator. The score is normalized to range from 0 to 100, with 100 representing the frontier of best practices (the higher the score, the better). For more details, see the chapter "About Doing Business and Doing Business in South Africa 2018." The OECD averages are based on economy-level data for the 33 OECD high-income economies. The BRIC averages are based on economy-level data for Brazil, the Russian Federation, India and China.

outperforms the average for OECD high-income economies. Conversely, Tshwane's score places it in the bottom half of global economies, behind Eswatini and just ahead of Namibia. This gap is mostly because of differences in procedural complexity and the time to obtain approval of a building plan. Municipalities with fewer preconstruction approvals and better internal coordination among the relevant departments perform better.

The gap is even wider for getting electricity. Nearly 40 percentage points separate the top and lowest performers' distance to frontier scores. This puts them worlds apart. In the global distribution of 190 Doing Business economies, Cape Town would rank 60th and Nelson Mandela Bay would be 107 places below it. Performance is widely varied across all components of this indicator. For instance, while it takes two and a half months to connect to the

grid in Buffalo City, it takes nearly four months longer in Nelson Mandela Bay. The South African average performance (58.92 points) is equally telling. It places the country among the 40% of lowest performers globally. This is largely because over half of the country's nine urban locations do not monitor electrical outages using internationally recognized methodologies.

Differences in performance are not as large in the indicators on registering property, enforcing contracts and trading across borders. However, there are still good practices to be found in these areas across South African locations. These are also the indicators for which locations are collectively furthest from global best practices—mostly because of relatively high costs and lower scores on the quality indices for registering property and enforcing contracts. In these regulatory areas in particular, adopting global good

practices is also key to increasing South Africa's overall competitiveness.

A second observation on the rankings: the quality of regulation has a strong national component and is an area of potential improvement for South Africa. Locations perform uniformly on the quality indices for registering property and enforcing contracts, which are managed by national departments. Even in those areas where municipalities tend to have greater authority, national regulation plays a large role. For example, the national building code has significant influence over local regulatory quality for dealing with construction permits. South Africa's average performance lags behind that of the BRIC economies (Brazil, the Russian Federation, India and China) and OECD high-income economies for all the quality indices, save for dealing with construction permits (figure 1.3). Because the instruments that determine

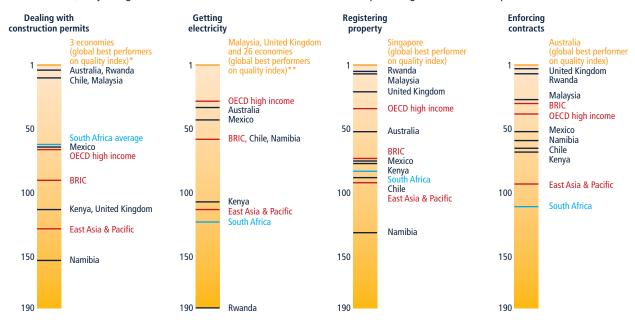


FIGURE 1.3 Quality of regulation: South African locations trail in all areas except dealing with construction permits

Note: The figure illustrates sample rankings among 190 Doing Business economies. Rankings are based on the distance to frontier score (DTF), which shows how far a location is from the best performance achieved by any economy on each Doing Business indicator. The score is normalized to range from 0 to 100, with 100 representing the frontier of best practices (the higher the score, the better). For more information, see the chapter "About Doing Business and Doing Business in South Africa 2018" and the data notes. In this figure, the ranking is determined by sorting the DTF scores for the corresponding indicator's quality index. The OECD averages are based on economy-level data for the 33 OECD high-income economies. The East Asia & Pacific averages are based on economy-level data for Brazil, Russia, India and China.

regulatory quality are largely national, this also points to the key role national departments can play in improving the local business environment and helping South African locations converge with international best practices.

Third, a close look at the efficiency metrics reveals that South Africa is relatively competitive in terms of time across three indicators, and the main challenges are in streamlining processes and reducing costs. More specifically, the South African average either outperforms or performs close to the average for OECD high-income economies on the time it takes to obtain construction approvals, transfer property and enforce contracts (figure 1.4). In some cases, the best performance in South Africa is among the best globally. For instance, the 88 days to obtain building plan approvals places Cape Town among the 30 fastest global economies on this indicator. However, the time to get an electricity connection remains a constraint, linked to the number of time-consuming inspections required. On average, South African businesses wait one month longer for a permanent electricity connection than their counterparts in the BRIC economies.

Procedural complexity and the cost to complete regulatory processes are generally still obstacles for South African entrepreneurs, across indicators. For example, South Africa's average performance on transferring property—eight steps costing 7.6% of the property value—puts it among the 40 most procedurally complex and 44 most expensive economies globally.

Beyond the four regulatory areas measured across the nine urban locations, maritime trade is an equally important development

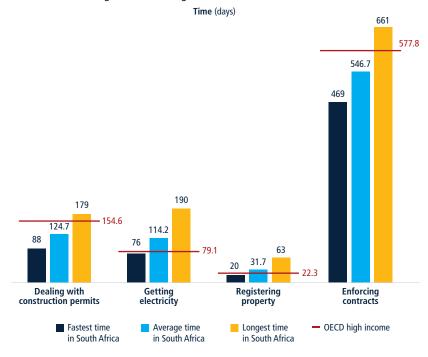
vehicle for South Africa. It represents the vast majority of the country's exports, and South Africa's ports form a major corridor for regional trade.10 Yet compared globally, the time needed to comply with port and documentary requirements remains a key barrier for traders across all four ports assessed. South Africa's border compliance costs for exports are also comparatively high across the ports and more expensive than the average for OECD high-income economies that export by sea (figure 1.5). This is because customs clearance fees and port handling costs are high on a global scale. Durban, the country's largest port in terms of volume handled, is its slowest and most expensive. South Africa's efforts continue to focus on upgrading port infrastructure and moving toward electronic transaction systems across agencies involved in the trade value chain.

^{*}These are Luxembourg, New Zealand and the United Arab Emirates.

^{**}These are Belarus; Belgium; Costa Rica; Cyprus; Czech Republic; Estonia; Finland; France; Germany; Hong Kong SAR, China; Ireland; Japan; Kazakhstan; Republic of Korea; Lithuania; the Netherlands; Panama; Portugal; Russia; the Slovak Republic; Slovenia; Spain; Sweden; Taiwan, China; the United Arab Emirates; and Uzbekistan.

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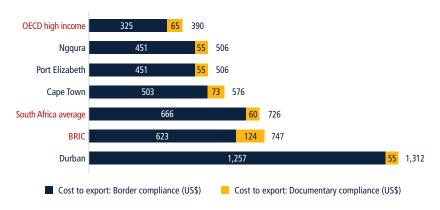
FIGURE 1.4 In three areas measured, average times in South Africa are better than or close to the OECD high-income average



Source: Doing Business database.

Note: The OECD averages are based on economy-level data for the 33 OECD high-income economies.

FIGURE 1.5 On average, exporting through South African ports is nearly twice as expensive as through OECD high-income economies that export by sea



Source: Doing Business database.

Note: The OECD averages are based on economy-level data for the 13 OECD high-income economies that export by sea. The BRIC averages are based on economy-level data for Brazil, Russia, India and China, all which export by sea.

WHAT HAS CHANGED?

Following the first *Doing Business in South Africa* study in 2015, the South African locations assessed set out on a journey to implement reforms aimed at improving service delivery and the quality of regulation. South Africa created a dedicated program to support local governments' reform efforts, emulating the practices of economies like Mexico and Colombia (box 1.2).¹¹

Over the last three years, five of the nine urban locations measured each introduced one reform. The pace of reforms is undoubtedly slow, but the improvements recorded are noteworthy for their impact. Cape Town, eThekwini, Johannesburg and Nelson Mandela Bay have implemented reforms in getting electricity, while Mangaung made improvements in registering property (table 1.2).

Most reforms focused on getting electricity. In 2018 Cape Town, eThekwini and Johannesburg became South African pioneers in calculating the number and frequency of electrical outages using two methodologies: the system average interruption duration index (SAIDI) and the system average interruption frequency index (SAIFI). Replicating this international good practice, they joined more than 120 Doing Business economies that calculate these critical inputs for monitoring and improving the quality of electricity supply. This improvement has enabled the three locations to score points on the reliability of supply and transparency of tariffs index and improve their overall performance on the getting electricity indicator. They are now collectively at the top of the ranking for this indicator.

Beyond the quality of regulation, Cape Town also improved process efficiency and reduced costs to obtain an electricity connection. It streamlined internal processes for issuance of budget quotes for connection works, slashing the time by nearly a week. It also exempted first-time

BOX 1.2 The Cities Support Programme—advancing reforms at the subnational level

Housed in the South African National Treasury, the Cities Support Programme (CSP) has been one of the main champions of local-level regulatory reform in South Africa. It is founded on the premise that good governance, coupled with sound policy action, can yield economic growth and reduce poverty and inequality.^a The CSP provides support to cities along five main themes essential to the overarching goal of achieving inclusive growth.^b Within the theme of economic development support, the CSP aims to promote local decision-making aimed at bolstering private sector development, increasing formal business activity and harnessing job creation.

To carry forward this agenda, the CSP works closely with the municipalities. Beyond the CSP's central coordination team, each municipality also has a "CSP city lead" who works directly with municipal coordinators and focal points—located in the corresponding municipality's planning or economic development department. This organizational structure allows the CSP to draw both municipal executives and technical staff into the reform process.

The CSP's support takes four main forms: monitoring progress, fostering accountability, providing technical assistance and facilitating peer learning. South Africa's subnational *Doing Business* studies have been requested and conducted in the context of the CSP's monitoring role. The CSP used the *Doing Business in South Africa 2015* report to advance the conversation around regulatory reform at the local level. Following the first assessment, the report served as input to help relevant municipalities design action plans for reform.^c The CSP continues to monitor implementation of these action plans on a quarterly basis. Progress is reported at City Budget Forum meetings, to promote accountability.

In 2016 the CSP also organized three peer-learning events so that locations could share good practices related to specific regulatory areas.^d This opened the door for municipalities to start engaging each other directly in the context of peer learning. For example, Buffalo City, Nelson Mandela Bay and eThekwini engaged with Cape Town about its electronic building plan approval system. Nelson Mandela Bay also sought information from Johannesburg and Tshwane about their building plan approval processes. Representatives of eThekwini and Msunduzi met to discuss implementing management software for building plan approvals and georeferencing drone-captured imagery.

The CSP also facilitates technical assistance to the municipalities. For example, in collaboration with the World Bank's Urban Technical Assistance Program, it helped Cape Town, eThekwini and Johannesburg develop capacity to monitor the reliability of electricity supply using internationally recognized methodologies—leading to some of the major improvements recognized in this report.

South Africa is not alone in adopting this approach. In Colombia and Mexico—which respectively have conducted four and six rounds of subnational *Doing Business* benchmarking exercises—a national government body supports local reform activity. In Colombia the National Planning Department (DNP)^e has taken this charge since 2008. It has helped states map regulatory processes, identify bottlenecks and exchange good practices. Mexico has a dedicated National Commission for Regulatory Reform (CONAMER) which does the same.^f

The Colombian and Mexican examples show that having a reform champion adds value. The facilitating agencies have an overview of each location's needs and can respond with the appropriate technical assistance and create meaningful avenues for locations to exchange good practices. For example, in Mexico *Doing Business* has recorded 257 reforms across 32 states in just over a decade. Moreover, it found that states that engaged most in peer learning improved the most. Similarly, Colombia has recorded 158 regulatory reforms over four rounds of benchmarking, with peer learning increasing over time.

After just the first study, South Africa has documented regulatory reforms across five locations. Colombia and Mexico's experience using a similar model indicates that even broader success may be possible over time. However, as seen in both Colombia and Mexico, the linchpin of long-term success is coordination among all levels of government and the political will to drive the regulatory reform agenda.

a. See the Cities Support Programme website at https://csp.treasury.gov.za/Programmes/Pages/default.aspx.

b. The thematic areas are core city governance, human settlement, public transport, economic development and climate resilience.

c. In the context of the subnational *Doing Business* study, the CSP's work has focused primarily on those areas where the municipalities have direct authority: dealing with construction permits, getting electricity and registering property.

d. For more information about the peer learning events, see the Cities Support Programme 2016/17 Annual Report. Available at https://csp.treasury.gov.za/Pages/default.aspx.

e. Departamento Nacional de Planeación. Available at https://www.dnp.gov.co/DNPN/Paginas/default.aspx.

f. Comisión Nacional de Mejora Regulatoria (CONAMER, formerly COFEMER). Available at https://www.gob.mx/conamer.

TABLE 1.2 Who has made it easier to do business since 2015?

Location Getting electricity Registering property

Cape Town (Cape Town) ✓

eThekwini (Durban) ✓

Johannesburg (Johannesburg) ✓

Mangaung (Bloemfontein) ✓

Nelson Mandela Bay (Port Elizabeth) ✓

Note: Any data update that leads to a change of 2% or more on the relative distance to frontier gap or a change in the quality index score beyond certain defined thresholds is classified as a reform. If a location implemented both improvements and changes making it more difficult to do business, only reforms with an ent positive impact are displayed in this table. The relevant indicator chapters include tables showing all changes, positive and negative. For more information on how reforms are documented for each indicator, see the data notes.

The pace of reforms is undoubtedly slow, but the improvements recorded are noteworthy for their impact.

applicants from the application fee for an electricity connection. Yet the most notable reform improving process efficiency in getting electricity was in Nelson Mandela Bay. It cut the time to obtain a connection by over five months. Emerging from labor strikes in 2015, the municipality improved staff retention, enabling it to better manage its workload. Moreover, it created a strategic planning team—the Getting Electricity Improvement Teamwith the specific mission of monitoring and improving service delivery. It also delegated connection works to external service providers and procured construction materials for these projects. Despite still ranking last among South African locations, Nelson Mandela Bay has made strides forward on the getting electricity indicator. Its distance to frontier score improved by 6.50 percentage pointsfrom 35.69 to 42.19 points.

Like Nelson Mandela Bay, Mangaung ranked lowest on an indicator in 2015 but has achieved remarkable improvements in regulatory efficiency and converged with domestic best practices. Mangaung simplified the process to obtain a municipal rates clearance certificate needed to register property. Previously, obtaining the certificate required separate interactions with the electricity utility (Centlec) and the municipality. In 2015 the municipality launched an electronic financial management system and e-application process

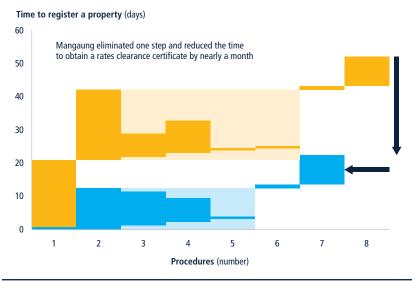
for rates clearance certificates. In so doing, it improved its internal coordination with Centlec by integrating the utility into its new electronic platform. This eliminated the need for conveyancers to have a separate interaction with Centlec, removing one step in the process of obtaining a rates clearance certificate. Moreover, the automation of back- and front-office functions improved overall efficiency. Conveyancers now apply online and receive rates clearance certificates from the comfort of their office. Consequently, the time to obtain a rates clearance certificate was

cut by a month (figure 1.6). This brings Mangaung-formerly the sole location to require a separate interaction with the electricity utility—in line with other municipalities. Increased transparency across South Africa's local deeds offices also contributed to better conditions for registering property in Mangaung. Deeds offices now display their service commitment charter, stating time limits for registering deeds, on a public board at the agency. Taken together, these local and national factors have reformed the process of registering property, propelling Mangaung from last to first place on this indicator.

No major improvements were documented for dealing with construction permits and enforcing contracts. This signals the need to continue improving the efficiency of municipal procedures and local courts, as well as the quality of building regulations and judicial processes.

Some changes also made it more difficult for entrepreneurs to do business. In two areas—dealing with construction permits and registering property—fee increases hampered reform efforts. For dealing with construction permits, all municipalities

FIGURE 1.6 Automation and internal coordination helped Mangaung speed up the issuance of rates clearance certificates



Source: Doing Business database.

raised construction approval fees. In Buffalo City, Cape Town and eThekwini the magnitude of local tariff increases made business conditions worse. For example, in Cape Town and Buffalo City building plan approval fees went up by nearly two-thirds over the past three years, far exceeding the rate of inflation for the same period. For registering property, fee increases at the national level-most notably the transfer duty, but also conveyancing and registration fees-made property transfers costlier. Consequently, global Doing Business, which measures Johannesburg annually. recorded an increase in the transfer duty as a change making it more difficult to transfer property in South Africa in Doing Business 2017.

Besides fee increases, other factors made it more difficult to obtain construction approvals, register property and connect to electricity. As of 2016 Cape Town requires the approval of integrated waste plans to obtain construction approvals. This adds a preconstruction procedure to the process. In eThekwini and Msunduzi challenges in implementing the new electronic revenue management systems and lack of staff capacity in both locations have caused delays to obtain a rates clearance certificate needed for property transfers. This led to an increase in the time to transfer property by nearly three weeks in both locations. Similarly, in Mangaung getting electricity has become more difficult because of limited staff capacity. As a result, the time it takes for the utility to issue a connection fee estimate has doubled—increasing total time to obtain a connection to the grid from two and a half to three and a half months.

THE WAY FORWARD

In the context of budding growth in South Africa, the second *Doing Business* in South Africa study is timely. It can contribute to the discourse on how South Africa might tackle one of its biggest challenges—job creation—as a means of

The obstacles firms face extend beyond mere process efficiency. Businesses also depend on good quality regulations to protect their interests.

ensuring better resilience and continued growth.¹² More specifically, the report provides insight into which regulations and practices are conducive to business creation within the South African context. As a follow-on to the first study, this report informs policy makers about which reforms have been successful and where constraints persist.

Although some locations have advanced toward best practices, there is still significant room for improvement across the country (table 1.3). Overall, while locations should continue streamlining regulatory processes, they must also start improving the quality of regulation. Moreover, advancement hinges on national and local policy makers' ability to address some cross-cutting issues.

As a first order of business, local authorities should increase coordination to streamline service delivery for businesses. Across nearly all indicators, there is evidence that authorities' lack of internal coordination makes processes more burdensome for entrepreneurs. For example, in four urban locations—Johannesburg, Mangaung, Nelson Mandela Bay and Tshwane—people applying for construction approvals are responsible for circulating their application to the various departments involved in the preconstruction approval process. In other locations, however, the application is circulated internally, streamlining the process. Similarly, at local ports a lack of coordination between government agencies can result in redundant processes. For example, the South African Revenue Service and Border Police sometimes investigate the same consignment several times, at various stages of the logistics chain. This adds three days on average to maritime import and export processes. Locations need not look far to see the potential benefits of better internal coordination

and how it can be achieved. Mangaung's property registration reform is a prime example: the municipality facilitated coordination with the electricity utility through automation, creating a one-stop shop experience for clients.

Second, while municipalities still have significant room for improving on their own, collaboration with the national government would increase the range of areas improved. The obstacles firms face extend beyond mere process efficiency. Businesses also depend on good quality regulations to protect their interests. Because the quality of business regulation affects local entrepreneurs but is mostly beyond the purview of local government action, there is a need for better collaboration between the levels of government. Drawing national departments into the conversation on local improvements would allow national decision makers to better understand local needs and implement changes improving conditions across the country. For example, adopting legislation to address who bears responsibility for postconstruction latent defects and mandating liability insurance to cover losses would be a step toward greater protections for local entrepreneurs. However, this improvement depends on national legislative action.

Similarly, local entrepreneurs require reliable electricity supply for their daily operations. Systematic monitoring of outages would provide utilities the information they need to undertake remedial actions to improve the quality of supply. Cape Town, eThekwini and Johannesburg have led by example, as they recently started monitoring outages using the internationally recognized SAIDI and SAIFI methodologies, which focus on the impacts of outages on individual users. Yet the authority to require all local utilities to use this monitoring method rests

TABLE 1.3 Summary recommendations to improve the ease of doing	g business across South Africa
Suggested reforms	Relevant departments, agencies and other stakeholders
Dealing with construction permits	
 Consider differentiating projects by risk and introducing risk-based inspections Increase efficiency by improving coordination, consolidating procedures and implementing electronic platforms Introduce stringent liability and insurance regimes for latent defects* Involve private-sector professionals in the construction permitting process 	Local Land use management/town planning department Building control department Building inspections department Roads and stormwater department Local Utility providers Fire department Health department Solid waste department
	National
Getting electricity	
 Monitor and improve the reliability of supply* Streamline the wayleave and excavation permit systems Identify bottlenecks in the internal process to reduce time* Make the cost and process of getting electricity more transparent to the customer Upgrade geographic information system to eliminate external site inspection Reduce the burden of the security deposit 	Local • Municipal distribution utilities National • National Energy Regulator of South Africa (NERSA) • Eskom • Department of Energy
Registering property	
 Streamline issuance of rates clearance certificates Improve coordination among stakeholders and consider implementing a one-stop shop for property registration Reinforce transparency in the land administration system* Strengthen protections and resolution mechanisms for land-related issues and disputes* Expand geographic coverage* 	Local • Municipalities • Local deeds offices • Local surveyor-general's offices National • Office of the Chief Registrar of Deeds • Office of the Chief Surveyor-General • Department of Rural Development and Land Reform • Department of Justice** Private sector • Conveyancers
Enforcing contracts	
 Study magistrates' court caseloads to identify and eliminate causes of trial delay and consider limiting the frequency and causes of adjournments Assess judicial capacity and resources needed to enhance case management and make it effective, especially in lower courts* Consider introducing specialized commercial courts or commercial sections in locations where needed 	Local • Magistrates' courts National • Office of the Chief Justice • Department of Justice**
Trading across borders	
 Further reduce and streamline documentary requirements and increase the use of electronic transaction systems Increase coordination of different agencies with a view to streamlining procedures* Introduce an electronic single window for trade Promote regional integration through the effective implementation of border cooperation agreements Upgrade trade logistics infrastructure* 	Local Chamber of commerce and industry National Department of Trade and Industry South African Revenue Service (SARS) Transnet National Ports Authority (TNPA) Transnet Port Terminals (TPT) International Trade Administration Commission of South Africa (ITAC) Ports Regulator of South Africa (PRSA) Perishable Products Export Control Board (PPECB) Department of Agriculture, Forestry and Fisheries (DAFF) South African Police Service (SAPS) National Regulator for Compulsory Specifications (NRCS) Private sector Clearing and freight forwarding agencies Carriers (shipping/rail lines, trucking companies)

^{**} For the purpose of this study, the Department of Justice and Correctional Services is referred to as the Department of Justice.

Municipalities and national departments can work together to achieve more holistic and comprehensive improvements across all locations.

with the National Energy Regulator of South Africa. The two levels of government can work together to achieve more holistic and comprehensive improvements across all locations.

Third, municipalities argue that a lack of resources, specifically staff resources, has constrained their ability to improve service delivery. Authorities could conduct a study of how to better streamline processes to use existing resources more efficiently. Process mapping could subsequently help them determine if resources should be redistributed or added. For instance, Tshwane-where obtaining construction approvals is most cumbersome—does not have sufficient plan examiners to efficiently process its volume of construction applications. Similarly, in Mangaung the limited number of technical experts is one of the major factors fueling the twofold increase in the time to obtain a budget quotation for electricity connection works. And eThekwini faces a similar adversity. As of May 2018 it had nine staff vacancies in the department that processes rates clearance certificate applications-it is the second slowest place to obtain this type of certificate.¹³ Msunduzi's staffing gap is perhaps the best example of how a lack of resources can erode potential success. The municipality introduced a new platform to manage construction approvals, but due to staff departures and retirements, the human resources needed to translate this into an increase in efficiency are lacking. This also suggests that there is a need for municipalities to identify reasons for staff attrition and explore avenues to improve retention.

Lastly, municipalities should ensure the implementation process is properly executed for improvement efforts to produce real results. Authorities should consider making the intended users part of the implementation process and publicizing reforms. Since 2015 many locations have worked toward multiyear reforms like process automation. For example, Johannesburg developed an option for conveyancers to apply for rates clearance certificates electronically. The e-application is connected to the municipality's SAP software platform and aims to streamline processing time. The municipality has also made it cheaper to apply electronically than manually. However, manual application is still more commonly used, as many conveyancers are unaware of the electronic option. This points to the need to raise awareness among the community of prospective users for such reforms to succeed. Mangaung illustrates how drawing beneficiaries into the process can yield intended outcomes. It was successful in implementing an e-application reform like Johannesburg's, and part of its strategy involved biannual meetings with stakeholders-including conveyancers-to understand their concerns and keep them apprised of upcoming improvements.

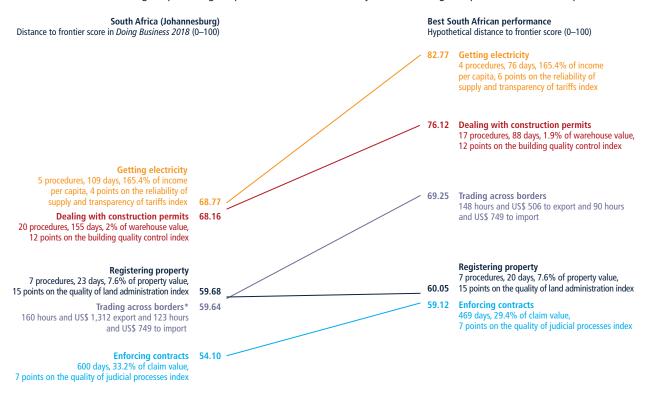
Staff training is also important for proper implementation, especially where electronic platforms are involved. Efforts by eThekwini and Msunduzi to improve service delivery through their new revenue management system are hampered by a lack of staff training and recurring technical glitches. These two factors have prevented optimal use of the new platforms. To reap the benefits of going electronic, municipalities must ensure their staff are well trained and systems are backed with proper technical support. Moreover, during the rollout of electronic platforms, municipalities need a contingency plan to avert loss of efficiency. For instance, when eThekwini introduced its new revenue management system, staff could

not issue rates clearance certificates during the data migration period, which lasted about a month. This caused the backlogs the municipality is still striving to overcome.

Addressing these cross-cutting issues will improve the prospects for attempted reforms to bear fruit. The good news is that as locations prepare to tackle more reforms, they can find good practices to emulate from neighbors that share their development context and history. Combining the subnational practices found in the country reveals the potential for improvement. If Johannesburg, which represents South Africa in the annual Doing Business assessment, adopted all the good practices found in the country, its performance would improve dramatically (figure 1.7). All indicator areas would benefit, but the potential for improvement is greatest in getting electricity. If Johannesburg were to streamline the process of obtaining a connection—to four procedures (as in Cape Town and Mangaung) taking 76 days (as in Buffalo City)—and score 6 points on the reliability of supply and transparency of tariffs index (as in Cape Town), it would narrow its distance to the frontier of best practices by 14.00 percentage points-equivalent to moving up 55 places in the global ranking for this indicator. Moreover, if Johannesburg adopted South African good practices across all five indicators, its overall distance to frontier score—across all Doing Business indicators—would improve by 3.72 percentage points, and it would gain ground on the global ranking of economies by 24 places.

South African locations are already engaging in peer learning, facilitated by the Cities Support Programme and also on their own initiative. The way forward is to redouble these efforts and maximize opportunities to share good practices. Municipalities can also learn from each other's reform experiences. Most of the improvements so far have been driven by the municipalities, and successful

FIGURE 1.7 If Johannesburg adopted the good practices found in the country, South Africa's global performance would improve



Note: The distance to frontier score shows how far a location is from the best performance achieved by any economy on each *Doing Business* indicator. The measure is normalized to range from 0 to 100, with 100 representing the frontier of best practices (the higher the score, the better). For more information, see the chapter "About *Doing Business* and *Doing Business in South Africa 2018*" and the data notes.

*The port of Durban represents South Africa in the global Doing Business assessment, as the entry and exit port for Johannesburg.

reforms generally occurred within their areas of competence. Additionally, reforms were successful where they were supported by effective local leadership, strong coordination among municipal departments and sufficient capacity to ensure proper implementation. Yet as local authorities continue to reform, collaboration with national departments will help them achieve broader and deeper local improvements.

South Africa finds itself at a crossroads. Amid renewed optimism in its economy, the country must find ways to sustain growth and ensure it is inclusive. ¹⁴ In the latest State of the Nation Address, the South African president noted that small businesses are the key to sustained economic growth. He vowed to work with social partners "to build a small business support ecosystem that assists,

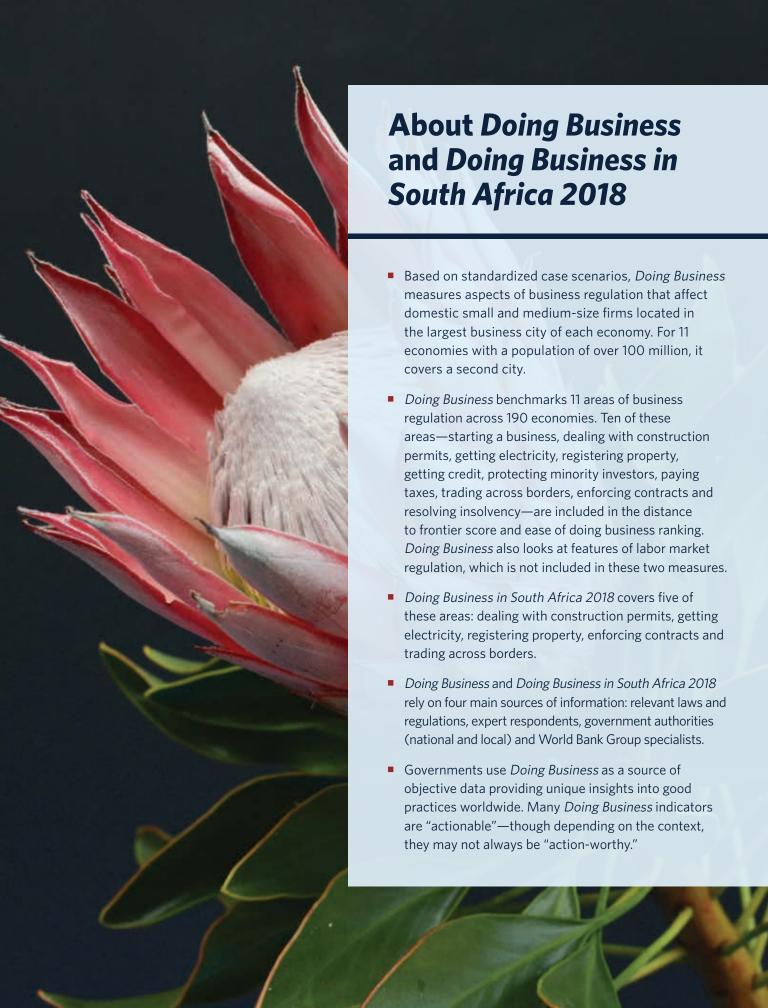
nourishes and promotes entrepreneurs" and to "reduce the regulatory barriers for small businesses." The country must seize on this momentum to drive the regulatory reform effort, in support of its national development goal of attaining full employment by 2030.16

NOTES

- World Bank. 2018. South Africa Economic Update: Jobs and Inequality. Washington, DC: World Bank. Available at https://www .worldbank.org/en/country/southafrica /publication/south-africa-economic-update -policy-interventions-skilled-jobs-can-reduce -inequality-in-south-africa.
- International Monetary Fund. 2018. "South Africa: Staff Concluding Statement of the 2018 Article IV Mission."
- For more data on South Africa, see the World Bank Open Data site at https://data.worldbank.org.

- World Bank. 2018. Overcoming Poverty and Inequality in South Africa: An Assessment of Drivers, Constraints and Opportunities. Washington, DC: World Bank.
- Forecast of the Organisation for Economic Co-operation and Development. See OECD Data site at https://data.oecd.org/gdp/real -gdp-forecast.htm
- OECD. 2017. OECD Economic Surveys: South Africa. Paris: OECD Publishing.
- 7. Global Entrepreneurship Monitor. 2017. South Africa Report 2016/2017.
- 8. The three other locations are Ekurhuleni, eThekwini and Msunduzi.
- 9. Only locations that monitor the frequency and duration of electricity outages—per the system average interruption duration index (SAIDI) and system average interruption frequency index (SAIFI)—are evaluated on this index. For more information, see the chapter on getting electricity and the data notes.
- 10. The Department of Transport's Maritime Branch states that in terms of volume, more than 96% of South Africa's imports and exports are shipped by sea. See the Maritime Branch's website at http://www.transport.gov .za/web/department-of-transport/maritime.
- 11. World Bank. 2015. "World Bank and Switzerland to Support South African Cities."

- Press Release, September 19, 2015. Available at http://www.worldbank.org/en/news/press-release/2015/09/18/world-bank-and-switzerland-to-support-south-african-cities.
- 12. "Most jobs in South Africa are located in firms of less than 50 workers. However, the share of employment in SMEs declined from 72 percent in 2005 to 67 percent in 2015, mirroring weak net job creation in this segment in the last decade. Small businesses are nonetheless critical to reducing inequalities, providing an entry point for young people to enter the labor market." World Bank. 2018. South Africa Economic Update.
- 13. Interview with eThekwini municipal authorities. May 10, 2018.
- World Bank. 2018. South Africa Systematic country diagnostic: an incomplete Transition: Overcoming the Legacy of Exclusion in South Africa. Washington, DC: World Bank.
- President Cyril Ramaphosa: 2018 State of the Nation Address, available at https://www.gov. za/speeches/president-cyril-ramaphosa -2018-state-nation-address-16-feb-2018-0000.
- National Planning Commission. 2012.
 "National Development Plan 2030: Our future
 -make it work." Available at https://www.gov
 .za/issues/national-development-plan-2030.



he foundation of Doing Business is the notion that economic activity, particularly private sector development, benefits from clear and coherent rules—rules that set out and clarify property rights and facilitate the resolution of disputes and rules that enhance the predictability of economic interactions and provide contractual partners with essential protections against arbitrariness and abuse. Such rules are much more effective in shaping the incentives of economic agents in ways that promote growth and development where they are reasonably efficient in design, are transparent and accessible to those for whom they are intended and can be implemented at a reasonable cost. The quality of the rules also has a crucial bearing on how societies distribute the benefits and finance the costs of development strategies and policies

Good rules are a key to social inclusion. Enabling growth—and ensuring that all people, regardless of income level, can participate in its benefits-requires an environment where new entrants with drive and good ideas can get started in business and where good firms can invest and expand. The role of government policy in the daily operations of domestic small and medium-size firms is a central focus of the Doing Business data. The objective is to encourage regulation that is designed to be efficient, accessible to all and simple to implement. Onerous regulation diverts the energies of entrepreneurs away from developing their businesses. But regulation that is efficient, transparent and implemented in a simple way facilitates business expansion and innovation and makes it easier for aspiring entrepreneurs to compete on an equal footing.

Doing Business measures aspects of business regulation for domestic firms through an objective lens. The focus of the project is on small and medium-size companies in the largest business city of an economy. Based on standardized case studies, *Doing Business* presents

quantitative indicators on the regulations that apply to firms at different stages of their life cycle. The results for each economy can be compared with those for 189 other economies and over time.

FACTORS MEASURED BY DOING BUSINESS AND SUBNATIONAL DOING BUSINESS STUDIES

Doing Business captures several important dimensions of the regulatory environment as it applies to local firms. It provides quantitative indicators on regulation for 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. Doing Business also measures features of labor market regulation. Although Doing Business does not present rankings of economies on the labor market regulation

Labor market regulation

indicators or include the topic in the aggregate distance to frontier score or ranking on the ease of doing business, it does present the data for these indicators. Subnational Doing Business studies cover a subset of the 11 areas of business regulation that Doing Business covers across 190 economies (table 2.1). These studies focus on indicators that are most likely to vary from city to city, such as those on dealing with construction permits or registering property. Indicators that use a legal scoring methodology, such as those on getting credit or protecting minority investors, are typically excluded because they mostly look at national laws with general applicability.

The subnational *Doing Business* studies expand the *Doing Business* analysis beyond the largest business city of an economy. They measure variation in regulations or in the implementation of national laws across locations within an economy (as in South Africa) or a region (as in the European Union).

TABLE 2.1 What *Doing Business* and subnational *Doing Business* studies measure—11 areas of business regulation

Indicator set	What is measured		
Included in subnational <i>Doing Business</i> reports			
Starting a business	Procedures, time, cost and paid-in minimum capital to start a limited liability company		
Dealing with construction permits	Procedures, time and cost to complete all formalities to build a commercial warehouse and the quality control and safety mechanisms in the construction permitting system		
Getting electricity	Procedures, time and cost to get connected to the electrical grid, the reliability of the electricity supply and the transparency of tariffs		
Registering property	Procedures, time and cost to transfer a property and the quality of the land administration system		
Enforcing contracts	Time and cost to resolve a commercial dispute and the quality of judicial processes		
Trading across borders	Time and cost to export the product of comparative advantage and import auto parts		
Not typically included in subnational <i>Doing Business</i> reports			
Getting credit	Movable collateral laws and credit information systems		
Protecting minority investors	Minority shareholders' rights in related-party transactions and in corporate governance		
Paying taxes	Payments, time and total tax rate for a firm to comply with all tax regulations as well as postfiling processes		
Resolving insolvency	Time, cost, outcome and recovery rate for a commercial insolvency and the strength of the legal framework for insolvency		

Flexibility in employment regulation and aspects of job quality

Projects are undertaken at the request of governments.

Data collected by subnational studies over the past three years show that there can be substantial variation within an economy (figure 2.1). In Mexico in 2016, for example, registering a property transfer took as few as 9 days in the state of Puebla and as many as 78 in Oaxaca. Indeed, within the same economy one can find locations that perform as well as economies ranking in the top 20 on the ease of registering property and locations that perform as poorly as economies ranking in the bottom 40 on that indicator.

The subnational *Doing Business* studies produce disaggregated data on business regulation. But they go beyond a data collection exercise. They have proved to be strong motivators for regulatory reform at the local level:

 The data produced are comparable across locations within the economy and internationally, enabling locations to benchmark their results both locally and globally. Comparisons of locations within the same economy that share the same legal and regulatory framework can be revealing: local officials find it hard to explain why doing business is more difficult in their jurisdiction than in a neighboring one.

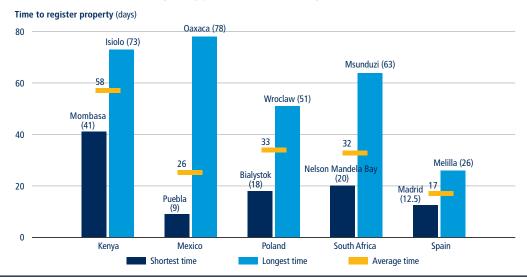
Pointing out good practices that exist in some locations but not others within an economy helps policy makers recognize the potential for replicating these good practices. This can prompt discussions of regulatory reform across different levels of government, providing opportunities for local governments and agencies to learn from one another and resulting in local ownership and capacity building.

Since 2005 subnational reports have covered 510 locations in 75 economies, including Colombia, the Arab Republic of Egypt, Italy, the Philippines and Serbia (figure 2.2). Seventeen economies—including Colombia, Indonesia, Kenya, Mexico, Nigeria, the Philippines, the Russian Federation and South Africa—have undertaken two or more rounds of subnational data collection to measure progress over time. Recently subnational studies were completed in Afghanistan,

Colombia, the European Union (Bulgaria, Hungary and Romania in one report and Croatia, the Czech Republic, Portugal and Slovakia in another) and Kazakhstan. Ongoing studies include those in the European Union (Greece, Ireland and Italy), Kazakhstan, Mozambique and the United Arab Emirates.

Doing Business in South Africa 2018 is the second subnational Doing Business study for South Africa. It focuses on five topics: dealing with construction permits, getting electricity, registering property, enforcing contracts and trading across borders. The first study, conducted in 2015, measured for the first time the regulatory environment beyond the capital, Johannesburg. It benchmarked business regulations and their enforcement in eight additional locations across four regulatory areas. It also measured trading across borders at four maritime ports. This second study updates the data presented in Doing Business in South Africa 2015 in four of the areas previously covered and includes new measures on the quality of regulations for each of them. Doing Business in South Africa 2018 also presents baseline data for trading across borders, adopting





Source: Subnational Doing Business database.

Note: The average time shown for each economy is based on all locations covered by the data: 11 counties in Kenya in 2016, 32 states in Mexico in 2016, 18 cities in Poland in 2015, 9 locations in South Africa in 2018 and 19 cities in Spain in 2015.

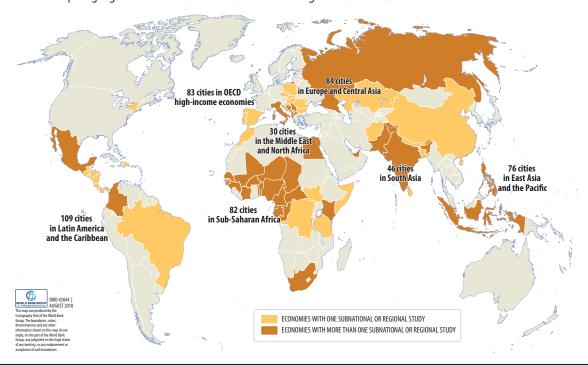


FIGURE 2.2 Comparing regulation at the local level: subnational *Doing Business* studies

Source: Subnational Doing Business database.

Doing Business' new approach to measuring trade processes.¹

How the indicators are selected

The design of the *Doing Business* indicators has been informed by theoretical insights gleaned from extensive research and the literature on the role of institutions in enabling economic development. In addition, the background papers developing the methodology for each of the *Doing Business* indicator sets have established the importance of the rules and regulations that *Doing Business* focuses on for such economic outcomes as trade volumes, foreign direct investment, market capitalization in stock exchanges and private credit as a percentage of GDP.²

The choice of the 11 sets of *Doing Business* indicators has also been guided by economic research and firm-level data, specifically data from the World Bank Enterprise Surveys.³ These surveys provide data highlighting the main obstacles to business activity as reported by entrepreneurs in more than 131,000

companies in 139 economies. Access to finance and access to electricity, for example, are among the factors identified by the surveys as important to businesses—inspiring the design of the *Doing Business* indicators on getting credit and getting electricity.

Some Doing Business indicators give a higher score for more regulation and better-functioning institutions (such as courts). For example, in the area of protecting minority investors higher scores are given for stricter disclosure requirements for related-party transactions. Higher scores are also given for a simplified way of applying regulation that keeps compliance costs for firms lowsuch as by easing the burden of business start-up formalities with a one-stop shop or through a single online portal. Finally, Doing Business scores reward economies that apply a risk-based approach to regulation as a way to address social and environmental concerns—such as by imposing a greater regulatory burden on activities that pose a high risk to the population and a lesser one on lower-risk activities. Thus the economies that rank highest on the ease of doing business are not those where there is no regulation—but those where governments have managed to create rules that facilitate interactions in the marketplace without needlessly hindering the development of the private sector.

The five *Doing Business* indicator sets included in this study—dealing with construction permits, getting electricity, registering property, enforcing contracts and trading across borders—were selected in collaboration with the National Treasury of South Africa. They are based on their relevance for the country's development and their ability to show variation across the locations covered.

The distance to frontier and ease of doing business ranking

To provide different perspectives on the data, *Doing Business* presents data both for individual indicators and for two aggregate measures: the distance to frontier score and the ease of doing business ranking. This report presents the distance to frontier score and the ranking for individual sets of indicators.

The distance to frontier score aids in assessing the absolute level of regulatory performance and how it improves over time. This measure shows the distance of each economy to the "frontier," which represents the best performance observed on each of the indicators across all economies in the Doing Business sample since 2005 or the third year in which data were collected for the indicator. The frontier is set at the highest possible value for indicators calculated as scores, such as the strength of legal rights index or the quality of land administration index. This underscores the gap between a particular economy's performance and the best performance at any point in time and helps in assessing the absolute change in the economy's regulatory environment over time as measured by *Doing Business*. The distance to frontier score is computed for each topic and can be averaged across all topics to compute the aggregate distance to frontier score. The ranking on the ease of doing business complements the distance to frontier score by providing information about an economy's performance in business regulation relative to the performance of other economies as measured by *Doing Business*.

The distance to frontier score for each indicator captures the gap between an economy's performance and the best practices globally. For starting a business, for example, New Zealand has the smallest number of procedures required (one) and the shortest time to fulfill them (0.5 days). Slovenia has the lowest cost (0.0), and Australia, Colombia and 112 other economies have no paid-in minimum capital requirement (table 2.2).

Doing Business uses a simple averaging approach for weighting component indicators, calculating rankings and determining the distance to frontier score.4 Each topic covered by Doing Business relates to a different aspect of the business regulatory environment. The distance to frontier scores and rankings of each economy vary, often considerably, across topics, indicating that a strong performance by an economy in one area of regulation can coexist with weak performance in another. One way to assess the variability of an economy's regulatory performance is to look at its distance to frontier scores across topics. Morocco, for example, has an overall distance to frontier score of 67.91, meaning that it is about two-thirds of the way from the worst to the best performance. Its distance to frontier score is 92.43 for starting a business, 81.12 for trading across borders and 79.73 for dealing with construction permits. At the same

TABLE 2.2 What is the frontier in regulatory practice?			
Topic and indicator	Who set the frontier	Frontier	Worst performance
Starting a business			
Procedures (number)	New Zealand	1	18ª
Time (days)	New Zealand	0.5	100 ^b
Cost (% of income per capita)	Slovenia	0.0	200.0b
Minimum capital (% of income per capita)	Australia; Colombia ^c	0.0	400.0 ^b
Dealing with construction permits			
Procedures (number)	No economy was at the frontier as of June 1, 2017.	5	30ª
Time (days)	No economy was at the frontier as of June 1, 2017.	26	373 ^b
Cost (% of warehouse value)	No economy was at the frontier as of June 1, 2017.	0.0	20.0 ^b
Building quality control index (0–15)	Luxembourg; New Zealand; United Arab Emirates	15	Oq
Registering property			
Procedures (number)	Georgia; Norway; Portugal; Sweden	1	13ª
Time (days)	Georgia; New Zealand; Portugal	1	210 ^b
Cost (% of property value)	Saudi Arabia	0.0	15.0 ^b
Quality of land administration index (0-30)	No economy has attained the frontier yet.	30	Oq
Enforcing contracts			
Time (days)	Singapore	120	1,340 ^b
Cost (% of claim)	Bhutan	0.1	89.0 ^b
Quality of judicial processes index (0–18)	No economy has attained the frontier yet.	18	Od

Source: Doing Business database.

- a. Worst performance is defined as the 99th percentile among all economies in the *Doing Business* sample.
- b. Worst performance is defined as the 95th percentile among all economies in the *Doing Business* sample.
- c. Another 112 economies also have a paid-in minimum capital requirement of 0.
- d. Worst performance is the worst value recorded.

time, it has a distance to frontier score of 34.03 for resolving insolvency, 45.00 for getting credit and 58.33 for protecting minority investors.

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 (except for the total tax rate) is rescaled using the linear transformation (worst - v)/(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.

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 and the time and cost indicators), and the 99th percentile is used for number of procedures (figure 2.3).

In the second step, for each economy the scores obtained for individual indicators are aggregated through simple averaging for each topic for which performance is measured and ranked. More complex aggregation methods—such as principal components and unobserved components—yield a ranking nearly identical to the simple average used by *Doing Business*. Thus *Doing Business* uses the simplest method: weighting all topics equally and, within each topic,

giving equal weight to each of the topic components.

A location's distance to frontier score, per topic and overall, 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 differences between the distance to frontier scores in 2015 and 2018 illustrate the extent to which each South African location has closed the gap to the regulatory frontier over time. The scores also show how far a location is from the best performance for both years.

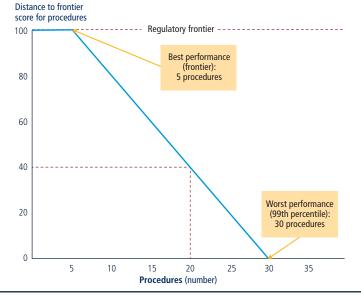
FACTORS NOT MEASURED BY DOING BUSINESS AND SUBNATIONAL DOING BUSINESS STUDIES

Many important policy areas are not covered by *Doing Business*; even within the areas it covers, its scope is narrow (table 2.3). *Doing Business* does not measure the full range of factors, policies and institutions that affect the quality of an economy's business environment or its national competitiveness. It does not, for example, capture the aspects of market size, macroeconomic stability, development of the financial system, the quality of the labor force or the incidence of bribery and corruption.

The focus is deliberately narrow even within the relatively small set of indicators included in *Doing Business*. The time and cost required for the logistical process of exporting and importing goods is captured in the trading across borders indicators, for example, but they do not measure the cost of tariffs or of international transport. *Doing Business* provides a narrow perspective on the infrastructure challenges that firms face, particularly

FIGURE 2.3 How are distance to frontier scores calculated for indicators? An example

A time-and-motion topic: dealing with construction permits



Source: Doing Business database.

TABLE 2.3 What Doing Business does not cover

Examples of areas not covered

Macroeconomic stability

Development of the financial system

Quality of the labor force

Incidence of bribery and corruption

Market size

Lack of security

in the developing world, through these indicators. It does not address the extent to which inadequate roads, rail, ports and communications may add to firms' costs and undermine competitiveness (except to the extent that the trading across borders indicators indirectly measure the quality of ports and border connections). Similar to the indicators on trading across borders, all aspects of commercial legislation are not covered by those on starting a business or protecting minority investors. And while Doing Business measures only a few aspects within each area that it covers, business regulation reforms should not focus only on these aspects, because those that are not measured are also important.

Doing Business does not attempt to quantify all costs and benefits of a particular law or regulation to society as a whole. The paying taxes indicators measure the total tax and contribution rate, which, in isolation, is a cost to businesses. However, the indicators do not measure-nor are they intended to measure—the benefits of the social and economic programs funded with tax revenues. Measuring the quality and efficiency of business regulation provides only one input into the debate on the regulatory burden associated with achieving regulatory objectives, which can differ across economies. Doing Business provides a starting point for this discussion and should be used in conjunction with other data sources.

ADVANTAGES AND LIMITATIONS OF THE METHODOLOGY

The *Doing Business* methodology is designed to be an easily replicable way to benchmark specific aspects of business regulation. Its advantages and limitations should be understood when using the data (table 2.4).

Ensuring comparability of the data across a global set of economies is a central consideration for the *Doing Business* indicators, which are developed around standardized case scenarios with specific assumptions. One such assumption is the location of a standardized business—the

subject of the Doing Business case study—in the largest business city of the economy. The reality is that business regulations and their enforcement may differ within a country, particularly in federal states and large economies. But gathering data for every relevant jurisdiction in each of the 190 economies covered by Doing Business is not feasible. Beginning in 2014, Doing Business extended its global coverage to include the second largest business city in economies with a population of more than 100 million as of 2013. To complement the global assessment, subnational Doing Business studies generate data at the local level, beyond the largest business city—a potentially useful tool for policy makers.

Doing Business recognizes the limitations of the standardized case scenarios and assumptions. But while such assumptions come at the expense of generality, they also help to ensure the comparability of data. Some Doing Business topics are complex, and so it is important that the standardized cases are defined carefully. For example, the standardized case scenario usually involves a limited liability company or its legal equivalent. There are two reasons for this assumption.

TABLE 2.4 Advantages and limitations of the <i>Doing Business</i> methodology				
Feature	Advantages	Limitations		
Use of standardized case scenarios	Makes data comparable across economies and methodology transparent, using case scenarios that are common globally	Reduces scope of data; only regulatory reforms in areas measured can be systematically tracked; the case scenarios may not be the most common in a particular economy		
Focus on largest business city ^a	Makes data collection manageable (cost-effective) and data comparable	Reduces representativeness of data for an economy if there are significant differences across locations		
Focus on domestic and formal sector	Keeps attention on formal sector— where regulations are relevant and firms are most productive	Unable to reflect reality for informal sector—important where that is large—or for foreign firms facing a different set of constraints		
Reliance on expert respondents	Ensures that data reflect knowledge of those with most experience in conducting types of transactions measured	Indicators less able to capture variation in experiences among entrepreneurs		
Focus on the law	Makes indicators "actionable"— because the law is what policy makers can change	Where systematic compliance with the law is lacking, regulatory changes will not achieve full results desired		

a. In economies with a population of more than 100 million as of 2013, *Doing Business* covers business regulation in both the largest and second largest business city. Subnational *Doing Business* studies go beyond the largest business cities within countries or regions.

First, private, limited liability companies are the most prevalent business form (for firms with more than one owner) in many economies around the world. Second, this choice reflects the focus of *Doing Business* on expanding opportunities for entrepreneurship: investors are encouraged to venture into business when potential losses are limited to their capital participation.

Another assumption underlying the Doing Business indicators is that entrepreneurs have knowledge of and comply with applicable regulations. In practice. entrepreneurs may not be aware of what needs to be done or how to comply with regulations and may lose considerable time trying to find out. Alternatively, they may intentionally avoid compliance—by not registering for social security, for example. Firms may opt for bribery and other informal arrangements intended to bypass the rules where regulation is particularly onerous—an aspect that helps explain differences between the de jure data provided by Doing Business and the de facto insights offered by the World Bank Enterprise Surveys.⁶ Levels of informality tend to be higher in economies with particularly burdensome regulation. Compared with their formal sector counterparts, firms in the informal sector typically grow more slowly, have poorer access to credit and employ fewer workers—and these workers remain outside the protections of labor law and, more generally, other legal protections embedded in the law.7 Firms in the informal sector are also less likely to pay taxes. Doing Business measures one set of factors that help explain the occurrence of informality and give policy makers insights into potential areas of regulatory reform.

DATA COLLECTION IN PRACTICE

The *Doing Business* data are based on a detailed reading of domestic laws and regulations as well as administrative

requirements. The Doing Business 2018 report covers 190 economies-including some of the smallest and poorest economies, for which little or no data are available from other sources. The data are collected through several rounds of communication with expert respondents (both private sector practitioners and government officials), through responses to questionnaires, conference calls, written correspondence and visits by the team. Doing Business relies on four main sources of information: the relevant laws and regulations, Doing Business respondents, the governments of the economies covered and World Bank Group staff. More than 43,000 professionals in 190 economies have assisted in providing the data that inform the Doing Business indicators over the past 16 years. For a detailed explanation of the Doing Business methodology, see the report's data notes.

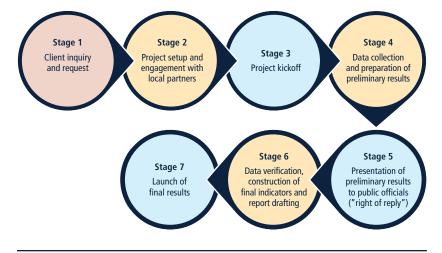
Subnational *Doing Business* follows similar data collection methods. However, subnational *Doing Business* studies are driven by client demand and do not follow the same timeline as global *Doing Business* publications. They incorporate a "right of reply" period, which consists of a series of consultative working meetings with local authorities in each of the locations measured to discuss the preliminary data and gather their feedback (figure 2.4).

Relevant laws and regulations

Indicators presented in *Doing Business in South Africa 2018* are based mostly on laws and regulations. Besides participating in interviews or filling out written questionnaires, expert respondents provided references to the relevant laws, regulations and fee schedules, which were collected and analyzed by the Subnational *Doing Business* team.

The team collects the texts of the relevant laws and regulations and checks the questionnaire responses for accuracy. The team examines the civil procedure code, for example, to check the maximum number of adjournments in a commercial court dispute, and reads the insolvency code to see whether the debtor can initiate liquidation or reorganization proceedings. These and other types of laws are available on the Doing Business law library website.8 Since the data collection process involves an annual update of an established database, having a very large sample of respondents is not strictly necessary. In principle, the role of the contributors is largely advisory—helping the Doing Business team to locate and understand the laws and regulations. There are quickly diminishing returns to an expanded pool of contributors. That said, the number of contributors rose by 40%, globally, between 2010 and 2017.

FIGURE 2.4 Typical stages of a subnational *Doing Business* project



Extensive consultations with multiple contributors are conducted by the team to minimize measurement error for the rest of the data. For some indicators-for example, those on dealing with construction permits, and enforcing contracts—the time component and part of the cost component (where fee schedules are lacking) are based on actual practice rather than the law on the books. This introduces a degree of judgment by respondents on what actual practice looks like. When respondents disagree, the time indicators reported by Doing Business represent the median values of several responses given under the assumptions of the standardized case.

Expert respondents

For Doing Business in South Africa 2018 more than 300 professionals across 13 locations assisted in providing the data that inform the five areas covered. The Subnational Doing Business website and the acknowledgments section of this report list the names and credentials of those respondents who wished to be acknowledged. Selected on the basis of their expertise, respondents are professionals who routinely administer or advise on the legal and regulatory requirements in the specific areas covered by Doing Business in South Africa 2018. Because of the focus on legal and regulatory arrangements, most of the respondents are legal professionals such as lawyers or conveyancers. Architects, engineers, electrical engineers and other professionals answered the questionnaires related to dealing with construction permits and getting electricity. For trading across borders, information was provided by clearing and freight forwarding agencies. Information incorporated in the indicators was also provided by public officials and judicial and municipal authorities.

The *Doing Business* approach is to work with legal practitioners or other professionals who regularly undertake the transactions involved. Following the standard methodological approach for time-and-motion studies, *Doing Business*

in South Africa 2018 breaks down each process or transaction, such as starting a business or registering a building, into separate steps to ensure a better estimate of time. The time estimate for each step was given by practitioners with significant and routine experience in the transaction.

There are two main reasons that Doing Business does not survey firms. The first relates to the frequency with which firms engage in the transactions captured by the indicators, which is generally low. For example, a firm goes through the startup process once in its existence, while an incorporation lawyer may carry out 10 such transactions each month. The incorporation lawyers and other experts providing information to Doing Business are therefore better able to assess the process of starting a business than are individual firms. They also have access to current regulations and practices, while a firm may have faced a different set of rules when incorporating years before. The second reason is that the Doing Business questionnaires mostly gather legal information, which firms are unlikely to be fully familiar with. For example, few firms will know about all the main legal procedures involved in resolving a commercial dispute through the courts, even if they have gone through the process themselves. But a litigation lawyer should have little difficulty in providing the requested information on all the procedures.

Governments and World Bank Group staff

After analyzing laws and regulations and conducting follow-up interviews with respondents for *Doing Business in South Africa 2018*, the Subnational *Doing Business* team shared the preliminary findings with the relevant government and public authorities in each location. Through this process, government officials have the opportunity to provide their feedback on the preliminary data, give updates on their new and ongoing regulatory reform initiatives, and share their

reform experiences and stories. Over time, these right of reply meetings have become an essential milestone of subnational *Doing Business* projects to enhance the quality of the studies and motivate local governments to have greater ownership of the reform process. The final data are analyzed and incorporated into a comprehensive written report, which is shared and peer-reviewed by World Bank Group specialists.

USES OF THE DOING BUSINESS DATA

Doing Business was designed with two main types of users in mind: policy makers and researchers.9 It is a tool that governments can use in designing sound business regulatory policies. Nevertheless, the Doing Business data are limited in scope and should be complemented with other sources of information. Doing Business focuses on a few specific rules relevant to the specific case studies analyzed. These rules and case studies are chosen to be illustrative of the business regulatory environment, but they are not a comprehensive description of that environment. By providing a unique data set that enables analysis aimed at better understanding the role of business regulation in economic development, Doing Business also serves as an important source of information for researchers.

Governments and policy makers

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

Many *Doing Business* indicators can be considered "actionable." For example,

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

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

Over the past decade governments have increasingly turned to *Doing Business* as a repository of actionable, objective data

providing unique insights into good practices worldwide as they have come to understand the importance of business regulation as a driving force of competitiveness. To ensure the coordination of efforts across agencies, economies such as Colombia, Malaysia and the Russian Federation have formed regulatory reform committees. These committees use the Doing Business indicators as one input to inform their programs for improving the business environment. More than 60 other economies have also formed such committees. In East Asia and the Pacific, they include Brunei Darussalam; Indonesia; the Republic of Korea; the Philippines; Taiwan, China; and Thailand. In the Middle East and North Africa: the Arab Republic of Egypt, Kuwait, Morocco, Saudi Arabia and the United Arab Emirates. In South Asia: Bangladesh, India and Pakistan. In Europe and Central Asia: Albania, Croatia, Georgia, Kazakhstan, Kosovo, the Kyrgyz Republic, the former Yugoslav Republic of Macedonia, Moldova, Montenegro, Poland, Tajikistan, Turkey, Ukraine and Uzbekistan. In Sub-Saharan Africa: Benin, Burundi, the Comoros, the Democratic Republic of Congo, the Republic of Congo, Côte d'Ivoire, Guinea, Guinea-Bissau, Kenya, Liberia, Malawi, Mali, Mauritius, Niger, Nigeria, Rwanda, Senegal, Sierra Leone, Sudan, Tanzania, Togo, Zambia and Zimbabwe. And in Latin America and the Caribbean: Argentina, Brazil, Chile, Costa Rica, the Dominican Republic, Guatemala, Jamaica, Mexico, Nicaragua, Panama, Peru and St. Lucia. Since 2003, governments have reported more than 3,180 regulatory reforms, about 920 of which have been informed by Doing Business since 2003.10

Many economies share knowledge on the regulatory reform process related to the areas measured by *Doing Business*. Among the most common venues for this knowledge sharing are peer-to-peer learning events—workshops where officials from different governments across a region or even across the globe meet to discuss the challenges of regulatory reform and to share their experiences.

Think tanks and other research organizations

Doing Business data are widely used by think tanks and other research organizations, both to produce research papers and to develop new indices.

Many research papers have shown the importance of business regulation, demonstrating how it relates to different economic outcomes.11 One of the most cited theories on how excessive business regulation affects economic performance and development is that it makes it too costly for firms to engage in the formal economy, causing them not to invest or prompting them to move to the informal economy. Recent studies have conducted extensive empirical testing of this proposition using Doing Business and other related indicators. According to one study, for example, a reform that simplified business registration in Mexican municipalities increased registration by 5% and wage employment by 2.2%and, as a result of increased competition, reduced the income of incumbent businesses by 3%.12 Business registration reforms in Mexico also resulted in 14.9% of informal business owners shifting to the formal economy.¹³

Efficient and non-distortionary business regulations are important drivers of productivity. A study on India, for example, shows that inefficient licensing and size restrictions cause a misallocation of resources, reducing total factor productivity by preventing efficient firms from achieving their optimal scale and allowing inefficient firms to remain in the market.14 The study shows that removing these restrictions would boost total factor productivity by an estimated 40-60%. In the European Union and Japan, implicit taxes on capital use were shown to reduce the average size of firms by 20%, output by 8.1% and output per firm by 25.6%. 15 A recent study on Côte d'Ivoire, Ethiopia, Ghana and Kenya demonstrates large

productivity gains following the removal of firm-level distortions caused by uneven regulations and a poor business environment.¹⁶ Research also shows that raising the efficiency level of bankruptcy laws in select OECD high-income economies to that of the United States would increase the total factor productivity of the former by about 30% through a rise in bank loans to large firms.¹⁷

Considerable effort has been devoted to studying the link between employment growth and government regulation of firm entry. In Portugal business reforms resulted in a reduction of the time and cost needed for company formalization, increasing the number of business startups by 17% and creating 7 new jobs per 100,000 inhabitants per month. New start-ups were more likely to be femaleowned, were smaller and were headed by less experienced, less-educated entrepreneurs than before the reform, suggesting that the reform created a more inclusive environment for aspiring entrepreneurs.18

In many economies companies engaging in international trade struggle with high trade costs arising from transport, logistics and regulations, impeding their competitiveness and preventing them from taking full advantage of their productive capacity. With the availability of Doing Business indicators on trading across borders—which measure the time, procedural and monetary costs of exporting and importing—several empirical studies have assessed how trade costs affect the export and import performance of economies. A rich body of empirical research shows that efficient infrastructure and a healthy business environment are positively associated with export performance.19

Improving infrastructure efficiency and trade logistics bring documented benefits to an economy's balance of trade and individual traders. However, delays in transit time can reduce exports: a study analyzing the importance of trade

logistics found that a one-day increase in transit time reduces exports by an average of 7% in Sub-Saharan Africa.²⁰ Another study found that a one-day delay in transport time for landlocked economies and for time-sensitive agricultural and manufacturing products has a particularly large negative impact, reducing trade by more than 1% for each day of delay.²¹ Delays while clearing customs also affect a firm's ability to export, particularly when goods are destined for new clients.²² And in economies with flexible entry regulations, a 1% increase in trade is associated with an increase of more than 0.5% in income per capita but has no positive income effects in economies with more rigid regulation.²³ Research has also found that—although domestic buyers benefit from having goods of varying quality and price to choose from—import competition results in only minimal quality upgrading in OECD highincome economies with cumbersome regulation while it has no effect on quality upgrading in non-OECD economies with cumbersome regulation.²⁴ Therefore, the potential gains for consumers from import competition are reduced where regulation is cumbersome.

Doing Business measures aspects of business regulation affecting domestic firms. However, research shows that better business regulation—as measured by Doing Business—is associated with higher levels of foreign direct investment.²⁵ Furthermore, foreign direct investment can either impede or promote domestic investment depending on how businessfriendly entry regulations are in the host economy. In fact, foreign direct investment has been shown to crowd out domestic investment in economies with costly processes for starting a business.²⁶ Another study shows that economies with higher international market integration have, on average, easier and simpler processes for starting a business.²⁷

Recent empirical work shows the importance of well-designed credit market regulations and well-functioning court systems for debt recovery. For example, a reform making bankruptcy laws more efficient significantly improved the recovery rate for viable firms in Colombia.²⁸ In a multi-economy study the introduction of collateral registries for movable assets was shown to increase firms' access to finance by approximately 8%.29 In India the establishment of debt recovery tribunals reduced nonperforming loans by 28% and lowered interest rates on larger loans, suggesting that faster processing of debt recovery cases led to a lower cost of credit.30 An in-depth review of global bank flows revealed that firms in economies with better credit information sharing systems and higher branch penetration evade taxes to a lesser degree.31 Strong shareholder rights have been found to reduce financial frictions, especially for firms with large external finance relative to their capital stock (such as small firms or firms in distress).32

There is also a large body of theoretical and empirical work investigating the distortionary effects of high tax rates and cumbersome tax codes and procedures. According to one study, business licensing among retail firms rose 13% after a tax reform in Brazil.³³ Another found that a 10% reduction in tax complexity is comparable to a 1% reduction in effective corporate tax rates.³⁴

Labor market regulation—as measured by Doing Business—has been shown to have important implications for the labor market. According to one study, graduating from school during a time of adverse economic conditions has a persistent, harmful effect on workers' subsequent employment opportunities. The persistence of this negative effect is stronger in countries with stricter employment protection legislation.35 Rigid employment protection legislation can also have negative distributional consequences. A study on Chile, for example, found that the tightening of job security rules was associated with lower employment rates for youth, unskilled workers and women.36

By expanding the time series dimension and the scope of the data, *Doing Business* hopes to continue being a key reference for the debate on the importance of business regulation for economic development both within and outside the World Bank Group.

Indices

Beyond this body of research, Doing Business has identified 17 different data projects or indices that use Doing Business as one source of data.³⁷ Most of these use indicator-level data and not the aggregate ease of doing business ranking. Starting a business is the indicator set most widely used, followed by labor market regulation and paying taxes. These efforts typically combine Doing Business data with data from other sources to assess economies along a particular aggregate dimension such as competitiveness or innovation. The Heritage Foundation's Index of Economic Freedom, for example, has used six Doing Business indicators in measuring the degree of economic freedom in the world.38 Economies that score better in these six areas also tend to have a higher degree of economic freedom.

Similarly, the World Economic Forum uses Doing Business data in its Global Competitiveness Index, designed to demonstrate how competitiveness is a global driver of economic growth. The organization also uses Doing Business indicators in four other indices, which measure trade facilitation, technological readiness, human capital development, and travel and tourism sector competitiveness. These publicly available sources expand on the general business environment data generated by Doing Business by incorporating these data into the study of other important social and economic issues across economies and regions. They prove that, taken individually, Doing Business indicators remain a useful starting point for a rich body of analysis across different areas and dimensions.

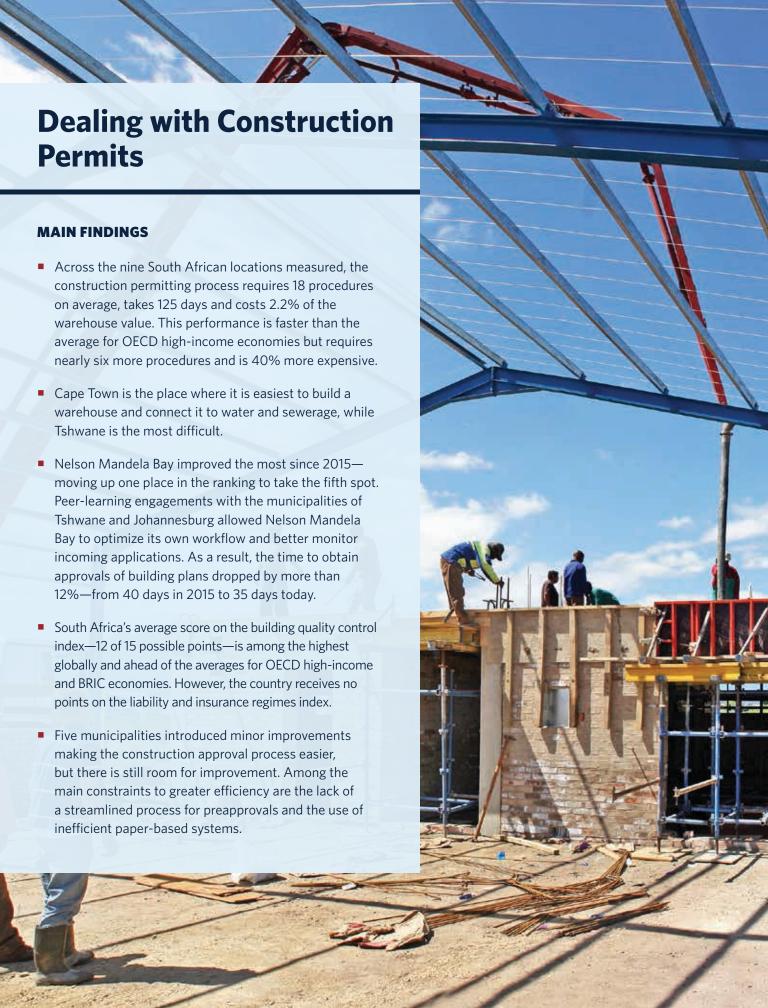
NOTES

- For more information on additions and changes to the methodology since 2015, please refer to the methodology box in each indicator chapter and the data notes.
- These papers are available on the Doing Business website at http://www.doingbusiness org/methodology.
- The World Bank Enterprise Surveys and Doing Business complement each other as two sides of the same coin. They both provide useful information on the business environment of an economy, but in different ways. Doing Business has a narrower scope than the Enterprise Surveys. But by focusing on actionable indicators related to business regulation, Doing Business provides a clear roadmap for governments seeking to improve such regulation. Doing Business uses standardized case scenarios while the Enterprise Surveys use representative samples. For more on the Enterprise Surveys and how they differ from Doing Business, see the website at http://www.enterprisesurveys.org.
- 4. 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. In this way each point included in these indices has the same value independent of the component it belongs to. Indicators for all other topics are assigned equal weights.
- 5. Djankov, Simeon, Darshini Manraj, Caralee McLiesh and Rita Ramalho. 2005. "Doing Business Indicators: Why Aggregate, and How to Do It." Washington, DC: World Bank. 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.
- Hallward-Driemeier, Mary, and Lant Pritchett. 2015. "How Business Is Done in the Developing World: Deals versus Rules." *Journal* of Economic Perspectives 29, no. 3: 121–40.
- Schneider, Friedrich. 2005. "The Informal Sector in 145 Countries." Department of Economics, University Linz, Linz, Austria; La Porta, Rafael, and Andrei Shleifer. 2008. "The Unofficial Economy and Economic Development." Tuck School of Business Working Paper 2009-57, Dartmouth College, Hanover, NH, available at Social Science Research Network (SSRN) at http://ssrn.com/abstract=1304760.
- For the law library, see the website at http://www.doingbusiness.org/law-library.
- The focus of the *Doing Business* indicators remains the regulatory regime faced by domestic firms engaging in economic activity in the largest business city of an economy.

- Doing Business was not initially designed to inform decisions by foreign investors, though investors may in practice find the data useful as a proxy for the quality of the national investment climate. Analysis done in the World Bank Group's Global Indicators Group has shown that countries that have sensible rules for domestic economic activity also tend to have good rules for the activities of foreign investors engaged in the local economy.
- These are reforms for which Doing Business is aware that information provided by Doing Business was used in shaping the reform agenda.
- 11. The papers cited here are just a few examples of research done in the areas measured by Doing Business. Since 2003, when the Doing Business report was first published, 2,182 research articles published in peer-reviewed academic journals have discussed how regulation in the areas measured by Doing Business influences economic outcomes. Another 6,296 working papers have been posted online.
- Bruhn, Miriam. 2011. "License to Sell: The Effect of Business Registration Reform on Entrepreneurial Activity in Mexico." Review of Economics and Statistics 93, no. 1: 382–86.
- Bruhn, Miriam. 2013. "A Tale of Two Species: Revisiting the Effect of Registration Reform on Informal Business Owners in Mexico." *Journal* of Development Economics 103: 275–83.
- Hsieh, Chang-Tai, and Peter J. Klenow. 2009. "Misallocation and Manufacturing TFP in China and India." Quarterly Journal of Economics 124 (4): 1403-48.
- Guner, Nezih, Gustavo Ventura and Yi Xu. 2008. "Macroeconomic Implications of Size-Dependent Policies." Review of Economic Dynamics 11: 721-44.
- Cirera, Xavier, Roberto N. Fattal Jaef and Hibret B. Maemir. 2017. "Taxing the Good? Distortions, Misallocation, and Productivity in Sub-Saharan Africa." Policy Research Working Paper 7949, World Bank, Washington, DC.
- Neira, Julian. 2017. "Bankruptcy and Cross-Country Differences in Productivity." Journal of Economic Behavior and Organization (2017). Available from http://dx.doi.org/10.1016/j.jebo 2017.07.011
- Branstetter, Lee G., Francisco Lima, Lowell J. Taylor and Ana Venâncio. 2013. "Do Entry Regulations Deter Entrepreneurship and Job Creation? Evidence from Recent Reforms in Portugal." *Economic Journal*, published electronically July 16, 2013. https://doi.org /10.1111//ecoj.12044.
- Portugal-Perez, Alberto, and John S. Wilson. 2011. "Export Performance and Trade Facilitation Reform: Hard and Soft Infrastructure." World Development 40, no. 7: 1295-1307.
- 20. Freund, Caroline, and Nadia Rocha. 2011. "What Constrains Africa's Exports?" World Bank Economic Review 25, no. 3: 361–86.
- Djankov, Simeon, Caroline Freund and Cong S. Pham. 2010. "Trading on Time." Review of Economics and Statistics 92, no. 1: 166–73.
- Volpe Martincus, Christian, Jeronimo Carballo and Alejandro Graziano. 2015. "Customs." Journal of International Economics 96: 119–37.

- Freund, Caroline, and Bineswaree Bolaky.
 2008. "Trade, Regulations, and Income."
 Journal of Development Economics 87: 309–21.
- Amiti, Mary, and Amit K. Khandelwal. 2011. "Import Competition and Quality Upgrading." Review of Statistics and Economics 95 (2): 476–90.
- 25. Corcoran, Adrian, and Robert Gillanders. 2015. "Foreign Direct Investment and the Ease of Doing Business." *Review of World Economics* 151, no. 1: 103–26.
- Munemo, Jonathan. 2014. "Business Start-Up Regulations and the Complementarity between Foreign and Domestic Investment." Review of World Economics 150, no. 4: 745–61.
- Norbäck, Pehr-Johan, Lars Persson and Robin Douhan. 2014. "Entrepreneurship Policy and Globalization." Journal of Development Economics 110: 22–38.
- Giné, Xavier, and Inessa Love. 2010. "Do Reorganization Costs Matter for Efficiency? Evidence from a Bankruptcy Reform in Colombia." Journal of Law and Economics 53, no. 4: 833-64.
- Love, Inessa, María Soledad Martínez
 Pería and Sandeep Singh. 2013. "Collateral
 Registries for Movable Assets: Does Their
 Introduction Spur Firms' Access to Bank
 Finance?" Policy Research Working Paper
 6477, World Bank, Washington, DC.
- Visaria, Sujata. 2009. "Legal Reform and Loan Repayment: The Microeconomic Impact of Debt Recovery Tribunals in India." American Economic Journal: Applied Economics 1, no. 3: 59–81.
- Beck, Thorsten, Chen Lin and Yue Ma. 2014.
 "Why Do Firms Evade Taxes? The Role of Information Sharing and Financial Sector Outreach." Journal of Finance 69: 763–817.
- Claessens, Stijn, Kenichi Ueda and Yishay Yafeh. 2014. "Institutions and Financial Frictions: Estimating with Structural Restrictions on Firm Value and Investment." Journal of Development Economics 110: 107-22.
- Monteiro, Joana, and Juliano J. Assunção. 2012. "Coming Out of the Shadows? Estimating the Impact of Bureaucracy Simplification and Tax Cut on Formality in Brazilian Microenterprises." Journal of Development Economics 99: 105-15.
- Lawless, Martina. 2013. "Do Complicated Tax Systems Prevent Foreign Direct Investment?" Economica 80, no. 317: 1–22.
- Kawaguchi, Daiji, and Tetsushi Murao. 2014. "Labor-Market Institutions and Long-Term Effects of Youth Unemployment." Journal of Money, Credit and Banking 46, S2: 95–116.
- Montenegro, Claudio, and Carmen Pagés.
 2003. "Who Benefits from Labor Market Regulations?" Policy Research Working Paper 3143, World Bank, Washington, DC.
- 37. The 17 data projects or indices are the Millennium Challenge Corporation's Open Data Catalog; the Heritage Foundation's Index of Economic Freedom; the World Economic Forum's Global Competitiveness Index, Enabling Trade Index, Networked Readiness Index (jointly with INSEAD), Human Capital Index and Travel and Tourism Competitiveness Index; INSEAD's Global Talent Competitiveness Index and Global Innovation

- Index (jointly with Cornell University and the World Intellectual Property Organization); the Fraser Institute's Economic Freedom of the World; KPMG's Change Readiness Index; Citi and Imperial College London's Digital Money Index; the International Institute for Management Development's World Competitiveness Yearbook; DHL's Global Connectedness Index; PwC's Paying Taxes 2016: The Global Picture; and the Legatum Institute's Legatum Prosperity Index.
- For more on the Heritage Foundation's Index of Economic Freedom, see the website at https://www.heritage.org/index.



he construction sector is the second largest employer in South Africa after the government. Since building and construction are labor-intensive, when this industry is operating at full capacity, large sections of an economy's workforce are active. Worldwide, the construction industry is recognized as a significant contributor to employment and economic growth. The South African construction industry thus has the potential to bolster the National Development Plan's overarching goals of increasing economic growth and creating jobs.

Following the end of the apartheid era's economic isolation, there was

relatively steady growth in total construction output for 20 years (1990 to 2010). However, with the 2008 financial crisis and completion of infrastructure projects in preparation for the 2010 World Cup, growth slowed. This led to labor unrest and strikes, which negatively affected the construction sector and caused delays in major building projects to this day. Studies have shown that extensive delays in the construction permitting process can lead to higher transaction costs and fewer construction projects.³

Economies such as Denmark, New Zealand and Taiwan, China, have proved that the construction permitting process

can be relatively simple, efficient and safe. In these economies regulatory reforms have revolved around three key features: delegating parts of the process to the private sector, applying risk classification for buildings and using new technologies (such as electronic platforms or one-stop shops).

HOW DOES CONSTRUCTION PERMITTING WORK IN SOUTH AFRICA?

South Africa's construction permitting process follows a general scheme of 11 steps common to most locations

WHAT DOES DEALING WITH CONSTRUCTION PERMITS MEASURE?

To measure the ease of dealing with construction permits, *Doing Business* records the procedures, time and cost required for a small or medium-size business to obtain the approvals needed to build a commercial warehouse and connect it to water and sewerage. This includes all inspections and certificates needed before, during and after construction of the warehouse.

To make the data comparable across locations, it is assumed that the warehouse is in the periurban area of the analyzed business city, that it is not in a special economic or industrial zone and that it will be used for the general storage of non-hazardous materials such as books.

In 2015 a new indicator was introduced to measure the underlying quality of construction regulations and controls. The building quality control index accounts for one-fourth of the distance to frontier score for dealing with construction permits (see figure).

Dealing with construction permits: measuring the efficiency and quality of building regulation



(figure 3.1). Under the National Building Regulations and Building Standards Act, constructing a building requires the prior approval of the building plans by the local authority (municipality).⁴ The building company (the builder) must first prepare a set of building plans and submit them to the municipal building control department. The submission usually includes the application form, a copy of the title deed, a zoning certificate and detailed drawings.⁵

To prepare the architectural and structural designs of the plans, the builder needs a geological and topographical survey of the land plot. Such surveys are conducted by a private licensed firm or land surveyor.⁶ Once all required documentation is presented, a fee for submission must be paid immediately, and a reference number is provided to the builder. The application is then sent to the various municipal departments (for example, health, water and sanitation, fire, traffic, roads and energy) for their review and comments on the plans.

Once building plans have been approved, the builder must notify the municipality of its commencement of work at least four days before construction begins. At this point the builder will apply for connection to water and sewerage services at the municipal water and sanitation department.

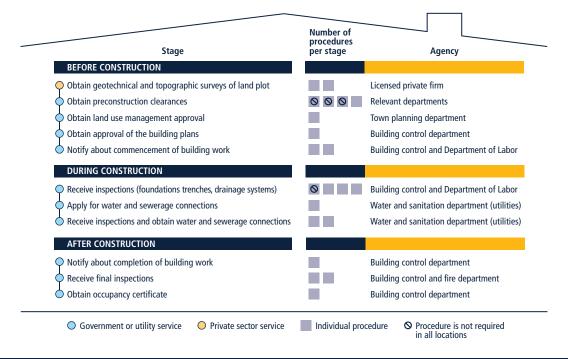
Compulsory building site inspections happen at various intervals during the construction process. These inspections include the excavation inspection (foundation trenches) and an open drain inspection. Once the building work has been completed and the plot is ready for final inspection, the builder must notify the municipality of the completion of the work.

Lastly, the builder prepares a set of certificates of compliance. These indicate that the building has been designed and erected in accordance with the application for which approval was granted.⁷ The builder then sends the certificates

of compliance and a written request for issuance of the occupancy certificate to the municipality. The local authority usually issues this within 14 days. Per the National Building Regulations and Building Standards Act, the building may not be occupied prior to issuance of the occupancy certificate.

These 11 steps require an average of 18 procedures, take 125 days and cost 2.2% of the warehouse value. This performance is twice as fast as the average of the BRIC economies (Brazil, Russian Federation, India and China) and almost a month faster than the OECD high-income economies (figure 3.2). However, the process requires nearly six more procedures and is nearly 40% more expensive than the average of the OECD high-income economies (12.5 procedures and 1.6% of the warehouse value). Denmark—the global best performer—requires seven procedures and is two months faster than the South African average. In Denmark preconstruction clearances are

FIGURE 3.1 Ten of the 11 stages in the construction permitting process are governed at the municipal level



Source: Doing Business database.

Note: These stages are common to all locations benchmarked. Additional requirements may apply in specific locations.

EFFICIENCY OF CONSTRUCTION PERMITTING BUILDING QUALITY CONTROL Procedures Time Cost Index (number) (% of warehouse value) (0-15)(days) 0 0 5 economies 3 economies Denmark, 15 (global best) (alobal best) Marshall Islands 25 (global best) Australia, Rwanda 9 Australia Korea, Rep. 14 United Kingdom United Kingdom (global best) 10 Chile Chile, Malaysia 75 Malaysia 13 Malaysia 11 OÉCD 8 South African Australia Mexico Msunduzi high income Mexico Cape Town United Kingdom 100 12 12 East Asia 7 South African Namibia, Chile Nelson Mandela Bay South Africa OFCD & Pacific ocations OECD high income **Buffalo City** average 13 high income Rwanda Namihia 11 Mangaung 3 South Africa **Buffalo City** 125 Australia average 14 BRIC Malaysia South Africa average Nelson Chile 10 Mandela Bay Mexico 15 East Asia Rwanda Ekurhuleni 5 East Asia & Pacific & Pacific East Asia & Pacific Cape Town Kenva 9 16 **Johannesburg** Kenya **OECD** Kenya Ekurhuleni United Kingdom high income eThekwini 17 8 Msunduzi Kenya Tshwane 8 Namibia 18 South Africa **Buffalo City** Namibia 200 BRIC 7 range (9 locations) South Africa 19 average 10 20 Mexico 6 250 Johannesburg, Mangaung, Nelson Mandela Bay 21 Rwanda 1 BRIC -**Tshwane** 22 275 14 RRIC 0

FIGURE 3.2 Building in South Africa is faster but requires more procedures and is more expensive than in OECD high-income economies

Note: The OECD averages are based on economy-level data for the 33 OECD high-income economies. The East Asia & Pacific averages are based on economy-level data for the 25 economies of East Asia and the Pacific. The BRIC averages are based on economy-level data for Brazil, Russia, India and China.

The nine locations benchmarked show notable differences in the efficiency of the construction permitting process.

required and the building permit application can be managed and completed online. Nevertheless, South Africa's average score on the building quality control index—12 of 15 possible points—is among the highest globally and ahead of the averages for OECD high-income and BRIC economies

The nine locations benchmarked show notable differences in the efficiency of the construction permitting process and the quality of building regulation. Obtaining construction approvals remains easiest in Cape Town—17 procedures, 88 days, 2.4% of the warehouse value and 12 points on the building quality control index (table 3.1). It is more difficult in

Tshwane and Johannesburg, where the process, even though cheaper (2.1% on average), requires three additional procedures and takes two and a half months longer.

How the process compares

Obtaining construction approvals requires between 17 and 20 procedures in South Africa. This stems from local requirements before construction. Buffalo City and Cape Town have no municipal requirements prior to submission of building plans. In these locations building plans are circulated internally by the municipality to the town planning, traffic engineering, health, wastewater, roads and stormwater

management departments for comments and stamps of approval on the plans. In Johannesburg, Mangaung, Nelson Mandela Bay and Tshwane the municipality does not circulate building plans internally across departments; instead, the applicant is responsible for getting the plans to each of the departments involved. Depending on the location, this adds three to five procedures to the preconstruction phase.

Additionally, in six locations builders need a mandatory preconstruction approval from the town planning or land use management departments. In Ekurhuleni, Johannesburg, Nelson Mandela Bay and Tshwane the builder must obtain a site development plan from the town planning department. In eThekwini and Msunduzi the land use management department must conduct "pre-scrutiny" of the plans.9

^{*}These are Mongolia, the Slovak Republic, St. Vincent and the Grenadines, Thailand and Trinidad and Tobago.

^{**}These are Luxembourg, New Zealand and the United Arab Emirates.

TABLE 3.1 Dealing with construction permits in South Africa—where is it easier?										
Location	Rank (1–9)	2018 Distance to frontier score (0–100)	2015 Distance to frontier score (0–100)	Procedures (number)	Time (days)	Cost (% of warehouse value)	Building quality control index (0-15)			
OECD high income average		75.14	75.03	12.5	154.6	1.6	11.4			
South Africa average		71.46	71.41	18.4	124.7	2.2	11.9			
East Asia & Pacific average		69.60	68.90	15.2	138.0	2.2	8.9			
BRIC average		50.29	48.49	21.7	266.1	8.3	10.0			
Cape Town (Cape Town)	1	75.48	76.19	17	88	2.4	12			
eThekwini (Durban)	2	73.65	73.67	17	117	2.2	12			
Msunduzi (Pietermaritzburg)	3	73.17	73.07	17	129	1.9	12			
Ekurhuleni (Germiston)	4	71.81	71.82	17	144	2.2	12			
Nelson Mandela Bay (Port Elizabeth)	5	71.70	71.10	20	96	2.6	12			
Buffalo City (East London)	6	71.66	71.80	18	104	2.4	11			
Mangaung (Bloemfontein)	7	71.25	71.06	20	110	2.2	12			
Johannesburg (Johannesburg)	8	68.16	67.98	20	155	2.0	12			
Tshwane (Pretoria)	9	66.25	66.04	20	179	2.2	12			

Note: Rankings are based on the average distance to frontier score (DTF) for the procedures, time and cost associated with dealing with construction permits as well as for the building quality control index. The DTF score is normalized to range from 0 to 100, with 100 representing the frontier of best practices (the higher the score, the better). The DTF score from the 2015 report includes all data revisions and methodological changes implemented since then. For more details, see the chapter "About Doing Business and Doing Business in South Africa 2018." The OECD averages are based on economy-level data for the 25 economies of East Asia and the Pacific. The BRIC averages are based on economy-level data for the 25 economies of East Asia and the Pacific. The BRIC averages are based on economy-level data for Brazil, Russia, India and China.

Despite its high number of procedures, South Africa's construction permitting process is relatively fast. The South Africa average is not only faster than the average for OECD high-income and BRIC economies but also faster than nearly 60% of the 189 other economies measured by Doing Business. However, significant differences still exist at the local level. Compared with the previous benchmarking in 2015, construction permitting is still fastest in Cape Town (88 days). This is mainly due to continued improvement of the municipality's electronic platform for submitting building plans. Meanwhile, Tshwane remains the location with the longest delays (179 days). On average in Tshwane, as in Mangaung and Johannesburg, it takes approximately two months to obtain approval of building plans due to a lack of capacity to efficiently process the volume of plans and the number of times building control departments circulate the plans internally. In Tshwane, for example, files are sometimes mislabeled, misfiled or sent to other service departments unnecessarily, thus delaying the process.

Construction regulations can help protect the public from faulty building practices. But to do so they need to be clear and thorough.

The average cost of dealing with construction permits is 2.2% of the warehouse value—ZAR 84,532 (\$6,146)—and ranges from 1.9% of the warehouse value in Msunduzi to 2.6% in Nelson Mandela Bay. Building plan approval fees are the main drivers of this variation. These fees, set by the local authorities, depend on the use of the building and its size. They comprise over a third of the total cost on average and vary across locations (figure 3.3).

Preconstruction procedure costs, such as fees to obtain geotechnical and topographical surveys of the land plot, can also amount to upwards of ZAR 37,695 (\$2,740). However, these procedures—performed by a private sector firm or private land surveyor—cost approximately the same nationwide, accounting for 45% of the total cost on average. These surveys provide information to

the civil or structural engineer to design a sound foundation system as well as the drainage and stormwater circulation systems.

Going beyond efficiency—the building quality control index

Construction regulations can help protect the public from faulty building practices. But to do so they need to be clear and thorough. Where regulations lack clarity there is a risk of confusion among both builders and authorities, which can lead to unnecessary delays and disputes. Overly complicated regulations can also increase opportunities for corruption. An analysis of the World Bank's Enterprise Survey data shows that the share of firms expecting to give gifts in exchange for construction approvals is correlated to the level of complexity and cost of dealing with construction permits.10

Mangaung ZAR 81,338 ZAR 82,258 (\$5.980) Other 1% Cape Town ZAR 92,189 **Building plans** approval 34% Johannesburg ZAR 76,664 (\$5,572) Cost of dealing with construction Type of fee, as a share Nelson Mandela Bay Geotechnical & topographical surveys 45% permits, South Africa average ZAR 98.305 of total cost across (\$7.147) ZAR 84,532 (\$6,146) South Africa (%) ZAR 72.610 **Utility-water** (\$5.279)and sewerage Buffalo City ZAR 91,966 Land use management (\$6,686) approval 2% Ekurhuleni ZAR 81,117 ZAR 84.341 (\$6.132)

FIGURE 3.3 Private sector services account for 45% of the cost of dealing with construction permits

Note: Costs are based on the assumed Doing Business warehouse, valued at ZAR 3,768,738 (\$274,000).

This new edition of *Doing Business in South Africa* continues to measure efficiency—procedures, time and cost—in construction permitting, but it now adds a measure of quality. The building quality control index assesses both quality control and safety mechanisms in six primary areas (for a maximum of 15 points): transparency and quality of building regulations (2 points); quality control before (1 point), during (3 points) and after construction (3 points); liability and insurance regimes (2 points); and professional certifications (4 points).

All South African locations except Buffalo City score 3 points shy of the maximum building quality control index score (12 of 15 points). This is higher than the averages for OECD high-income and BRIC economies, which score 11 and 10 points, respectively. Buffalo City's lower score (11 points) is mainly due to its inspection practices during construction. In this location the building inspector does not always inspect the construction work, due to staffing limitations. Instead, the municipality relies on the assurance of

the builder's professional team and the sign-off of the appointed professional to the project. Not having an external or independent inspector can affect the accountability and quality of the construction process as well as the enforcement of penalties when violations are discovered.

Across the nine locations measured, the accessibility and clarity of building regulations are on par with OECD high-income and BRIC economies (figure 3.4). National building regulations and building standards are publicly available online (1 point), though access to most of them is not free of charge. Additionally, the list of documents to be submitted, preapproval requirements for building plans and fee schedules are available online or by request via e-mail, telephone or in person (1 point).

In South Africa building control officers and plan examiners are vital to quality control before construction. These public officials verify that building plans comply with regulations before construction begins. Moreover, because building

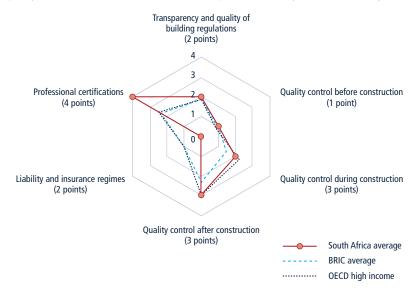
control officers head the committees approving the plans, the law requires them to be licensed engineers (1 point).

During construction, inspections in South Africa are carried out in practice by building control authorities, as seen in almost in three-quarters of economies globally (1 point). By national law, these inspections must be phased (1 point) rather than risk-based (2 points).¹²

After construction, more than 90% of global economies require either an inhouse supervising engineer, an external supervising engineer or a government agency to conduct the final inspection. South Africa is among this majority (2 points). Among the 175 economies requiring a final inspection, 25% of them rarely implement it in practice. In South Africa the final inspection is always conducted (1 point).

When structural defects are discovered during construction, they are more than likely to be remedied. But some defects can be discovered only after the building has been occupied. Remedying defects

FIGURE 3.4 Despite surpassing almost two-thirds of all economies on the building quality control index, South Africa receives no points on liability and insurance regimes



at that stage can be both costly and time-consuming. It is important that the responsible party be held liable and that the parties involved in the building design, supervision and construction obtain insurance to cover the costs of any structural defects. In South Africa the law does not specify upfront who is liable for structural defects (0 points),¹³ and there is no legal requirement to obtain a latent defect liability insurance policy to cover structural flaws in the building once it is

in use (0 points).¹⁴ In most economies the architect who designed the plans or the construction company will be held liable for any structural defects.

It is important that professionals in the construction industry have baseline technical qualifications. In South Africa both the professionals reviewing the plans and those supervising the construction on the ground are required to hold a university degree in architecture or

engineering, have a minimum number of years of practical experience, be a registered member of the national association of architects or engineers and pass a certification exam (4 points).

WHAT HAS CHANGED?

Since 2015 five municipalities have introduced improvements making construction permitting easier by reducing building plan approval times, improving electronic platforms or both. These are Cape Town, Mangaung, Msunduzi, Nelson Mandela Bay and Tshwane (table 3.2).

Mangaung and Tshwane cut the time to obtain the occupancy certificate by 17% (four days) and almost 30% (two days), respectively, while Nelson Mandela Bay reduced the time to obtain preconstruction approval of the site development plan by more than 12% (five days). In Tshwane the building control department became more efficient by training and coaching staff in processing applications faster. Similarly, a change in the management team in Mangaung has increased the administrative efficiency of the process over the last three years. Officials from Nelson Mandela Bay met with counterparts from Tshwane and Johannesburg to better understand how these municipalities organize their

Location	Overall	Reduced approval time	Streamlined procedures	Reduced fees	Improved electronic platforms
Buffalo City (East London)	×			x	
Cape Town (Cape Town)	x	✓	×	×	✓
Ekurhuleni (Germiston)	×			×	
eThekwini (Durban)	×			×	
Johannesburg (Johannesburg)	x			×	
Mangaung (Bloemfontein)	×	✓		×	
Msunduzi (Pietermaritzburg)	x			×	✓
Nelson Mandela Bay (Port Elizabeth)	x	✓		×	
Tshwane (Pretoria)	×	✓		x	

Source: Doing Business database.

Note: This table records all Doing Business improvements and changes that occurred between January 2015 and May 1, 2018.

^{✓ =} Doing Business improvement making it easier to deal with construction permits.

★ = Doing Business change making it more difficult to deal with construction permits.

workflow and identify bottlenecks. These peer-learning engagements allowed Nelson Mandela Bay to optimize its own workflow and better monitor incoming applications, with more quality control.

Thanks to the successful implementation and continuous improvement of the Development Application Management System (DAMS) platform, the time to obtain approval of building plans in Cape Town dropped by 18%, from 45 to 37 days. In Msunduzi a similar electronic platform was introduced, focusing on building plan applications that had

Not all changes made life easier for entrepreneurs. Among the main constraints to greater efficiency are the lack of a streamlined process for preapprovals and the use of inefficient paper-based systems.

already gone through the pre-scrutiny process (box 3.1). However, in Msunduzi this has yet to show a reduction in time because of other factors—chief among them the decrease in the number of staff at the building control office.

Not all changes made life easier for entrepreneurs (figure 3.5). In fact, in all

locations municipalities raised construction approval fees. In Buffalo City, Cape Town and eThekwini the magnitude of local tariff increases made business conditions worse. Building plan approval fees, along with the cost to connect to water and sewerage went up by more than half over the last three years, far exceeding the rate of inflation for the same period.

BOX 3.1 Electronic platforms for construction permitting in South Africa—the road ahead

Across South Africa many municipalities have a paper-based system to manage construction permit applications. For builders, paper submissions involve circulating files back and forth between departments. This sometimes results in document loss. In locations such as Tshwane and Johannesburg, where the municipality does not circulate building plans internally (across departments), builders and architects often have to hire a middleman or "runner" to move files through the process. This adds to the cost. Additionally, building control departments across the country are faced with overextended staff and pressure to improve service delivery.

The use of electronic platforms in construction permitting is changing the way building authorities serve the public (see figure). In the past decade *Doing Business* has recorded more than 20 improvements resulting from the introduction of a onestop shop for construction permitting. In Kisumu, Kenya, the introduction of an electronic platform in October 2015 reduced the time to deal with construction permitting by more than 14 days during its first year.^a China and India have reduced delays in dealing with construction permits by introducing electronic processing of building permit applications and centralizing preconstruction approvals.

In South Africa a few municipalities have already started the digital transformation journey. Of the locations measured, Cape Town has the fastest construction permitting process. There, builders have direct access to a single electronic platform where they can submit and track their building plan applications. Building plans are circulated internally by the municipality through a Development Application Management System (DAMS).^b Comments from relevant departments are obtained simultaneously during the electronic "circulation" workflow stage. All requirements from relevant departments are consolidated in



a. This electronic platform was the result of a cooperation agreement signed in March 2014 between Kisumu County and the World Bank Group through the Kenya Investment Climate Program II (KICP II), funded by the Dutch government and aid from the U.K. government.

b. Cape Town's electronic platform is available at https://eservices.capetown.gov.za/irj/portal/.

BOX 3.1 Electronic platforms for construction permitting in South Africa—the road ahead (continued)

the letter of decision and sent to the applicant, also electronically, speeding up the building plan approval process and ensuring its overall efficiency. Msunduzi has undertaken a similar project. Once an application has been accepted by the building control department, the application is then processed for approval on the ENGAGE System (the building plan management software). Although this platform does not give the builder direct access, it does allow the municipality to easily track the application. This ensures that all steps—including the plan review, inspections and final approval—are coordinated. However, due to staff departures and retirements over the past two years (among plan examiners and building inspectors), the use of an electronic platform has not led to major reductions in time delays.

Improvement and replication of an efficient electronic platform in other South African municipalities would not only reduce the overall complexity associated with the approval of building plans but would also reduce opportunities for corruption by decreasing the number of human interactions. To reap the benefits of going electronic, municipalities will need to ensure that they maintain the requisite capacity to manage workloads, train staff on how to use new systems and enforce time limits. More specifically, building control officers, plan examiners and building inspectors need to be trained to use new software and other tools. On-the-job training prevents delays caused by poor institutional capacity to review building documents or carry out on-site inspections. Additionally, having an upto-date zoning masterplan and integration with the geographic information system increases the overall transparency of the system and may make some procedures (such as preliminary clearances from utilities) redundant and thus unnecessary.

Municipalities like Nelson Mandela Bay, Johannesburg, Buffalo City and eThekwini have already shown interest in these technologies, but further exchanges, peer-to-peer learning events and cost-benefit analysis—accompanied by willingness and commitment at the municipal management level—will need to follow if implementation is to be successful.

Some local initiatives also made the process more burdensome. Cape Town now requires the approval of a waste integrated plan as a mandatory preconstruction procedure. This requirement was introduced through a 2016 bylaw as part of the municipal environmental agenda to minimize the waste going to landfills by making sure construction waste is recycled in the correct facilities. The addition of this procedure

as a separate requirement—versus part of the approval process, as in other locations—has contributed to a drop in Cape Town's overall performance in efficiency to below the average for OECD high-income economies. In 2016 Mangaung introduced a fee of ZAR 5,500 (\$400) to obtain an occupancy certificate, becoming the only municipality measured to charge a fee for this procedure.

FIGURE 3.5 Cost increases and a large number of procedures are making dealing with construction permits less efficient

Average distance to frontier score for the efficiency of dealing with construction permits (procedures, time and cost*)



Source: Doing Business database.

Note: The figure illustrates the change in each location's average distance to frontier score (DTF) for procedures, time and cost to deal with construction permits, between 2015 and 2018. The DTF score shows how far a location is from the best performance achieved by any economy on the dealing with construction permits indicator. The DTF score is normalized to range from 0 to 100, with 100 representing the frontier of best practices (the higher the score, the better). For more information, see the chapter "About Doing Business and Doing Business in South Africa 2018" and the data notes. The OECD averages are based on economy-level data for the 33 OECD high-income economies. The East Asia & Pacific averages are based on economy-level data for the 25 economies of East Asia and the Pacific.

WHAT CAN BE IMPROVED?

Making the process of dealing with construction permits easier has several benefits. First, economies with simpler procedures and less costly regimes have larger construction industries. Second, reducing the cost and hassle of obtaining construction approvals keeps more construction in the formal economy, therefore improving public safety. Finally, a simpler and faster building approval process benefits both the public and private sectors. A study in the United States shows that accelerating permit approvals by three months could increase a local government's property-tax revenue by 16% and overall construction spending by 5.7%,15 expanding the benefits of increased construction activity to the rest of the economy.

While some South African localities—such as Cape Town and eThekwini—stand out in the process of construction permitting when compared with BRIC or OECD high-income economies, other lagging localities show different strengths in managing construction permitting. This means that there is room to improve and learn from other locations.

^{*}For the cost DTF score, this figure uses the same income per capita for both years.

The following list of recommendations is based on good practices both within South Africa and from other economies around the world and points to potential ways to introduce those improvements.

Consider differentiating projects by risk and introducing risk-based inspections

Categorizing building projects based on risk and adopting risk-based inspections can streamline preconstruction approvals and procedures during construction for low-risk buildings and allow municipalities to better allocate resources. Yet in South Africa the building plan approval process does not differentiate by a construction project's size or its level of risk to public safety. All projects are subject to the same level of scrutiny, regardless of complexity. This may cause delays as well as an inefficient use of resources, especially where projects are relatively simple and routine.

It also makes the inspection process inefficient. In South Africa inspections occur during specific phases of construction, regardless of a building's size, location or intended purpose. Phased inspection requires that authorities have enough resources to inspect buildings at each phase. When all projects are subject to the same stringent regime, resources are more likely to be strained. For example, in Buffalo City the phased inspections do not always occur in practice, due to an insufficient number of inspectors. This can lead to missed, hurried or incomplete inspections.

Though many risk-based inspection systems include a minimum number of phased inspections for all buildings, they typically give priority to buildings with high risks, such as environmental risks. Having fewer inspections for less risky buildings lowers costs without compromising safety. This increases flexibility and enables inspectors to move away from random and phased inspections. For example, the United Kingdom has defined key stages of inspections for all

Streamlining preconstruction clearances by improving coordination and consolidating procedures is a key factor in making the construction permitting process more efficient.

buildings, plus additional inspections based on the building's risk level. Highrisk sites must undergo extra inspections. The assessment is adjusted accordingly during construction.

To set up a risk-based inspection system, South Africa should develop a detailed system to categorize building risks, based on several criteria, including building classification, nature of use and occupancy. Classifying and assessing buildings is important for determining the frequency of inspections. Because not all buildings are similar in terms of risk levels, an understanding of risks associated with distinct types of buildings is essential.

Differentiating projects by risk can also allow municipal departments to allocate more resources to riskier projects while maintaining required levels of inspections for low-risk projects. Departments involved in issuing building plan approvals could assess the actual costs of reviewing plans and conducting inspections and calculate fee rates accordingly. Additional brackets could be added based on risk categories. This way, larger projects with more substantial building fees could subsidize smaller ones. In economies that have adopted good practices in this area, building approval fees are generally set to recover the costs of the service provided and may vary depending on the size or complexity of the project. This approach can also be applied to inspections.

Introducing risk-based categories is challenging. Among the many prerequisites are: sound legislation, accurate categorization of buildings, effective agencies with sufficient resources and well-trained workers with legal mandates to conduct inspections. Economies that have successfully implemented such systems have seen more efficient inspections of

their construction industries without compromising the safety of workers, the public or buildings.

Increase efficiency by improving coordination, consolidating procedures and implementing electronic platforms

Streamlining preconstruction clearances is a key factor in making the construction permitting process more efficient. In South Africa builders must complete five more steps than in the average OECD high-income economy and the average economy in East Asia and the Pacific.

In locations such as Johannesburg. Mangaung, Nelson Mandela Bay and Tshwane the applicant must take the plans to the different municipal departments (such as water and sanitation. fire, roads and stormwater, and energy) to obtain their comments. One way to simplify this process is by establishing one-stop shops. Today, more than 37 economies around the world have a onestop shop for construction permitting. Serbia made it mandatory to request a building permit online through the e-permit system. Singapore introduced the CORENET (Construction and Real Estate Network) electronic submission system in 2013. This has streamlined the process for building professionals to request and obtain several approvals from different authorities. Obtaining approvals for building and fire safety plans, commencement permits, environmental and parking clearances, and workplace safety and health notifications are among the services that can be done through CORENET. However, the success of onestop shops hinges on efficient coordination among all departments involved and often requires comprehensive legislation that ensures information-sharing and establishes oversight mechanisms. In

early 2017 Lagos, Nigeria, expanded its electronic platform to the public by introducing an electronic title search at the Lagos State Land Registry. As a result, the local authority eliminated the need to obtain an affidavit from a commissioner of oath for title search, which used to be a required document when applying for a development permit. This reform reduced the number of procedures and improved coordination among local authorities.

In the initial phase, South African municipalities with a paper-based approach can start by streamlining procedures and processes. Analyzing the workflow to eliminate redundancies and identifying bottlenecks can lead to better monitoring of incoming applications. These steps, combined with a risk-based approach, can reduce approval times without compromising safety. In the longer term, municipalities can start implementing electronic platforms, which allow them to use a computerized workflow system across key departments, and gradually open the system to integrating more services in the permitting process. However, building control authorities should balance the costs and benefits of going electronic. To determine cost effectiveness, having solid statistics—showing the number of building plans reviewed, inspections conducted and certificates of occupancy granted—can help a building control department identify where and when problems occur. Analyzing these statistics can facilitate an understanding of how an electronic platform can bring significant benefits in quality, provide better service, reduce staff time and improve coordination with other municipal departments.

Smaller South African municipalities, where the cost of going electronic may not be justified, could follow Lithuania's example. The Vilnius municipality acts as a one-stop shop that collects information from different departments on behalf of the applicant. The builder submits only one consolidated form to the municipality requesting the "Special Architectural

Requirements," which are the technical conditions needed to prepare the design documentation. The municipality gathers these technical requirements from all departments, then gives them to the builder. This approach can significantly reduce preconstruction procedures and ease the applicant's burden of having to circulate building plans.

Introduce stringent liability and insurance regimes for latent defects

While builders and architects in South Africa are held liable for structural flaws or problems in the building, liability coverage is not required by law but is addressed through a contract between parties. Additionally, there is no legal requirement for any party to obtain a 10-year liability insurance policy to cover structural defects in the building once it is in use, nor do most parties obtain such insurance in practice. Liability regimes should be coupled with a compulsory insurance system for owners, designers and contractors. Liability and insurance regimes are crucial in the construction sector because they ensure the accountability of practitioners and the enforcement agencies themselves. Available insurance systems also contribute to a restitution mechanism for an aggrieved party or plaintiff. In France government legislation has established an insurancedriven building control process. The result has been a construction regulation system that functions with very minimal state involvement and a largely simple and straightforward permitting process.

Contract and tort laws may specify a warranty period for the liability—a period that can be extended for an additional cost to the owner (if the builder pays an additional premium to the insurance company). In Belize, New Zealand and the United Kingdom, for example, the warranty period can range from one to three years after the building is completed. During this time the building contractor must repair any defects. Contractors commonly hold insurance

to cover these costs even if not required to do so by law. In other economies, however, liability is generally shared by the contractor and the architect, often for 10 years. In Australia, for example, both the contractor and the architect must have insurance for 10 years. But even among high-income economies, very few make this insurance mandatory. In more than 60% of economies, the architect who designed the plans or the construction company will be held liable for any defects, but not the supervising engineer or the agency that conducted inspections during construction. In most cases the question of who is held liable depends on the origin of the defect. For example, if the defect was a result of an error at the design stage, the architect is usually held liable.

Having insurance to cover costs that arise from structural defects benefits all parties involved, from clients to contractors. It ensures that damages will be covered if defects occur once the building has been occupied—and gives parties assurance that they are protected, which can encourage more construction. Having insurance to protect against excessive costs from potential damages can be particularly important for small and medium-size construction companies.

Involve private sector professionals in the construction permitting process

Partnering with the private sector to supplement municipalities' strained capacity to oversee building design, control and inspections can make the construction permitting process faster and more efficient. The South African locations where the process takes the longest—such as Ekurhuleni, Johannesburg and Tshwane could reap numerous benefits if private sector involvement were carefully implemented within a coherent regulatory framework. Most EU member economies have made a complete shift from public to private governance mechanisms in building regulation, reflecting a desire to improve the quality of regulation,

reduce the administrative burden for applicants and support a greater focus on risk mitigation.¹⁶ Japan established a successful regulatory system that relies on third-party checks, thereby increasing its capacity to detect deficiencies in building design and construction. The former Yugoslav Republic of Macedonia initiated sweeping construction reforms in 2007/08, mandating the use of private engineers licensed by the Chamber of Engineers to undertake independent building plan reviews. Since then, FYR Macedonia has seen significant improvements in the efficiency of construction as measured by Doing Business.

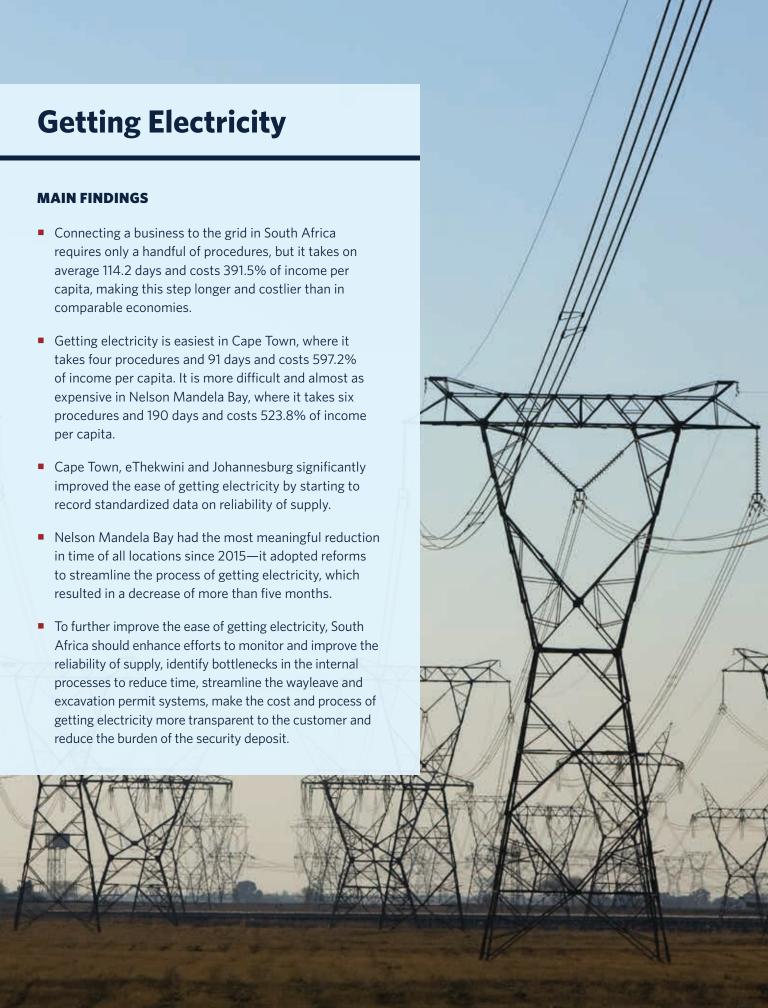
For the private sector to successfully assume such an important regulatory role, a robust vetting system should be in place. Private third-party entities carrying out controls on construction are entrusted to promote compliance with building codes and regulations and enforce rigorous safeguards in favor of the public interest. To do so, public agencies could enforce professional certification criteria to ensure that individuals and firms are eligible to take on a regulatory mandate. This is important because individuals and firms with poor qualifications would undermine the objective of such a regulatory mechanism, as the quality of service provided by these professionals would fail to meet required safety standards.

However, third-party inspections may cost more. Doing Business data show that hiring a qualified third-party professional on construction projects raises the cost of regulatory compliance by 1.3% on average in upper-middle-income economies. The trade-off in economies with lower prices is that regulatory compliance takes longer than in those economies with third-party involvement. Municipalities in South Africa should take into consideration the cost-benefit tradeoff when deciding whether to delegate some of their functions. Many economies with well-developed construction industries have successfully implemented some level of collaboration with licensed private building professionals to reduce public controls. Austria and Germany use qualified professionals for plan reviews and inspections. Austria, Australia, Canada, Germany, Japan, New Zealand, Singapore and the United Kingdom allow private professionals to conduct inspections.

NOTES

- PricewaterhouseCoopers in South Africa. 2016. "SA construction, 4th edition: Highlighting trends in the South African construction industry."
- National Planning Commission. 2012.
 "National Development Plan 2030: Our future
 -make it work."
- Hamman, Sonia. 2014. "Housing Matters." World Bank Policy Research Working Paper 6876. Washington, DC: World Bank.
- 4. The National Building Regulations and Building Standards Act (Act No. 103 of 1977). The act, which has been amended several times since 1977, establishes the national regulatory framework for construction activity in South Africa. Relatively general in format, this national building code relies on the South African National Standards (SANS-10400), which provide a code of practice for the application of the national building regulations and cover the technical aspects of construction. These standards are published by the South African Bureau of Standards (SABS).
- 5. Additional documents may be requested if deemed necessary by the local municipality to comply with the town planning scheme. An example of this is the site development plan (SDP). If the zoning certificate stipulates that an SDP must be approved prior to the commencement of building work, then approval of the SDP must be obtained before submission of the building plans.
- Although zoning requirements may already be met after a township has been established on a farm property, an unoccupied parcel may be unstable due to underlying dolomite or undermined land. In South Africa it is common practice to obtain an in-depth geotechnical and topographical survey of the land plot. The geotechnical survey will provide information on the ground's load-bearing capacity and stability. This information is used by the appointed civil or structural engineer to design an economical and technically sound foundation system. A large-scale topographical survey will show the main physical features of the ground and provide accurate details about the changes in levels (elevation or vertical height) and the layout contour lines and limitations of the land plot. These details are needed to design the drainage and stormwater circulation systems.
- 7. These certificates of compliance may include: electrical wiring and other electrical

- installations; the structural system; fire protection and fire installation systems; plumbing, drainage and sewerage works; and any other certificates deemed necessary by the local authority (for example, roof truss, gas and glazing).
- 8. In Buffalo City and Cape Town the builder can meet with the municipal town planning authority to ensure that the project complies with the town planning regulations. This pre-application consultation, although not mandatory, is a customary practice for new builders because it helps them ensure a streamlined building plan submission process.
- 9. Like the site development plan, the prescrutiny stage in these municipalities serves to evaluate the building plans in terms of the relevant development controls under the land use scheme and to ensure compliance with the town planning scheme. In eThekwini this stage is known as a pre-assessment plan, and in Msunduzi it takes the form of a pre-scrutiny inspection by both the land survey and town planning departments.
- World Bank. 2009. Doing Business 2010: Reforming through difficult times. Washington, DC: World Bank Group.
- The National Building Regulations and Building Standards Act (Act No. 103 of 1977) is available free of charge at http://www.nrcs.org.za. The associated regulations (Building Standards SANS 10400-parts A to X) are available online but for purchase only at https://www.sabs.co.za.
- 12. A score of 2 is assigned for one of the following options: a government agency, in-house supervising engineer, external supervising engineer or external inspections firm is legally mandated to oversee construction of the building throughout the entire construction period, or risk-based inspections are legally mandated.
- 13. To score a point on this section, the law must explicitly hold a party liable. It cannot be determined by a court or contract as in South Africa. In South Africa the parties held liable are determined by a contract, usually done by the Joint Building Contracts Committee.
- 14. The liability insurance section of the building quality control index does not take into consideration professional insurance, which is legally mandated in most countries—as in South Africa. That generally applies only to what happened on the construction site during the construction phase and does not extend past construction.
- PricewaterhouseCoopers. 2005. "The Economic Impact of Accelerating Permitting Process of Local Development and Government Revenues." Report prepared for the American Institute of Architects, Washington, DC.
- 16. Visscher, Henk, and Frits Meijer. 2005. "Certification of Building Control in the Netherlands." OTB Research Institute for Housing, Urban and Mobility Studies. Delft university of Technology, The Netherlands.



he impact of electrification on education, labor and income is well-documented. In fact, estimates suggest that the electrification of a household leads to average increases of around 7% in school enrollment, 25% in employment and 30% in incomes. From a business perspective, a country's electricity supply is one of the elements that

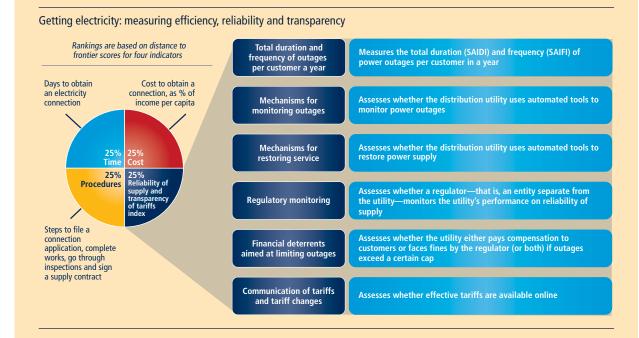
has the strongest impact on company productivity.² It is estimated that a weak power infrastructure in Sub-Saharan Africa drags down economic growth by about 2 percentage points per year.³ Moreover, studies suggest that firms perform better in terms of sales in countries where it is easier and less costly to get an electricity connection.⁴

While in some countries the time to connect to the grid is as short as 10 days, in others it can take over a year. The efficiency of the process of getting electricity, however, is only one part of the equation. Equally important is what happens once the business is connected to the grid, as outages may occur or electricity consumption may be prohibitively expensive.

WHAT DOES GETTING ELECTRICITY MEASURE?

Doing Business records all procedures required for a business to obtain a permanent electricity connection and supply for a standardized warehouse. These procedures include applications and contracts with electricity utilities, all necessary inspections and clearances from the distribution utility and other agencies, and the external and final connection works. To make the data comparable across locations, several assumptions about the warehouse and the electricity connection are used. The location of the warehouse is assumed to be within city limits, the subscribed capacity of the connection is 140 kilovolt-ampere (kVA) and the length of the connection is 150 meters.

In 2015 *Doing Business* started measuring how reliable the supply of electricity is and how transparent the consumption tariffs are. The reliability of supply and transparency of tariffs index encompasses quantitative data on the duration and frequency of power outages as well as qualitative information on several aspects: the mechanisms put in place by the utility for monitoring power outages and restoring power supply, the reporting relationship between the utility and the regulator for power outages, the transparency and accessibility of tariffs and whether the utility faces a financial deterrent aimed at limiting outages. The index accounts for one-fourth of the distance to frontier score for getting electricity (see figure). In addition, *Doing Business* records the price of electricity in each location covered.^a



a. While Doing Business records the price of electricity, it does not include these data when calculating the distance to frontier score or the ranking on the ease of getting electricity.

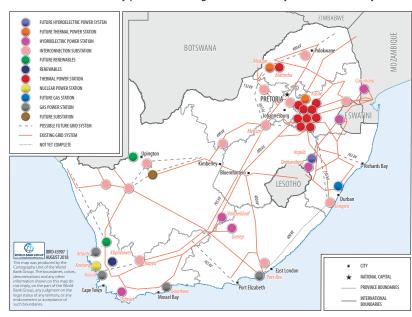
Research shows that power outages have a negative impact on the production efficiency of firms in Sub-Saharan Africa. The impact is particularly hard on small and medium enterprises (SMEs) because they typically lack resources to buy generators. Data from World Bank Enterprise Surveys show that 38% of SMEs in developing countries own a generator, as opposed to 60% for larger firms.

In South Africa unreliable electricity supply was one of several domestic factors contributing to the economy's poor growth over the past few years.7 As the South African economy thrived following democratization in 1994, electricity demand increased. But the electricity supply did not keep pace with the demand, which eventually resulted in an energy crisis in 2008. Reserve supply margin dropped from 25% in 2004 to 8% in 2008, and load shedding was a widespread practice to reduce the strain on the electricity grid.8 Since then there has been significant improvement in the country's reliability of supply. Nevertheless, risks continue in 2018, with coal shortages and industrial labor actions threatening to affect the reliability of electricity supply and hurt business.

HOW DOES GETTING ELECTRICITY WORK IN SOUTH AFRICA?

Electricity services in South Africa are governed by an expansive regulatory framework.9 The National Energy Regulator of South Africa (NERSA)10 is responsible for regulating electricity.¹¹ NERSA issues licenses with terms and conditions for generation, transmission and distribution.¹² Eskom, a state-owned electricity company, generates and transmits roughly 95% of South African electricity.¹³ The remaining 5% is produced by independent power suppliers or small municipal generators.14 Electricity is produced by over 20 power stations currently in operation, and coal accounts for almost 83% of power generation in

FIGURE 4.1 Over twenty power stations generate electricity across the country



Source: Eskom (May 2018).

the country (figure 4.1). The current rate of access to electricity in South Africa is 84.2%. Access is much lower in rural areas (67.9%) than in cities (92.9%).¹⁵

Electricity distribution is a shared undertaking: South African municipalities handle most of the urban distribution, while Eskom distributes power primarily to rural areas and smaller cities. In each of the nine locations benchmarked, a different distribution utility is measured. All the distribution utilities covered purchase electricity from Eskom and negotiate the tariffs annually with that company under NERSA's supervision. Distribution utilities are governed by municipal bylaws that typically provide step-by-step descriptions of how the process of getting electricity should work, the documents required for the application and the responsibilities of utilities and customers.

The process of obtaining a permanent electricity connection is generally the

same throughout the measured locations. There are three common procedures to connect to the grid in South Africa. A few additional intermediary steps apply, depending on the location (figure 4.2).

First, the customer submits an application to the distribution utility for a new electricity connection. In Cape Town, Ekurhuleni, eThekwini, Mangaung, Nelson Mandela Bay and Tshwane the application forms can be downloaded online. Although almost all the municipalities measured accept applications via e-mail, customers usually submit the application to the utility in hard copy.¹⁶

Second, the utility prepares the project design for the external connection and issues a connection fee estimate stating the costs for material, labor and network charges. These costs vary among locations. The issuance of a connection fee estimate is usually preceded by an external site inspection by the utility's planner.

The process of obtaining a permanent electricity connection is generally the same throughout the measured locations.

FIGURE 4.2 Getting a permanent electricity connection in South Africa takes four to six procedures

Submit an application for electricity connection to distribution utility and obtain connection fee estimate

Await external site inspection by distribution utility*

Await utility's inspection of meter box/circuit breaker

Await completion of external connection works by distribution utility

Open customer account, sign supply contract with distribution utility and submit proof of payment of security deposit

Obtain certificate of compliance (COC) for the internal wiring and submit to distribution utility to obtain final connection

Distribution utility
 Customer's electrical engineer/
consultant/contractor

❖ Procedure present in all locations

Source: Doing Business database.

In some locations the utility requires the customer to install a meter box, a step that would be followed by another inspection by the utility. In Johannesburg the procedures are slightly different. Instead of inspecting the meter box, the utility performs a "trip test" in the circuit breaker and schedules a "kickoff" meeting with all stakeholders before connection works can start.¹⁷

As a following general step, the customer submits proof of payment of the connection costs and awaits the completion of external connection works by the distribution utility. South African distribution utilities are responsible for the external connection works up to the customer's boundary—including the meter installation. The internal wiring up to the meter box is the customer's responsibility. In all locations except Johannesburg and Cape Town, the customer is required to sign a supply contract with the distribution utility for billing purposes.¹⁸

Finally, once the connection works are completed, the customer's electrical contractor tests the internal wiring and issues a certificate of compliance (COC). As a globally recognized good practice, South Africa ensures safety by regulating the electrical profession and establishing clear liability arrangements for electrical contractors. It

is a statutory requirement for every user or lessor of an electrical installation to have a valid COC for every such installation; this must be signed by a licensed electrical contractor registered with the Department of Labour.¹⁹ Submission of a copy of the COC to the distribution utility is usually the last procedure, after which the power is switched on.

On average across South Africa, getting electricity takes five procedures lasting 114.2 days and costs 391.5% of income per capita. The number of steps is comparable to OECD high-income economies (4.7) and outperforms Mexico (6.8) and Nigeria (10). However, connecting a business to the grid in South Africa takes a month longer and is three times costlier than in the BRIC economies (Brazil, the Russian Federation, India and China), where it takes 84.1 days and costs 137.2% of income per capita on average (figure 4.3). On the reliability of supply and transparency of tariffs index, South Africa has a notably lower average score (1.6 points) than BRIC (6.6 points) and OECD high-income economies (7.4 points).

Getting electricity is easiest in Cape Town, where it takes four procedures and 91 days and costs 597.2% of income per capita (table 4.1). It is more difficult in Nelson Mandela Bay, where it takes six procedures and 190 days and costs 523.8% of income per capita.

How the process compares

Differences among locations depend largely on whether inspections are required. The process of getting electricity is simpler in Cape Town and Mangaung, with only four procedures. It is more complex in Ekurhuleni, Msunduzi, Nelson Mandela Bay and Tshwane, where six steps are required. In these locations the distribution utility typically carries out two inspections: an external site inspection before the connection fee estimate is issued and a meter box inspection before the connection works begin. In Ekurhuleni and Tshwane the utility performs a third inspection to test the voltage after the connection works are finalized and the meter is installed.

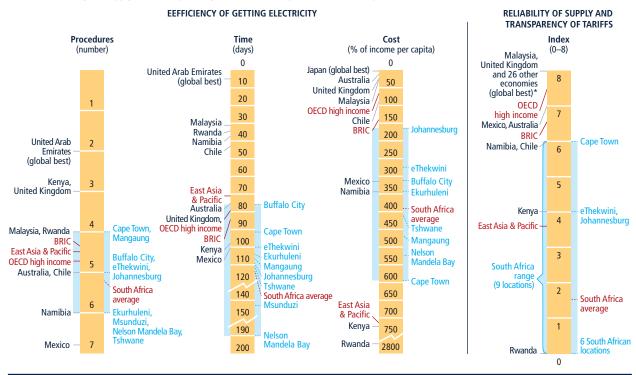
More inspections imply more procedures, which means a longer time to obtain a connection (figure 4.4). While inspections of internal wiring and meter boxes are important in the South African context for safety concerns, they could happen with minimal customer engagement. Locations where utilities perform two or more inspections have longer delays—on average, almost two months longer—than places where there are no inspections or only one.

The time it takes to connect a business to the grid varies substantially across the nine locations measured. Buffalo City remains the fastest place to obtain an electricity connection in South Africa, taking 76 days—faster than the United Kingdom (79 days) and Kenya (97 days). Nelson

Locations where utilities perform two or more inspections have longer delays—on average, almost two months longer—than places where there are no inspections or only one.

^{*} Procedure usually happens simultaneously with the previous one.

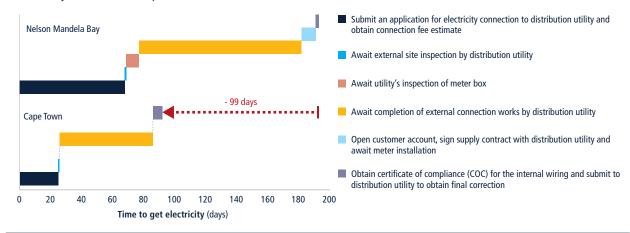
FIGURE 4.3 Getting electricity in South Africa requires the same number of steps as in OECD high-income economies, but the cost and the reliability of supply and transparency of tariffs index put them worlds apart



Note: The OECD averages are based on economy-level data for the 33 OECD high-income economies. The East Asia & Pacific averages are based on economy-level data for the 25 economies of East Asia and the Pacific. The BRIC averages are based on economy-level data for Brazil, Russia, India and China.

*These are Belarus; Belgium; Costa Rica; Cyprus; the Czech Republic; Estonia; Finland; France; Germany; Hong Kong SAR, China; Ireland; Japan; Kazakhstan; Republic of Korea; Lithuania; the Netherlands; Panama; Portugal; the Russian Federation; the Slovak Republic; Slovenia; Spain; Sweden; Taiwan, China; the United Arab Emirates; and Uzbekistan.

FIGURE 4.4 Obtaining a new connection takes two more procedures and almost 100 days longer for an entrepreneur in Nelson Mandela Bay than for one in Cape Town



Source: Doing Business database.

Mandela Bay remains the slowest, at 190 days. On average, South African businesses wait almost a month longer to connect to the grid than their BRIC counterparts.

Delays affecting the total time are related to the issuance of a connection fee estimate (which takes about one-third of the total time) and the completion of external

connection works by the distribution utility (more than half of the total time) (figure 4.5). In Cape Town, Ekurhuleni, eThekwini and Johannesburg delays

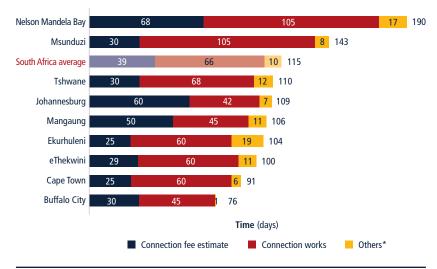
TABLE 4.1 Getting electricity in South Africa—where is it easier? Reliability of 2018 2015 supply and Distance to Distance to Cost transparency of (% of income Rank frontier score frontier score **Procedures** Time tariffs index Location (1 - 9)(0-100)(0-100)(number) per capita) (days) (0 - 8)OECD high income average 84.44 83.60 4.7 79.1 63.0 7.4 BRIC average 82.33 74.60 4.4 84.1 137.2 6.6 72.23 4.5 71.6 712.0 3.7 East Asia & Pacific average 68 81 58.92 South Africa average 52.05 5.2 114 2 3915 1.6 Cape Town (Cape Town) 1 79.81 60.27 4 91 597.2 6 5 eThekwini (Durban) 2 69.40 57.52 100 277.2 4 5 Johannesburg (Johannesburg) 3 68.77 41.81 109 165.4 4 Mangaung (Bloemfontein) 4 59.82 62.59 4 106 468.2 0 Buffalo City (East London) 5 59.40 59.47 5 313.0 0 76 Ekurhuleni (Germiston) 6 52.09 52.35 6 104 343.4 0 Tshwane (Pretoria) 7 51 24 51.24 6 110 407 0 0 Msunduzi (Pietermaritzburg) 8 47.59 47.54 6 143 428.5 0 Nelson Mandela Bay (Port Elizabeth) 9 42.19 35.69 6 190 523.8 0

Note: Rankings are based on the average distance to frontier score (DTF) for the procedures, time and cost associated with getting electricity as well as for the reliability of supply and transparency of tariffs index. The DTF score is normalized to range from 0 to 100, with 100 representing the frontier of best practices (the higher the score, the better). The DTF score from the 2015 report includes all data revisions and methodological changes implemented since then. For more details, see the chapter "About *Doing Business and Doing Business in South Africa 2018.*" Locations that do not use the SAIDI and SAIFI benchmarks to calculate outages are ineligible to score on the reliability of supply and transparency of tariffs index and thus receive 0 points on this indicator component. The OECD averages are based on economy-level data for the 33 OECD high-income economies. The East Asia & Pacific averages are based on economy-level data for the 25 economies of East Asia and the Pacific. The BRIC averages are based on economy-level data for Brazil, Russia, India and China.

in the connection works are related to obtaining wayleaves and excavation permits from municipal departments and agencies as well as from relevant utilities and other service providers that may already have underground infrastructure

in the vicinity.²⁰ Connection works cannot start before wayleaves are issued—these agreements establish rights of access while the work is being done—and the wayleave application process can take from a week to several months.

FIGURE 4.5 South African utilities take an average of 39 days to issue a connection fee estimate and 66 days to complete external connection works



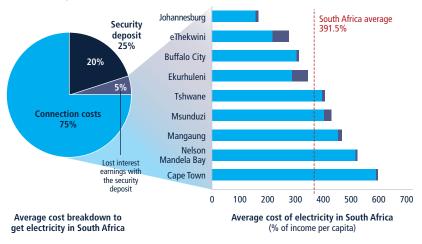
Source: Doing Business database.

The cost to get electricity in South Africa ranges from 165.4% of income per capita in Johannesburg to 597.2% in Cape Town (figure 4.6). This is much higher than in the Russian Federation and Brazil, for instance, where connection costs amount to 41.5% and 54.5% of income per capita, respectively. Two main reasons account for the variation in cost: the requirement for installation or upgrade of a minisubstation or transformer, and the amount of security deposit charged by the utility.

Connecting the *Doing Business* warehouse to the grid in the industrial areas measured requires the installation of a mini-substation or transformer in all the benchmarked locations except eThekwini and Johannesburg. The cost associated with a transformer tends to significantly increase the total cost to connect to the grid. However, distribution utilities in South Africa subsidize the cost, which means that an entrepreneur does not have to pay the full price of a minisubstation when a network extension is required. Rather, this cost is prorated to the capacity of the warehouse and embedded in the connection fee estimate.

^{*&}quot;Others" include inspections and the signing of a supply contract with the distribution utility.

FIGURE 4.6 A firm pays four times more to connect to the grid in Cape Town than in Johannesburg



Note: Doing Business does not record the full amount of the security deposit. Instead, it records the present value of the losses in interest earnings experienced by the customer because the utility holds the security deposit over a prolonged period, in most cases until the end of the contract (assumed to be after five years). For more details, see the data notes

As in half of the 190 economies measured by Doing Business in 2016/17, entrepreneurs in South Africa bear the cost of a security deposit. Security deposits are charged to safeguard utilities against non-payment and are usually paid by the customer before the supply contract is signed. Across the locations measured, security deposits comprise almost a quarter of the total cost to get electricity. They range from 2.8% of the total cost in Cape Town to 31.9% in Ekurhuleni, and the method for calculating the deposit also varies across locations.21 To reduce the burden on customers, Buffalo City, Mangaung and Tshwane accept a bank guarantee to settle the security deposit.

In addition to the cost to obtain a new connection and the security deposit, the entrepreneur must pay for electricity consumption. Monthly electricity prices vary significantly across South African locations,²² ranging from 9.8 U.S. cents per kilowatt-hour in Cape Town to 15.7 cents in Johannesburg (figure 4.7). On average across the nine locations measured, the monthly consumption cost is 13 cents per kilowatt-hour in South Africa. This is slightly cheaper than the average for BRIC economies (13.8 cents)

but almost double the cost in Mexico (6.5 cents).

Going beyond efficiency the reliability of supply and transparency of tariffs index

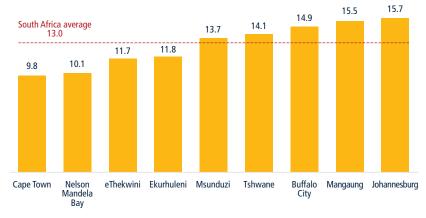
The reliability of supply and transparency of tariffs index measures the quality of electricity services provided by distribution utilities and suppliers (box 4.1). It looks at stability in power distribution as

well as clarity in the information provided by the supplier on consumption costs. The scoring is based on six components, for a total of 8 possible points. The first five components relate to power outages: total duration and frequency of outages per customer per year (3 points), mechanisms for monitoring outages (1), mechanisms for restoring service (1), regulatory monitoring (1) and financial deterrents aimed at limiting outages (1). The sixth component relates to the transparency of electricity tariffs (1 point).

Scoring 6 points, Cape Town has the best performance on this index, followed by eThekwini and Johannesburg, which both score 4 points. Buffalo City, Ekurhuleni, Mangaung, Msunduzi, Nelson Mandela Bay and Tshwane do not score any points on the reliability of supply and transparency of tariffs index (table 4.2). The discrepancy lies in how reliability is measured. Data related to the duration and frequency of power outages are calculated by the system average interruption duration index (SAIDI) and the system average interruption frequency index (SAIFI). If the municipality does not calculate SAIDI and SAIFI (as defined by the Doing Business methodology), it receives a score of 0 on the overall index, even if it would otherwise score points on other components.

FIGURE 4.7 A firm in Johannesburg pays nearly two-thirds more for monthly consumption than a firm in Cape Town

Price of electricity (U.S. cents per kilowatt-hour)



Source: Doing Business database.

BOX 4.1 Measuring reliability of supply—why does it matter?

Distribution system reliability is "the ability of the distribution system to perform its function under stated conditions for a given period of time without failure." This is vital for any type of business. Unreliable distribution systems adversely affect productivity, investments and competitive potential. Moreover, domestic and foreign capital tends to go to countries that can offer a reliable supply of electricity. It is not by chance that unreliable electricity service is identified as a major obstacle by nearly a third of firms surveyed globally.^c

To assess whether a distribution system is reliable or not, data on duration and frequency of power interruptions must be gathered. Collecting data is the first step to identifying bottlenecks and gaps in system reliability. It provides important input for strategic development and remedial action. Measuring outages allows utilities to recognize problem areas in electric power systems and solve them, improving reliability of supply for the small and medium-size businesses they serve.

The two benchmarks commonly used to calculate outages—SAIDI (system average interruption duration index) and SAIFI (system average interruption frequency index)—are standardized key performance indicators developed by the Institute of Electrical and Electronic Engineers Power & Energy Society.^d This standard is used around the world to quantitatively measure distribution reliability. In addition to estimating interruptions by distribution systems, substations, circuits and defined regions, SAIDI and SAIFI allow an assessment of power outages from the customer's perspective.

Because SAIDI and SAIFI are measured by more than 120 economies around the world and require simple variables to be interpreted, they allow utilities to compare performance with one another locally and globally. They also compel utilities to look at reliability from an equity perspective. First, the indices reflect the perspective of the average customer. Both large companies and small households have equal weight in the calculation. Second, they require mapping of all customers for the different feeders across the network. Therefore, they help identify where reliability is a big issue—which is often outside the main industrial areas.

Finally, research shows that economies where SAIDI and SAIFI data are not available have more power outages on average and significantly less reliable service. The Lao People's Democratic Republic and Oman are examples of countries that reduced power outages once they began tracking SAIDI and SAIFI. One likely reason is that authorities can now see where outages are most common at the feeder-station level. From there, they can target their investments to improve power network reliability in those areas.

All benchmarked municipalities have supervisory control and data acquisition (SCADA) systems for monitoring outages and restoring service. A SCADA system improves reliability of supply because it helps utilities detect a power outage and take action automatically and remotely—which reduces the average interruption time.

Concerning regulatory monitoring, the National Energy Regulator of South Africa has the duty to monitor a utility's performance on reliability of supply. NERSA requires every utility to annually submit electricity distribution forms (D-Forms), which measure mediumand high-voltage forced interruption statistics.²³ It also recommends that utilities maintain their own records and keep track of data on each forced interruption.

As for financial deterrents aimed at limiting outages—another component of the reliability of supply and transparency of tariffs index—no such regulation exists in South Africa, an omission that can negatively affect reliability of supply. *Doing Business* data reveal that low and lower-middle-income economies

Measuring outages allows utilities to recognize problem areas in electric power systems and solve them, improving reliability of supply for the small and medium-size businesses they serve.

a. Hua, Bowen, et al. "Reliability Evaluation of Distribution Systems Considering Demand Response: 'Application of IEEE Std 1366TM-2012:" Available at http://www.standardsuniversity.org/wp-content/uploads/Reliability_Evaluation_of_Distribution_Systems_Considering_Demand_Response.pdf.

b. World Bank. 2010. "Managing an Electricity Shortfall: A Guide for Policy Makers." Available at https://openknowledge.worldbank.org/handle/10986/2999. c. According to 2010-17 data from World Bank Enterprise Surveys, 31.5% of the firms surveyed globally identify electricity as a major constraint to their activities. Enterprise Survey database (http://www.enterprisesurveys.org), World Bank.

d. IEEE Power and Energy Society. "IEEE Guide for Electric Power Distribution Reliability Indices." Institute of Electrical and Electronics Engineers. Available at https://ieeexplore.ieee.org/document/6209381/.

at https://ieeexplore.ieee.org/document/6209381/.
e. Arlet, Jean. 2017. "Electricity Sector Constraints for Firms Across Economies: A Comparative Analysis." *Doing Business* Research Notes No. 1/June 2017, available at http://documents.worldbank.org/curated/en/409771499690745091/pdf/117320-BRI-PUBLIC-Doing-Business-Research-Notes.pdf.

f. Lao PDR started calculating SAIDI and SAIFI in 2017 and improved on the interruption duration index (SAIDI) from 49.28 to 8.4 in 2018 and on the interruption frequency index (SAIFI) from 9.42 to 7.2. Oman, which started calculating SAIDI and SAIFI in 2016, went from SAIDI 3.39 to 2.82 in 2018 and from SAIFI 2.24 to 1.36.

TABLE 4.2 Only Johannesburg, eThekwini and Cape Town score on the reliability of supply and transparency of tariffs index										
	Cape Town	eThekwini	Johannesburg	Buffalo City	Ekurhuleni	Mangaung	Msunduzi	Nelson Mandela Bay	Tshwane	
Reliability of supply and transparency of tariffs index (0–8)	6	4	4	0	0	0	0	0	0	
Total duration and frequency of outages per customer per year (0–3)	2	0	0	_	_	_	_	_	_	
System average interruption duration index (SAIDI)	3.5	37.9	44.0	_	_	_	_	_	_	
System average interruption frequency index (SAIFI)	0.9	2.5	6.5	_	_	_	_	_	_	
What is the minimum outage time (in minutes) that the utility considers for the calculation of SAIDI/SAIFI?	5.0	5.0	5.0	_	_	_	_	_	_	
Mechanisms for monitoring outages (0–1)	1	1	1	1	1	1	1	1	1	
Does the distribution utility use automated tools to monitor outages?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Mechanisms for restoring service (0–1)	1	1	1	1	1	1	1	1	1	
Does the distribution utility use automated tools to restore service?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Regulatory monitoring (0–1)	1	1	1	1	1	1	1	1	1	
Does a regulator—that is, an entity separate from the utility—monitor the utility's performance on reliability of supply?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Financial deterrents aimed at limiting outages (0–1)	0	0	0	0	0	0	0	0	0	
Does the utility either pay compensation to customers or face fines by the regulator (or both) if outages exceed a certain cap?	No	No	No	No	No	No	No	No	No	
Communication of tariffs and tariff changes (0–1)	1	1	1	1	1	1	1	1	1	
Are effective tariffs available online?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Are customers notified of a change in tariff ahead of the billing cycle?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	

Note: If SAIDI and SAIFI values are above 12 and below 100, no score is assigned but the economy is still eligible to score on this index. If SAIDI and SAIFI are 12 (equivalent to an outage of one hour each month) or below, a score of 1 is assigned. If SAIDI and SAIFI are 4 (equivalent to an outage of one hour each quarter) or below, 1 additional point is assigned. Finally, if SAIDI and SAIFI are 1 (equivalent to an outage of one hour per year) or below, 1 more point is assigned. Locations that do not use the SAIDI and SAIFI benchmarks to calculate outages are ineligible to score on the reliability of supply and transparency of tariffs index and thus receive 0 points on this indicator component.

using such financial deterrents averaged 53 power interruptions in 2015, while economies in the same income group without the financial deterrents had three times more outages. Finally, all nine municipalities surveyed in South Africa communicate tariffs and tariff changes to their customers online and ahead of the billing cycle.

Transmission and distribution of electricity can be affected by different factors (box 4.2). Aging infrastructure, faulty equipment, electricity supply shortages and even inclement weather can cause power interruptions. Although planned outages and load shedding have significantly decreased in South Africa since 2015, the nine utilities assessed still notify customers in advance of

those power interruptions. The means of communicating load-shedding plans are rather standardized throughout the country, and customers are notified at least one week in advance. The most common notification methods are publication on the utility's website and via newspaper and mail.²⁴

Buffalo City, Ekurhuleni, Mangaung, Msunduzi, Nelson Mandela Bay and Tshwane can improve in the reliability of supply and transparency of tariffs index by starting to compute SAIDI and SAIFI to meet international standards. Cape Town, eThekwini and Johannesburg can advance in the index by reducing the number of power outages and their duration.

WHAT HAS CHANGED?

Nelson Mandela Bay had the most dramatic reduction in time of all benchmarked locations (table 4.3). In addition to enhancing service delivery, the municipality managed to put protocols in place to retain staff and hold back the strikes that contributed to prolonged delays in 2015. Thanks to successful measures—such as creating a "Getting Electricity Improvement Team" to improve service delivery in the application process, hiring external service providers to perform connection works and procuring major items for construction—the time to get electricity in Nelson Mandela Bay dropped by almost half, from 347 to 190 days.

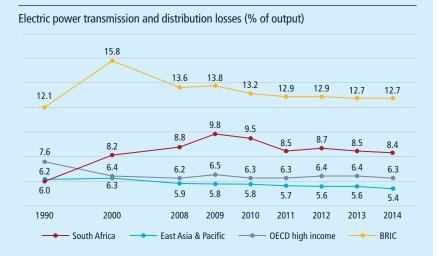
^{- =} not available.

BOX 4.2 Factors affecting the transmission and distribution of electricity

Several factors can adversely affect network performance. In electricity supply, these factors are called losses. They refer to the amounts of electricity injected into the transmission and distribution grids that are not paid for by users. Losses can be technical or non-technical.^a Technical losses are due to power dissipation in the transmission and distribution process. Non-technical losses are caused by actions external to the power system, such as cable theft and vandalism, illegal connections and non-payment, and errors in accounting and record-keeping. Losses can happen in electric power transmission and distribution.

In South Africa the acceptable range of energy losses in distribution, according to the National Energy Regulator of South Africa, is 5% to 12%. Currently, total distribution losses amount to 7.7%, with a financial impact of \$1.5 billion per year. The main causes of losses in South Africa are illegal connections and meter tampering.

Non-technical losses—a critical issue not only in South Africa but in other developing economies—can have a substantial economic impact. Brazil, for instance, lost around \$2 billion because of non-technical losses in 2015.^d In India, which has one of the highest levels of electricity losses in the world, non-technical losses can exceed 20% in some states.^e



Source: World Bank, World Development Indicators.

Note: The OECD averages are based on economy-level data for the 33 OECD high-income economies. The East Asia & Pacific averages are based on economy-level data for the 25 economies of East Asia and the Pacific. The BRIC averages are based on economy-level data for Brazil, the Russian Federation, India and China.

Transmission and distribution losses are lower on average in South Africa (8.4%) than in the BRIC economies (12.7%) but higher than in the OECD high-income economies (6.3%) and the economies of East Asia and the Pacific (5.4%) (see figure).

Addressing non-technical losses demands a broad approach and a long-term effort. Among the strategies to reduce these losses: convert regular meters into smart meters to avoid meter tampering; disconnect illegal connections and electrify informal settlements; and fill in gaps and correct errors related to billing.

Ekurhuleni, Tshwane and Johannesburg have been slowly introducing smart grid technology, following the national standard (NRS 049-2008). Smart grid technology helps detect illegal electricity usage and power outages, optimizes energy use and delivers enhanced levels of reliability and security of supply.^f

- $a.\ World\ Bank.\ 2009.\ "Reducing\ Technical\ and\ Non-Technical\ Losses\ in\ the\ Power\ Sector."\ Background\ Paper\ for\ the\ World\ Bank\ Group\ Energy\ Sector\ Strategy.$
- b. NERSA. 2014. Electricity Distribution Forms (D-Forms) Manual/Guide, available at http://www.nersa.org.za/Admin/Document/Editor/file/Electricity/Forms/Distribution%20Forms/Electricity%20Distribution%20Forms%20Completion%20Guide.pdf.
- c. Information provided by Eskom during a presentation to the subnational Doing Business project team on May 16, 2018.
- d. Instituto Acende Brasil. February 2017. 18 White Paper, Edition No. 18 "Perdas Comerciais e Inadimplência no Setor Elétrico," available at http://www.acendebrasil.com.br/media/estudos/2017_WhitePaperAcendeBrasil_18_PerdasInadimplencias.pdf.
- e. U.S. Energy Information Administration. October 22, 2015. Today in Energy. "India aims to reduce high electricity transmission and distribution system losses," available at https://www.eia.gov/todayinenergy/detail.php?id=23452.
- f. Sustainable Energy Africa. 2015. "Smart Metering: Overview and Considerations for South African Municipalities," available at https://africancityenergy.org/uploads/resource_127.pdf.

Cape Town improved considerably by starting to calculate SAIDI and SAIFI, which enabled it to score on the reliability of supply and transparency of tariffs index. The municipality also reduced the time to issue a connection fee estimate by nearly 20% (from 31 to 25 days) by

streamlining internal processes and phasing out the application fee for first-time applicants, reducing the burden on customers.²⁵

Johannesburg and eThekwini have also made it easier to get electricity by

improving the reliability of supply. Both municipalities started calculating the total duration and frequency of outages per customer using the SAIDI and SAIFI methodology, making them eligible to score on the reliability of supply and transparency of tariffs index.

TABLE 4.3 What locations have made it easier to get electricity in South Africa since 2015?										
Location	Overall	Streamlined application process and external works	Removed application fee	Improved connection process efficiency	Increased connection costs or security deposit	Started monitoring reliability of supply using SAIDI/SAIFI benchmarks				
Buffalo City (East London)	×				x					
Cape Town (Cape Town)	✓	✓	✓	✓	×	✓				
Ekurhuleni (Germiston)	×				×					
eThekwini (Durban)	✓	*			×	✓				
Johannesburg (Johannesburg)	✓				×	✓				
Mangaung (Bloemfontein)	×	*			×					
Msunduzi (Pietermaritzburg)	×				×					
Nelson Mandela Bay (Port Elizabeth)	✓	✓		✓	x					
Tshwane (Pretoria)	×				×					

Note: This table records all Doing Business improvements and changes that occurred between January 2015 and May 1, 2018.

On the flip side, overall efficiency has deteriorated in five locations (figure 4.8). Buffalo City, Cape Town, Ekurhuleni, eThekwini and Mangaung made changes making the process of connecting to the grid more burdensome.

It now takes longer to obtain a connection fee estimate in eThekwini and Mangaung. Connecting to the grid in both locations got longer due to an increased workload, limited staff capacity at the utilities and lack of proactive communication with customers. The time to obtain a connection fee estimate in Mangaung more than doubled since 2015—from 24 to 50 days. In eThekwini it increased by nearly one-third, from 22 to 29 days.

Furthermore, the overall cost of getting electricity in South Africa (measured in terms of income per capita) is higher than three years ago. All municipalities have raised connection fees since 2015.

Monthly tariffs also increased over three years, following the multi-year price determination and the tariff guideline established by NERSA.²⁶

WHAT CAN BE IMPROVED?

Monitor and improve the reliability of supply

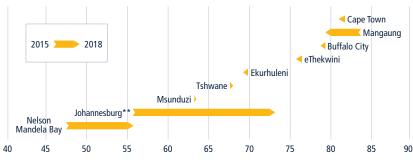
Measuring the number and duration of power interruptions is a critical step to improve the process of getting electricity. Nevertheless, across the nine benchmarked municipalities, only Cape Town, eThekwini and Johannesburg measure SAIDI and SAIFI data.

From a regulatory perspective, NERSA can be a driving force to improve the reliability of electricity supply. The information required by the national regulator in the D-Forms is very basic and does not include an estimate of unserved energy per customer.²⁷ In the short term, NERSA should consider adopting SAIDI and SAIFI as the official standards to calculate the reliability of electricity supply and require the utilities to publish this information on their websites.²⁸

Significant improvements in the quality of power supply require substantial

FIGURE 4.8 Since 2015 overall efficiency of processes has deteriorated in five locations

Average distance to frontier score for the efficiency of getting electricity (procedures, time and cost*)



Source: Doing Business database.

Note: The figure illustrates the change in each location's average distance to frontier score (DTF) for procedures, time and cost to get electricity, between 2015 and 2018. The DTF score shows how far a location is from the best performance achieved by any economy on the getting electricity indicator. The DTF score is normalized to range from 0 to 100, with 100 representing the frontier of best practices (the higher the score, the better). For more information, see the chapter "About Doing Business and Doing Business in South Africa 2018" and the data notes.

^{*}For the cost DTF score, this figure uses the same income per capita for both years.

^{**}The efficiency improvement in Johannesburg is due to external factors, namely the change in the location of the Doing Business warehouse from the concession area of Eskom to that of City Power.

South African municipalities that do not measure SAIDI and SAIFI can start collecting data manually to map the number of customers connected to each feeder and thus be able to manually calculate these indices.

investment targeting transmission losses and inadequate generation capacity. Although all municipalities have a SCADA system to monitor outages in high-voltage primary feeders, they still use the traditional approach to restore service at the low-voltage level. In other words, the customer still needs to call the utility when there is a power interruption so that maintenance technicians will be dispatched to the fault location.

As part of a long-term effort to increase network reliability, South African utilities should consider upgrading and expanding the coverage of their SCADA system and installing an advanced distribution management system (ADMS)²⁹ or an outage management system (OMS).³⁰ In over 130 economies—including Mexico, Turkey, Indonesia and the BRIC economies—utilities benefit from automation. In South Africa, meanwhile, eThekwini is on its way to installing an ADMS, and Cape Town has initiated the installation of an OMS.

Despite being the most effective solution, automation requires a dedicated budget. As a phased approach—and following Cape Town, eThekwini and Johannesburg's example—South African municipalities can start collecting data manually to map the number of customers connected to each feeder and thus be able to manually calculate SAIDI and SAIFI.

Once the mechanisms to monitor and restore outages are operative, the next regulatory step would be for NERSA to consider imposing financial deterrents on distribution utilities that fail to provide reliable electricity to their customers as a strategy to reduce power interruption.

Streamline the wayleave and excavation permit systems

Unlike in other countries worldwide, South African utilities typically apply for wayleaves and excavation permits on behalf of the customer. This relieves the customer of the burden of dealing with multiple agencies while applying for a connection. However, delays related to the approval process are common. In Cape Town, for instance, the utility sends a hard copy letter to each service authority and has no means of tracking the application progress. In some cases, it can take up to six months for a single wayleave to be issued.

One possible short-term solution for these delays is to introduce a silenceis-consent rule: when the responsible authority fails to respond within a given time frame, the approval is automatically granted. Italy, Poland and Spain are examples of countries that have adopted such rules and reduced delays as a result. Alongside these rules, regulations should establish a comprehensive risk classification schedule. The idea is to create distinct levels of scrutiny-and thus different time frames—for distinct levels of complexity in the wayleave process. Some permits are technically easier to assess, while others are very complex and demand lengthier technical analysis. It allows approvals for simple connections to be fast-tracked.

Another way to reduce delays is to centralize the wayleave system internally, setting up a one-stop shop to coordinate the process and issue a single consolidated approval to the applicant. This approach would also avoid the risk of contradictory decisions on the same project by different service providers. The main challenge in this case would

be to persuade the agencies to dispatch technical representatives to a common location and grant them enough decision-making power to expedite the application process. A possible solution would be to develop a part-time system in which representatives from various agencies work at a single access point at set times and days each week.

The most modern one-stop shops for service approval are electronic, allowing applicants to request all clearances simultaneously by submitting one online form. Tshwane has a good practice that could be adopted elsewhere in South Africa: the municipality has an electronic wayleave platform. It is controlled by the roads department and allows applicants to submit a single application for all relevant authorities within and outside the municipality.

Identify bottlenecks in the internal process to reduce time

Data related to the time it takes to get electricity are either not available or only partially available in all measured locations. Most utilities lack a management report system to track how long the municipality's interventions take and are therefore unable to assess the time required for each step of the connection process from beginning to end. To identify bottlenecks in the internal process, utilities should start by creating a database and reporting on a monthly basis the average time between the main steps, such as issuance of a connection fee estimate and completion of connection works. This can help increase internal accountability, and once bottlenecks are identified, more specific measures can be taken to streamline service delivery.

In South Africa—as in Russia, Singapore and the United Kingdom—regulators require utilities to meet minimum legal parameters for connecting customers to the grid.³¹ However, South Africa's time frames are too generous and do not help in optimizing utilities' performance.

Currently, most locations comply with NERSA's time limits. Yet except for Buffalo City, all South African locations still fall behind the averages of BRIC and OECD high-income economies on the time to get an electricity connection. Therefore, NERSA should consider reducing time limits in the national regulations by at least 30% to promote improvements in efficiency.

Make the cost and process of getting electricity more transparent to the customer

Connection costs should be as transparent as possible to allow customers to contest a charge when they feel they are overpaying. Johannesburg, for instance, has fully standardized costs—customers can know how much they will pay by looking in the utility's tariff book. In most locations either utilities present customers with individual quotes, or costs are divided into two categories: a regulated connection fee and variable costs for labor and material. Having standardized costs not only streamlines the issuance of a connection fee estimate but also ensures predictability.

In addition to being transparent on costs, utilities should clarify the process of connecting to the grid and explain to customers what is necessary to obtain an electricity connection. Comprehensive guidelines should cover information about key steps and documentation requirements as well as the corresponding time frames and fees. This information should be available online and easily accessible through mobile devices. It would help cut time and cost by reducing the number of incomplete and incorrect applications. An example of good practice is eThekwini. The utility there has an application guide on its website with a step-by-step explanation of how to fill out an application form as well as a detailed description of the process of getting electricity.32

Upgrade geographic information systems to eliminate external site inspection

South African locations should make the process more efficient by reducing the number of steps to connect to the grid. The utility's inspections—for which the customer is typically present, even when his or her presence is not required—offer an opportunity for simplifying the process. Before issuing a connection fee estimate, utilities perform an external site inspection to analyze infrastructure, confirm site layout and prepare the project design.

Technology could help simplify the process, and here South Africa could look to other economies such as Mexico and Turkey, where utilities have made site visits obsolete by using geographic information systems (GIS) to map the distribution network. In South Africa all the benchmarked municipalities have GIS technology installed, but they still do not map or update network infrastructure and points of supply. Utilities should therefore phase out external site inspections by upgrading their GIS to map their network infrastructure and to maintain updated records of their network assets and their customer database.

Reduce the burden of the security deposit

Security deposits should work as a guarantee against the possible failure of customers to pay their bills for electricity consumption. However, research shows that the collection ratio is not necessarily lower in economies where the security deposit is charged. Deposits end up being an interest-free credit granted to the utility over the life of a supply contract.³³

The benchmarked locations should make an evaluation of cost recovery rates in order to assess the real need to charge a security deposit. Where cash flow considerations are not the motivation for this charge, utilities should at least consider lessening the financial burden. A start would be to return the deposit after

one or two years if customers are in good standing, rather than at the end of the connection contract—or, alternatively, to return the deposit with interest.

Buffalo City, Mangaung and Tshwane allow customers to settle the security deposit with a bank guarantee or bond rather than paying the utility the entire amount upfront. The service for bank guarantees usually amounts to less than the interest that customers would lose on the deposit, and customers maintain control of their assets.

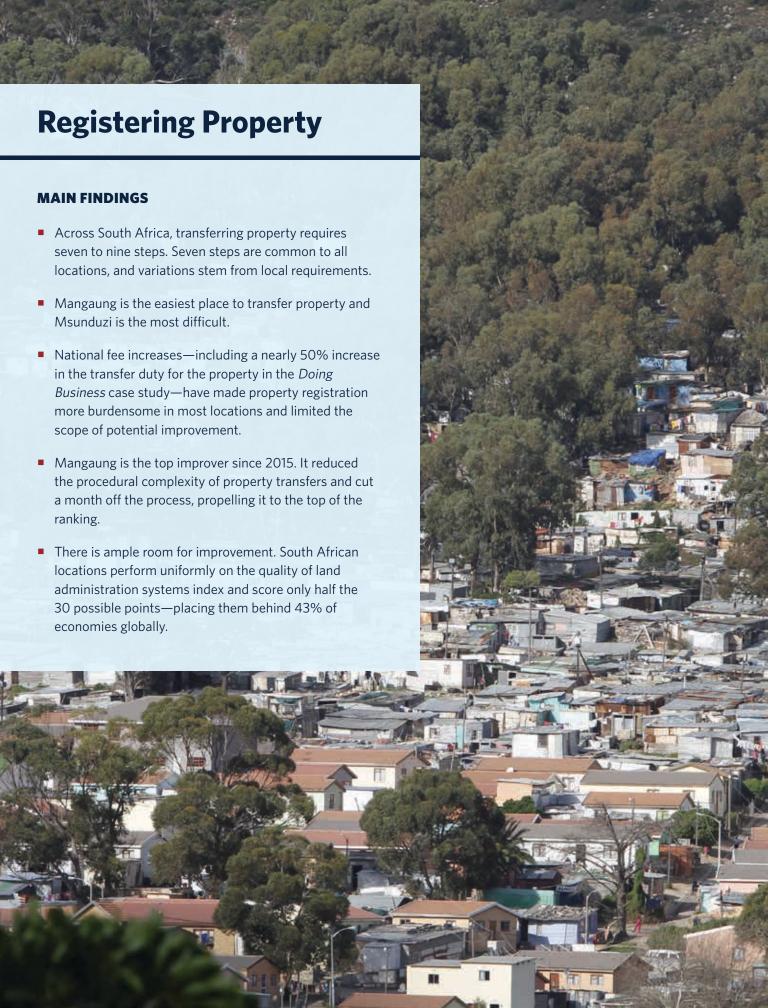
NOTES

- Jimenez, Raul. 2017. "Development Effects of Rural Electrification." Policy Brief IDB-PB-261, IDB Infrastructure and Energy Division, Inter-American Development Bank, Washington, DC
- Escribano, A., J.L. Guasch and J. Pena. 2009. "Assessing the Impact of Infrastructure Constraints on Firm Productivity in Africa." Working Paper 9, Africa Infrastructure Sector Diagnostic, World Bank, Washington, DC.
- Arlet, Jean. 2017. "Electricity Tariffs,
 Power Outages and Firm Performance: A
 Comparative Analysis." Global Indicators
 Group, Development Economics, World Bank,
 Washington, DC.
- Geginat, Carolin, and Rita Ramalho. 2015.
 "Electricity connections and firm performance in 183 countries." Policy Research Working Paper No. 7460, World Bank, Washington, DC
- Abotsi, A. K. 2016. "Power Outages and Production Efficiency of Firms in Africa." International Journal of Energy Economics and Policy 6 (1): 98-104.
- Arlet, Jean. 2017. "Electricity Tariffs,
 Power Outages and Firm Performance: A
 Comparative Analysis." Global Indicators
 Group, Development Economics, World Bank,
 Washington, DC.
- World Bank. September 2017. "South Africa Economic Update: More Innovation Could Improve Productivity, Create Jobs, and Reduce Poverty." Available at http://www .worldbank.org/en/country/southafrica /publication/south-africa-economic-update -more-innovation-could-improve-productivity -create-jobs-and-reduce-poverty.
- 8. Khobai, H., G. Mugano and P. le Roux. 2017. "The causal relationship between electricity supply and economic growth in South Africa." Studies in Economics and Econometrics 41 (2): 69-86.
- 9. The regulatory framework is available on the website of the Department of Energy of the

- Republic of South Africa, at http://www.energy.gov.za/files/policies_frame.html.
- NERSA was established by the National Energy Regulator Act (Act No. 40 of 2004), available at http://www.energy.gov.za /files/policies/National%20Energy%20 Regulator%20Act%2040%20of%202004.pdf.
- The Electricity Regulation Act or ERA (Act No. 4 of 2006) grants NERSA the mandate to regulate electricity in South Africa.
 See http://www.energy.gov.za/files/policies/ /ELECTRICITY%20REGULATION%20 ACT%204%20OF%202006.pdf.
- 12. The mandate to regulate the electricity industry is derived from the Electricity Regulation Act. NERSA's electricity division has four departments that serve as a platform to achieve its mandate: Licensing and Compliance, Pricing and Tariffs, Electricity Infrastructure Planning and Regulatory Reform. See NERSA website at http://www.nersa.org.za.
- See Eskom Holdings SOC Ltd. website at http://www.eskom.co.za/Pages/Landing.aspx.
- Information obtained in a meeting with NERSA representatives at NERSA's headquarters in Pretoria, on May 16, 2018.
- Data from World Development Indicators database: "Access to electricity (% of population)," available at https://data .worldbank.org/indicator/EG.ELC.ACCS.ZS.
- 16. Johannesburg, Msunduzi and eThekwini accept only hard copies of the application. Customers cannot submit the application via e-mail. Nevertheless, even for the utilities that do accept applications via e-mail, customers find it more reliable to submit the application in hard copy.
- 17. The circuit breaker inspection, or "trip test," ensures that the rated characteristic of the circuit breaker is exact and that there are no mechanical or electrical faults.
- 18. In Cape Town and Johannesburg, the customer is not required to sign a supply contract with the distribution utility. Instead, the customer simply presents the number of a "rates and services account" upon applying for an electricity connection. This account is opened at the corresponding municipality's customer service office and comprises water, sewerage, refuse and property rates in one municipal bill. Once connection works are finalized and the meter is installed, the utility links the meter number to the customer account for billing purposes.
- Department of Labour. Occupational Health and Safety Act (Act No. 85 of 1993).
- 20. An electricity connection project may involve obtaining wayleaves not only from municipal authorities but from pipeline operators, telecommunications companies or other types of service providers with infrastructure in the area.
- 21. The security deposit is calculated as an estimate of two months' consumption in Ekurhuleni, Msunduzi and Tshwane. In Mangaung and eThekwini the security deposit is calculated for a three-month period, based on the assumption that the connection will be used at 70% of its maximum capacity. In Cape Town and Nelson Mandela Bay the security

- deposit is a flat rate for connections up to a certain capacity.
- 22. Doing Business calculates consumption fees based on the following assumptions: The warehouse operates 30 days a month from 9:00 a.m. to 5:00 p.m. (eight hours a day), with equipment utilized at 80% of capacity on average. For simplicity, it is assumed that there are no electricity cuts. The monthly energy consumption is 26,880 kilowatt-hours (kWh); hourly consumption is 112 kWh. If multiple electricity suppliers exist, the warehouse is served by the cheapest supplier. Tariffs effective in March of the current year are used to calculate the price of electricity for the warehouse. Although March has 31 days, for calculation purposes only 30 days are used.
- 23. D-Forms are required pursuant to the Electricity Regulation Act (Act No. 4 of 2006), as well as to section 4 of NRS 048-3:2002, Rationalized User Specification, Electricity Supply Quality of Supply, Part 3: Procedures for measurement and reporting, Requirements for applications in the Electricity Supply Industry. The Electricity Distribution Forms (D-Forms) Manual/Guide is available at http://www.nersa.org.za/Admin/Document/Editor/file/Electricity/Forms/Distribution% 20Forms/Electricity%20Distribution%20 Forms%20Completion%20Guide.pdf.
- 24. In Buffalo City and Nelson Mandela Bay load shedding and planned outages are also communicated through social media.
- 25. The City of Cape Town Electricity Generation and Distribution Department still charges the application fee on the third application, after the connection fee estimate has lapsed twice.
- 26. The multi-year price determination is the process NERSA uses to determine electricity prices over a number of years. Usually Eskom obtains the license from NERSA and negotiates tariff increases individually with the distribution utilities. The negotiation must be approved by NERSA and becomes effective on July 1 of each year. All monthly tariffs are available on the websites of NERSA, Eskom and the distribution utilities.
 See http://www.eskom.co.za/CustomerCare /TariffsAndCharges/Pages/Multi_Year _Price_Determination_MYPD.aspx.
- 27. World Bank. "List of Recommendations for the National Energy Regulator Authority of South Africa to Improve the Getting Electricity Process." (Prepared by the World Bank Group as part of the South Africa Urban Knowledge Hub – Urban Technical Assistance).
- 28. IEEE Guide for Electric Power Distribution Reliability Indices (IEEE Std 1366-2012), available at https://ieeexplore.ieee.org/document/6209381/.
- 29. "An advanced distribution management system (ADMS) is the software platform that supports the full suite of distribution management and optimization. An ADMS includes functions that automate outage restoration and optimize the performance of the distribution grid. ADMS functions being developed for electric utilities include fault location, isolation and restoration; volt/volt-ampere reactive optimization; conservation through voltage reduction; peak demand

- management; and support for microgrids and electric vehicles." Gartner IT Glossary, available at https://www.gartner.com/it-glossary.
- 30. "An outage management system (OMS) is a utility network management software application that models network topology for safe, efficient field operations related to outage restoration. OMSs tightly integrate with call centers to provide timely, accurate, customer-specific outage information, as well as supervisory control and data acquisition (SCADA) systems for real-time-confirmed switching and breaker operations. These systems track, group and display outages to safely and efficiently manage service restoration activities." Gartner IT Glossary.
- 31. Time limits and service standards to issue quotes and supply electricity in South Africa are regulated by NERSA in section 4.2 of NRS 047-1:2002, Rationalized User Specification, Electricity Supply Quality of Service, Part 1: Minimum standards, Preferred Requirements for Applications in the Electricity Supply Industry.
- "Guide to complete application forms," available at http://www.durban.gov.za /City_Services/electricity/Online%20Forms /Documents/ApplicationFormsGuide.pdf.
- World Bank. 2010. Getting Electricity: A pilot indicator set from the Doing Business project. Washington, DC: World Bank.



and tenure has long been at the forefront of the South African national debate. It remains so because land is recognized around the world as an important source of wealth.1 Where land ownership is secure, the value of these assets is certain for all owners. In the post-apartheid era, research has shown that "property rights are critical for all South Africans to leverage their assets in support of economic growth, household incomes, and jobs."2 Moreover, evidence suggests that insecure property rights may be among the factors driving local businesses to invest abroad instead of in South Africa 3

Land registries, together with cadastres that identify the location of a property, are tools used around the world to map, prove and secure property rights. These are part of an economy's land information system. For governments, having reliable, up-to-date information in cadastres and land registries is essential to correctly assess and collect tax revenues. With upto-date land information, governments can map out the varying requirements location by location and strategically plan the provision of services and infrastructure in the areas where they are most needed.4 The ability to access official information on ownership also reduces

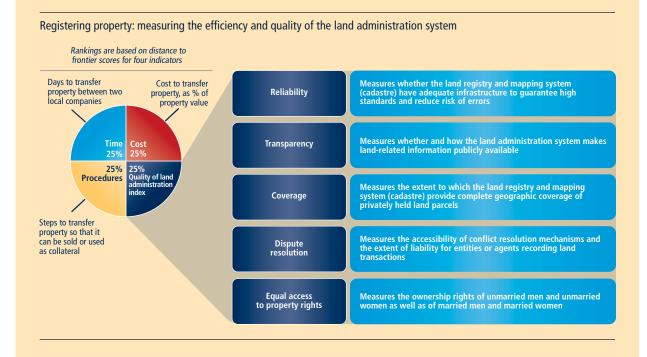
transaction costs in financial markets and makes it easier to use property as collateral.⁵

HOW DOES REGISTERING PROPERTY WORK IN SOUTH AFRICA?

The Deeds Registries Act 47 of 1937 and its amendments govern land administration in South Africa.⁶ Because this is a national law, land registries (deeds offices) follow the same process to transfer property across the country. However, varying municipal requirements and local

WHAT DOES REGISTERING PROPERTY MEASURE?

Doing Business records the full sequence of procedures necessary for a business to purchase a property from another business and formally transfer the property title to the buyer's name. The process starts with obtaining the required documents, such as a copy of the seller's title, and ends when the buyer is registered as the new property owner. Every procedure required by law or necessary in practice is recorded—along with the associated time and cost—whether it is the responsibility of the seller or the buyer and even if it must be completed by a third party on their behalf. In 2015 and 2016 Doing Business added components to the indicator to systematically assess the quality of the land administration system. The new index measures the land administration system's reliability, transparency and coverage; the availability of dispute resolution mechanisms; and whether men and women have equal ownership rights to property. Rankings on the ease of registering property are based on the procedures, time and cost to register property as well as the quality of land administration index (see figure).



practices drive differences in the process of conveying property (figure 5.1).

All property transfers require the services of a conveyancer.⁷ These legal practitioners draft the transfer deed, conduct due diligence on the parties and property, and undertake numerous procedural requirements on behalf of the seller and buyer. Conveyancers also have exclusive rights to lodge deeds at the deeds office.⁸

For the assumed *Doing Business* case—a commercial property transfer between two companies—conveyancers start with a title search. They check for liens or encumbrances on the property and ensure that the selling company is the rightful owner. Simultaneously, they gather the information to draft the deed and all necessary documents.⁹ Conveyancers also conduct a company search with the Companies and Intellectual Property Commission¹⁰ to confirm that the business is registered and in good standing.

Conveyancers then apply for a municipal rates clearance certificate on behalf of the seller. Depending on the location, they also ensure that the seller obtains the necessary compliance documentation—such as an electrical compliance certificate, entomologist's certificate or plumbing certificate from certified professionals. Next they pay the transfer duty (property transfer tax) to the South African Revenue Service (SARS) online and obtain a payment receipt required for the transfer.

The parties then sign the deed at the conveyancer's office. Lastly the conveyancer lodges the deed at the deeds office that has jurisdiction over the property in question. Upon lodgment and following the initial intake, the deed is subject to three levels of examination at the deeds office. This process is the same throughout the country.15 Once the deed is deemed valid, the conveyancer signs it before the registrar or deputy registrar at the deeds office. Upon execution of the deed, ownership is legally transferred to the buyer, who will be able to transfer or use the property as collateral as soon as his or her name is captured by the data unit, usually the next day.16

Across the nine South African locations measured, property transfers require on average eight procedures taking 31.7 days and costing 7.6% of

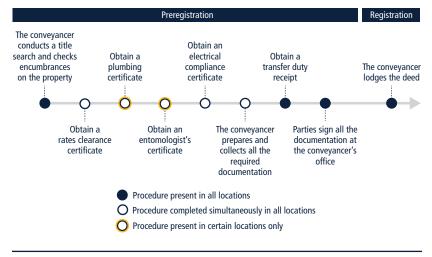
the property value. Procedurally, this is twice as complex as in China and the Russian Federation but on par with Mexico. The average time is comparable to Brazil, where it also takes just over a month. The cost is steeper than the average for the BRIC economies (Brazil, Russia, India and China) and is among the 44 highest globally (figure 5.2). Additionally, all locations score 15 of 30 points on the quality of land administration index—outperforming Brazil, India, Indonesia and Nigeria but trailing behind Russia and China. Transferring property is easiest in Mangaung, where it takes 22.5 days and costs 7.62% of the property value (table 5.1). It is most burdensome in Msunduzi, where the cost is identical but the process takes nearly three times longer. The time needed in Mangaung is on par with the average for OECD high-income economies, while Msunduzi is behind the average for Sub-Saharan Africa (59.3 days).

How the process compares

Although seven procedures are common to all locations measured, property transfer processes are not identical in each place. In coastal locations—Buffalo City, Cape Town, eThekwini, Msunduzi and Nelson Mandela Bay—contractual practice requires the seller to obtain an entomologist's certificate proving that the property is free of infestation. Additionally, in Cape Town municipal bylaws require the parties to provide a plumbing certificate.¹⁷

The time it takes to register property varies widely, from 20 days in Nelson Mandela Bay to 63 days in Msunduzi. This is largely because of differences in the time needed to obtain a rates clearance certificate (figure 5.3), which confirms that any outstanding utility bills or charges due to the municipality have been paid—a necessary step before the property can be transferred. Obtaining a rates clearance certificate takes almost seven times longer in Msunduzi than in Nelson Mandela Bay.

FIGURE 5.1 Transferring property in South Africa takes seven to nine steps



Source: Doing Business database.

Note: For more details on these procedures, see Doing Business in South Africa 2015.

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EFFICIENCY OF PROPERTY REGISTRATION QUALITY OF LAND ADMINISTRATION **Procedures** Time Cost Index (number) (days) (% of property value) (0-30)0 0 5 economies (global best)*** 3 economies 30 Singapore (global best) (global best)* 5 1 Rwanda 29 4 economies Australia Rwanda 10 (global best) Rwanda Chile 28 Malaysia 2 Malaysia -15 27 2 20 26 Nelson Mandela Bay 3 United Kingdom -United 25 Rwanda 3 25 **Buffalo City** OECD high income Kingdom Mangaung 24 4 Chile 30 Malaysia Johannesburg OECD 23 OECD BRIC BRIC 4 high income Tshwane high income OECD high income 5 22 Cape Town Australia 40 East Asia / Mexico South Africa average 21 5 South Africa range & Pacific East Asia & Pacific Ekurhuleni Australia 6 45 20 **United Kingdom** (9 locations) Chile Ekurhuleni, Australia United Kingdom 17 Johannesburg eThekwini BRIC 50 Mexico Mangaung, Mexico 16 Namibia Kenya 55 Kenya South African BRIC -15 South Africa average East Asia Mexico 8 60 Buffalo City, eThekwini, Msunduzi, Nelson Mandela Bay, & Pacific 14 All 9 Kenva Chile Malavsia. Msunduzi 65 South African 8 Namibia 9 Namibia Kenya Cape Town 70 8 East Asia 1 Namibia 14 10 75

FIGURE 5.2 South African locations have room for improvement across all aspects of land administration

Source: Doing Business database.

Note: The OECD averages are based on economy-level data for the 33 OECD high-income economies. The East Asia & Pacific averages are based on economy-level data for the 25 economies of East Asia and the Pacific. The BRIC averages are based on economy-level data for Brazil, Russia, India and China.

& Pacific

TABLE 5.1 Registering property in South Africa—where is it easier?										
Location	Rank (1–9)	2018 Distance to frontier score (0–100)	2015 Distance to frontier score (0-100)	Procedures (number)	Time (days)	Cost (% of property value)	Quality of land administration index (0-30)			
OECD high income average		76.81	76.71	4.6	22.3	4.2	22.7			
BRIC average		66.14	67.03	7.4	29.2	3.8	16.6			
South Africa average		57.23	58.69	7.7	31.7	7.6	15.0			
East Asia & Pacific average		57.21	56.61	5.5	74.5	4.3	15.8			
Mangaung (Bloemfontein)	1	59.73	55.89	7	22.5	7.62	15			
Johannesburg (Johannesburg)	2	59.68	61.45	7	23	7.61	15			
Tshwane (Pretoria)	3	59.39	60.56	7	25.5	7.61	15			
Ekurhuleni (Germiston)	4	58.48	60.25	7	33	7.61	15			
Nelson Mandela Bay (Port Elizabeth)	5	57.93	59.10	8	20	7.63	15			
Buffalo City (East London)	6	57.81	59.22	8	21	7.63	15			
Cape Town (Cape Town)	7	54.69	56.45	9	29.5	7.64	15			
eThekwini (Durban)	8	54.58	58.62	8	48	7.63	15			
Msunduzi (Pietermaritzburg)	9	52.78	56.70	8	63	7.63	15			

Source: Doing Business database.

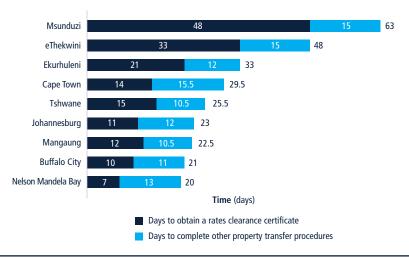
Note: Rankings are based on the average distance to frontier score (DTF) for the procedures, time and cost associated with registering property as well as for the quality of land administration index. The DTF score is normalized to range from 0 to 100, with 100 representing the frontier of best practices (the higher the score, the better). For more details, see the chapter "About Doing Business and Doing Business in South Africa 2018." The OECD averages are based on economy-level data for the 33 OECD high-income economies. The East Asia & Pacific averages are based on economy-level data for the 25 economies of East Asia and the Pacific. The BRIC averages are based on economy-level data for Brazil, Russia, India and China.

^{*} These are Georgia, Norway, Portugal and Sweden.

^{**} These are Georgia, New Zealand and Portugal.

^{***} These are Belarus, Georgia, Kiribati, Saudi Arabia and the Slovak Republic.

FIGURE 5.3 In five locations, time to obtain a rates clearance certificate is the main driver of total time to register property



Municipalities differ in how they receive applications for and issue rates clearance certificates—which has significant impact on the total time to transfer property.

Municipalities differ in how they receive applications for and issue rates clearance certificates—which has significant impact on the total time to transfer property. Electronic application is available and widely used by conveyancers in four locations (table 5.2). This is also available in Johannesburg but has yet to catch on with the private sector. Municipalities with e-application systems seem to perform better. Nelson Mandela Bay is an exception because it has an efficient

TABLE 5.2 Six municipalities offer e-application for rates clearance certificates

Location	Electronic application
Buffalo City (East London)	✓
Cape Town (Cape Town)	✓
Ekurhuleni (Germiston)	0
eThekwini (Durban)	✓
Johannesburg (Johannesburg)	•
Mangaung (Bloemfontein)	✓

- ✓ Fully implemented
- Available, but not commonly used by conveyancers
 Currently being piloted

Source: Doing Business database.

manual system. Another outlier is eThekwini, which despite its e-application process has a lag—largely due to staffing shortages and a difficult implementation of new back-office systems.

Mangaung and Buffalo City also issue rates clearance certificates electronically. For back-office functions, all locations use an electronic revenue management system to determine municipal account dues for a property before issuing the rates clearance certificate. However, locations experience different backoffice delays. These may stem from the following factors: reliability of the revenue management system platform, whether municipal systems have been connected across departments, the number of departments that must provide inputs on rates and whether these details are up to date for most accounts. On average, municipalities have to obtain inputs from six to eight departments—including water, waste, valuation and housing. In Mangaung these departments are interconnected through the SOLAR platform. This is not the case in Msunduzi—the slowest location to issue rates clearance certificates—where applications are circulated to different departments for approval.

Additionally, the list of application documents varies among municipalities. In Cape Town and Mangaung a printout of the title search must be included along with the application. Applications that do not include one will be rejected. In Tshwane the requirements are equivocal. Depending on the application counter and clerk, a title search may be required; conveyancers always include one to avoid delays. Consequently, in these three locations the conveyancer cannot simultaneously conduct a title search and apply for a rates clearance certificate.

Time variations may also stem from different workloads and staffing at municipal and deeds offices. Take, for example, the number of rates clearance certificate applications received in 2017 in three municipalities: Mangaung, 8,019; Ekurhuleni, 24,209; and eThekwini, 33,168.19 Moreover, eThekwini currently has nine staff vacancies in the department that processes such applications.²⁰ This matches the municipalities' relative speed in issuance of clearance certificates and overall performance. Similarly, differences in workloads, staffing and reliability of computer systems across deeds offices impact the time needed to register a property transfer. Over the past two years, in addition to the regular high number of lodgments, the Cape Town Deeds Office—one of the locations where lodging a deed takes the longest has faced an important backlog due to failure of information technology (IT). An action plan was adopted to address the problem.

Cost varies marginally—from 7.61% of the property value in Ekurhuleni, Johannesburg and Tshwane to 7.64% in Cape Town—with rates clearance and compliance certificate fees accounting for the main differences.²¹ This is because

the largest share of fees (including the transfer duty, conveyancers' fees and lodgment fees) are regulated nationally. The transfer duty alone accounts for 86% percent of the total cost to transfer property.

Going beyond efficiency—the quality of land administration index

While procedural complexity, time and cost of property registration all matter for businesses, good land administration goes beyond efficiency. It ensures property owners a secure title, backed by a reliable land administration system. A reliable, transparent, complete and secure land administration system is associated with greater access to credit, lower income inequality and lower incidence of bribery at the land registry.²²

Doing Business assesses the quality of this system through five main dimensions: reliability of infrastructure (0 to 8 points), geographic coverage (0 to 8), transparency of information (0 to 6), land dispute resolution (0 to 8) and equal access to property rights (-2 to 0). Results for these dimensions are then added for the overall score on the quality of land administration index (table 5.3).

In South Africa land administration falls under the purview of the national Department of Rural Development and Land Reform. More specifically, the department's chief registrar of deeds (land registry) and chief surveyorgeneral (mapping agency) manage property through their local offices. Quality standards are thus uniform across the country, and all locations score half the 30 possible points on the quality of land administration index—lagging behind 81 other economies globally (figure 5.4).

Reliability of infrastructure

A reliable land administration system provides clear information on property ownership and prevents fraudulent transactions.²³ Adequate infrastructure for keeping property records is key to

The gold standard is a fully digital, unified or linked property registry and cadastral mapping system that allows staff to electronically search and update records.

ensuring reliability. The gold standard is a fully digital, unified or linked property registry and cadastral mapping system that allows staff to electronically search and update records. The nine locations measured score 5 of the 8 possible points on the reliability of infrastructure index. Historical land records (cadastral maps and property titles) are either scanned images or microfilms (2 points). Deeds offices and surveyor-general's offices use a common "erf" number to uniquely identify each property (1 point), but they have separate databases. The deeds office's DeedsWeb database also makes it possible to conduct an electronic search for encumbrances on a given property (1 point). Lastly, surveyor-general's offices have a geographic information system (GIS) that captures, stores and analyzes cadastral data (1 point). This is not to be confused with municipal corporate GIS services (box 5.1).

If deeds offices and surveyor-general's offices had a shared database, they would score an additional point. The use of a single database, updated with changes in real time, would ensure that ownership and boundary data are linked across the two agencies. It would reduce the potential for fraud, as each agency would have access to the most updated information on land plots. Additionally, if land registry and cadastre historical files were digitized and searchable (rather than simply scanned), South Africa would score another 2 points—1 for each agency's records being fully digital.

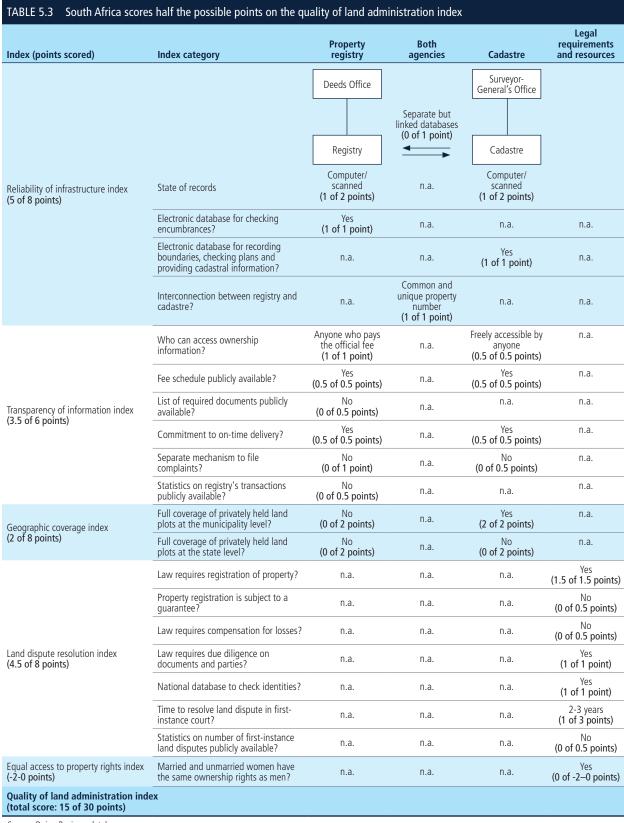
Transparency of information

Transparency is assessed by how the land administration system makes information publicly available. The best practice is for registries and cadastres to make land-related information available either online or on a public board. All nine locations score 3.5 of the 6 possible points on

the transparency of information index. In South Africa general information on time limits for completing property transactions is displayed on public boards located in all deeds offices (0.5 points), but the list of necessary documents is accessible only through conveyancers. Additionally, although deeds offices track the number of property transactions processed, this information is not publicly accessible. Anyone who pays the fee listed online can access information on property ownership (1.5 points).24 In this regard, the Office of the Chief Surveyor-General makes effective use of technology. Anyone can access cadastral diagrams online,²⁵ and general information-on fees and time limits to deliver an updated map—is also available on its website (1.5 points).26 Neither deeds offices nor surveyor-general's offices have a dedicated, separate mechanism for clients to file complaints.

Geographic coverage

Globally, only 22% of economies have a land registry that includes all privately held land plots, and 24% have cadastral mapping that covers all private land. Where land registries fall short of complete geographic coverage, companies and individuals cannot be sure whether the areas not covered are relevant to their interests.²⁷ The locations measured score 2 of 8 possible points on geographic coverage. In urban areas²⁸ privately held land plots are mapped (2 points). However, registration has yet to catch up with mapping, even in urban areas. Additionally, private land in rural areas is not yet fully covered by the cadastre and land registry. Many rural areas were formerly designated homelands, which started being mapped only after 1994.²⁹ Extending the coverage of deeds offices and surveyor-general's offices to include all privately held land would result in a score on this index of the full 8 points.



Note: The equal access to property rights index ranges from -2 to 0 points, with negative values indicating a lack of equity between women and their male counterparts. n.a. = not applicable.

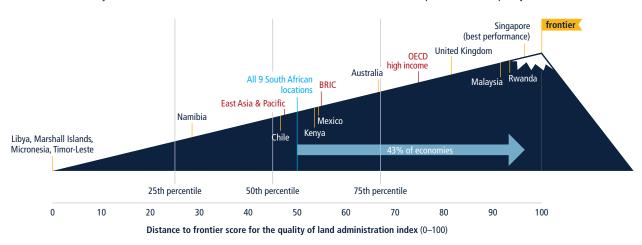


FIGURE 5.4 Globally, 43% of economies are closer than South Africa is to the frontier of best practices in the quality of land administration

Note: The figure illustrates the distribution of the 190 economies in the Doing Business sample by their distance to frontier score (DTF) for the quality of land administration index. The DTF score is normalized to range from 0 to 100, with 100 representing the frontier of best practices (the higher the score, the better). The OECD averages are based on economy-level data for the 33 OECD high-income economies. The East Asia & Pacific averages are based on economy-level data for the 25 economies of East Asia and the Pacific. The BRIC averages are based on economy-level data for Brazil, Russia, India and China.

BOX 5.1 Geographic information systems provide important input for municipal services

The Office of the Chief Surveyor-General, based in Pretoria, is the national cadastral agency. It has eight local offices, one per province except for Northern Cape Province, which is administered by the Free State office. Each office has a geographic information system (GIS) comprising the national cadastre.

The Office of the Chief Surveyor-General establishes cadastral boundaries and land plot dimensions throughout the country. It provides information to deeds offices for registration purposes. Its cadastral data—including plot-specific information and diagrams—are freely available online.^a Each local surveyor-general's office also has an email service through which clients can request diagrams not yet uploaded. This is an important resource for land owners who want to know their property boundaries or access other information on properties relevant to their interests.

Separately, municipalities have their own corporate GIS units—often part of the planning authority—that serve a broader purpose. While municipal corporate GIS teams periodically obtain source data from the local surveyor-general's office, they build on this information to create maps encompassing multiple layers of geographical information—cadastral, topographical, subterranean and other information—pertinent for providing municipal services. Municipalities mainly use this data internally, for land use and planning purposes. For example, having access to topographical information enables municipalities to zone and issue building plan approvals.

The level of detail contained in the municipal GIS varies from one location to the next. This is mainly because municipalities have their own development priorities and thus collect different information. Unlike the surveyor-general's office, which focuses on updating information on individual land plots, municipal GIS services tend to focus more broadly, such as on the characteristics of entire neighborhoods. For example, many municipalities use the GIS to monitor the creation and expansion of informal settlements. Nonetheless, some collect plot-specific information. For example, Mangaung uses aerial photography to identify unreported capital improvements on individual properties, for municipal valuation purposes.

Lastly, because the municipal GIS is mainly used internally, municipalities differ in what information they make publicly available and by what means. In most locations residents can access GIS information in person at the municipality. Cape Town is among the minority to make its municipal GIS data available online, for free.^b

a. A searchable index is available through the website of the Office of the Chief Surveyor-General, available at http://csg.dla.gov.za. Diagrams can be consulted free of charge.

 $b.\ Most\ of\ the\ GIS\ information\ is\ available\ on\ the\ Cape\ Town\ City\ Map\ Viewer,\ available\ at\ http://citymaps.capetown.gov.za/EGISViewer.$

Land dispute resolution

An economy with a model land administration system minimizes the number of land disputes by ensuring that clients receive accurate information, provides a state guarantee for registration and compensates parties for losses incurred as a result of errors by the property registry. In addition, it ensures that an effective and efficient court system exists to handle land disputes and provides statistics on the number of such disputes in courts of first instance.30 The nine South African locations score 4.5 of the 8 possible points on the land dispute resolution index. The law governing property registration mandates that all property transactions must be registered at the deeds office to be opposable to third parties (1.5 points).31 However, property registration in South Africa departs from the practice in 146 economies worldwide because it is not legally subject to a state or private guarantee (such as title insurance).

But South Africa does require in-depth verification steps during a property registration (1 point). The identity of the parties to a

property transaction is checked against a national database to confirm accuracy and ownership (1 point), and documents proving the legality of the transfer are checked by the conveyancer and the registrar, both of whom can be found liable for errors. The state, however, does not provide compensation for losses incurred because of erroneous information provided by deeds offices. When land disputes do arise, parties can file claims at their High Court provincial division, where cases typically take two to three years to resolve (1 point). But no disaggregated data are available on the number of first-instance land disputes. If such statistics were available, if property registration were subject to a guarantee and if the state compensated losses incurred because of erroneous information provided by the deeds office, South Africa would score another 1.5 points. In addition, faster resolution of land disputes would lead to an increase of up to 2 points in this index's score.

Equal access to property rights

Doing Business also assesses whether a person's gender has a bearing on access

to property rights. In South Africa, as in 175 other economies, married and unmarried women have the same ownership rights to property as their male counterparts.³²

WHAT HAS CHANGED?

Since 2015, both national and local regulatory changes have affected the ease of transferring property across South Africa. At the local level, Buffalo City, Mangaung, Nelson Mandela Bay and Tshwane have improved efficiency at the municipality or local deeds office (table 5.4). However, national fee increases have hampered overall improvement in most locations.

Most notable among the improvements was Mangaung's introduction of a new rates clearance application system in June 2015.³³ Previously this was a two-part process. First, the applicant had to obtain an assessment of electricity dues from the utility (Centlec), pay the corresponding amount and receive proof of

TABLE 5.4 What locations have made it easier to transfer property since 2015?										
		Local changes			National changes					
Location	Overall	Increased administrative efficiency at the municipality's finance department	Increased administrative efficiency at local deeds office	Introduced new rates clearance certificate fee	Introduced new transfer duty	Introduced new conveyancing fee	Introduced new registration fee	Increased efficiency at the South African Revenue Service	Increased transparency at the deeds offices	
Buffalo City (East London)	ж		✓	×						
Cape Town (Cape Town)	ж			×						
Ekurhuleni (Germiston)	×			*						
eThekwini (Durban)	×	×		*						
Johannesburg (Johannesburg)	×			*	×	x	ж	*	✓	
Mangaung (Bloemfontein)	✓	✓		×						
Msunduzi (Pietermaritzburg)	ж	×		×						
Nelson Mandela Bay (Port Elizabeth)	x		✓	×						
Tshwane (Pretoria)	ж	✓		×						

Source: Doing Business database.

Note: This table records all Doing Business improvements and changes that occurred between January 2015 and May 1, 2018.

^{✓ =} Doing Business improvement making it easier to transfer property.

✗ = Doing Business change making it more difficult to transfer property.

payment. With proof of payment in hand, the applicant could then apply in person for a rates clearance certificate³⁴ from Mangaung Municipality.

Mangaung has since launched an electronic application system and consolidated the process. Now applicants interact only with the municipality. When they lodge an application³⁵ for a rates clearance certificate, the municipality creates an e-task for Centlec to provide the balance due on the corresponding account—through the municipality's new financial system, SOLAR. Applicants then receive an assessment of the amount due to the electricity utility and for all municipal accounts. The municipality issues a single, consolidated clearance certificate once all payments are made.

This new system made obtaining a rates clearance certificate 3.5 times faster—a time reduction from 42 to 12 days. It also reduced the steps to transfer property (from eight to seven) by eliminating the need for a separate interaction with the utility. This brings Mangaung—formerly the sole municipality to require a separate electricity clearance certificate—in

line with other locations. These improvements also propel Mangaung from the bottom of the ranking to the top, making it the easiest place to transfer property in South Africa.

Similarly, Tshwane cut the time to obtain a rates clearance certificate by five days. The municipality automated back-office functions through the SAP software system,³⁶ consolidated its billing procedures³⁷ and installed pigeonholes for conveyancers to collect certificates as soon as they are ready.

Deed registration is now faster at the King William's Town Deeds Office—which covers Buffalo City and Nelson Mandela Bay.³⁸ This results from the broadening of this office's geographical jurisdiction (box 5.2). Along with this change came more resources (including additional staff) to match the new workload. Additionally, in preparation for the jurisdictional change, staff at the deeds office also worked extended hours to purge existing backlogs and prevent future ones.

At the national level, the Office of the Chief Registrar of Deeds increased transparency. Its service commitment charter, which states time limits for registering deeds, is now available on public boards in the various deeds offices.

However, not all changes have made transferring property easier. implementation of new electronic rates clearance management and billing systems can also create delays. Both eThekwini and Msunduzi are currently facing significant backlogs because all systems were off for several weeks in 2016 and 2017, respectively, to ensure proper data migration when they adopted new revenue management platforms. These backlogs are also due to computer glitches, slowness of the new systems, implementation delays and lack of staff training. It now takes 19 days longer than in 2015 to obtain a rates clearance certificate in eThekwini and 18 days longer in Msunduzi. These new electronic systems may yet bear fruit in the future, because automation is a long-term process which can take time to yield intended outcomes.

Nationally, SARS is also taking longer to issue transfer duty payment receipts.

BOX 5.2 Realignment of deeds offices' jurisdiction: an ongoing improvement

South Africa generally has one deeds office per province. The Eastern Cape and Gauteng provinces are the exception, with two deeds offices each: in King William's Town and Umtata (in the Eastern Cape) and Johannesburg and Pretoria (in Gauteng).

In 2017 the Office of the Chief Registrar of Deeds started realigning the jurisdiction of deeds offices to match provincial boundaries. The main purpose is to promote easier access for clients who sometimes travel long distances, beyond their province, to access deeds services.

To date, the realignment has affected Eastern Cape, Northern Cape and Western Cape provinces. On March 1, 2017, properties located in the Northern Cape but registered at the Cape Town Deeds Office (in the Western Cape) were reassigned to the Kimberley Deeds Office.^a Similarly, as of December 4, 2017, Eastern Cape properties registered at the Cape Town Deeds Office—specifically those located in Port Elizabeth—now fall under the jurisdiction of the King William's Town Deeds Office.^b This will affect workloads, as Cape Town used to cover a much larger area than other deeds offices.^c

Because the deeds offices for Johannesburg and Pretoria are both in Gauteng Province, the Office of the Chief Registrar of Deeds was also considering adjusting their respective jurisdictions. However, this was suspended^d after the Pretoria Attorneys Association filed a case contesting the new demarcation.

a. Registrar's Circular 1/2017 (Cape Town); Registrar's Circular 1/2017 (Kimberley).

b. Registrar's Circular 6/2017 (Cape Town); Registrar's Circular 5/2017 (King William's Town).

c. According to the Office of the Chief Registrar of Deeds, in 2016-2017 a fourth of the deeds lodged in South Africa were lodged in the Cape Town Deeds Office.

d. The Gauteng Division (Pretoria) of the High Court of South Africa issued an order regarding case 21152/18 on April 17, 2018. Available at: https://www.ppv.co.za/wp-content/uploads/2018/04/Pretoria-Attorneys-Association-Minister-of-Rural-Development-and-Land-Reform-Court-Order-17.04.2018.pdf.

Overall, registering property has become less efficient and more burdensome in most locations measured.

Anecdotal evidence suggests this is due to a lack of staff capacity to keep up with its growing workload. However, conveyancers complete this procedure in tandem with other steps that take longer. Consequently, the increase in SARS' processing time—from half a day to two days—has no impact on the total time to transfer property.

Transferring property has also become costlier across the country since 2015. All municipalities measured increased the fee to obtain a rates clearance certificate. Increases range from ZAR 5 (\$0.40) in Tshwane to ZAR 103 (\$7.50) in Mangaung. However, the most meaningful fee increases happened at the national level and affect all locations. The transfer duty—which already accounted for 85% of the cost of transferring property—went up by nearly half over three years for the commercial property in the Doing Business case study.39 Similarly, conveyancing fees went up by 34%.40 The deed registration fee also increased from ZAR 1,100 (\$80) to ZAR 1,275 (\$93). Because they are regulated at

the national level, these changes are consistent across locations. It is now 1.5 times more expensive to register commercial property in South Africa, which is a disincentive to buying and selling land and could therefore hinder business expansion.

Overall, registering property has become less efficient and more burdensome in most locations measured. Although Buffalo City, Mangaung, Nelson Mandela Bay and Tshwane have made some efficiency gains, national-level fee increases disproportionately overshadow improvements. Mangaung is the sole location to improve overall; the magnitude of its improvements outweighs the changes making property transfers more difficult (figure 5.5).

Future reforms are underway. The Office of the Chief Registrar of Deeds is working on the implementation of an electronic deeds registration system that would enable conveyancers to lodge deeds electronically from anywhere in South Africa. This system is also expected to

allow for electronic deeds to be delivered to clients. It could thus ensure faster registration at the deeds office and delivery of the deed to its new owner.

WHAT CAN BE IMPROVED?

Streamline issuance of rates clearance certificates

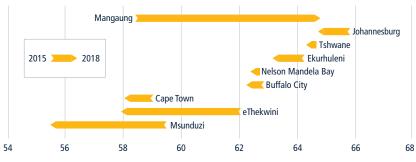
Buffalo City, Cape Town, eThekwini and Mangaung have implemented automated application systems that enable conveyancers to request rates clearance certificates directly from their office.41 Johannesburg has developed an online application system⁴² that is directly linked to its SAP-based billing system, but 70% of conveyancers still file their applications manually. In addition, Ekurhuleni has been piloting a webbased application system scheduled to go live soon.⁴³ Msunduzi, Nelson Mandela Bay and Tshwane still require conveyancers to file applications in person.44 Electronic application systems are a good practice because they prevent file loss and facilitate communication between conveyancers and revenue departments. In addition to electronic applications, municipalities should implement electronic issuance to allow conveyancers to print rates clearance certificates from their office.

Localities are also encouraged to adopt consolidated electronic revenue management systems encompassing all municipal accounts. Mangaung—among the four fastest locations to issue a rates clearance certificate—implemented such a system, along with set turnaround times for departments to provide timely information on unpaid municipal accounts. Internal deadlines structure internal procedures and optimize time efficiency, which is why eThekwini has adopted similar turnaround times. What is critical moving forward is to ensure that time limits are enforced.

However, the process could be streamlined further if the practice of requiring

FIGURE 5.5 Mangaung is the sole location where the efficiency of transferring property improved overall





Source: Doing Business database.

Note: The figure illustrates the change in each location's average distance to frontier score (DTF) for procedures, time and cost to transfer property, between 2015 and 2018. The DTF score shows how far a location is from the best performance achieved by any economy on the registering property indicator. The DTF score is normalized to range from 0 to 100, with 100 representing the frontier of best practices (the higher the score, the better). For more information, see the chapter "About Doing Business and Doing Business in South Africa 2018" and the data notes.

^{*}For the cost DTF score, this figure uses the same income per capita for both years.

separate rates clearances were abolished altogether. Municipalities could explore the possibility of replacing rates clearance certificates with online payment confirmation. Property owners could then print the confirmation and submit it with the application to transfer property at the deeds office. This should be especially feasible for municipalities like Cape Town, which has focused its efforts on cleaning up its property data and ensuring that all relevant information is up to date.

Automation alone is not sufficient, as conveyancers might experience delays due to system malfunction and backlogs. Msunduzi's difficult transition from one software system to another demonstrates that municipalities should equip themselves with software that meets their specific needs, as well as adequate IT support and trained staff, to enjoy the full benefit of going electronic. As municipalities introduce new electronic tools—such as Johannesburg's e-application system—they should consider conducting a public awareness campaign to ensure that end-users know about these resources.

Improve coordination among stakeholders and consider implementing a one-stop shop for property registration

At the local level, agencies work in silos. Each completes its part of the property transfer process, but the agencies lack coordination and have a limited understanding of the client's complete experience. A first step toward greater integration and efficiency would be the creation of a common database gathering cadastral maps and ownership data; such unified databases already exist in 23 economies around the world. Additionally, deeds offices and surveyorgeneral's offices are encouraged to convert historical files into fully electronic documents.

All relevant stakeholders—deeds offices, surveyor-general's offices, municipalities and conveyancers—could be gradually

Transparency is key because it helps eliminate asymmetries in information between users and officials in land administration and increases the efficiency of the land market.

brought into a centralized platform where all property-related information would be available. This platform could serve as a one-stop shop for conveyancers, reducing the number of interactions needed to transfer property. In Latvia, by way of example, the land registry and municipalities are interconnected, which frees entrepreneurs from having to provide tax information in paper format and makes property transfer faster.

Greater time efficiency could also be achieved through stronger coordination between deeds offices. The electronic deeds registration system is expected to allow conveyancers to lodge deeds electronically from anywhere in South Africa. Consequently, deeds offices should consider the possibility of allocating applications for registration among themselves according to their respective workloads. For instance, the Cape Town Deeds Office has faced an important backlog because of IT failure; an action plan was adopted to address the problem. Meanwhile, the Bloemfontein and Pietermaritzburg⁴⁶ Deeds Offices which handle smaller workloads-had the human and technical capacity to assist in eliminating backlogs in other deeds offices.

Agencies should regularly meet with local conveyancers to understand their daily challenges and ensure that their needs are met. In Mangaung the municipality and the deeds office meet with conveyancers on a semiannual basis to receive feedback.

Reinforce transparency in the land administration system

Transparency is key because it helps eliminate asymmetries in information between users and officials in land administration and increases the efficiency of the land market.⁴⁷ In South Africa deeds offices and surveyor-general's offices communicate some details relevant to property. Fee schedules as well as land ownership information and cadastral maps are available through their respective websites.⁴⁸ Property registration turnaround times are displayed in deeds offices on public boards but are not always located in a prominent place, making this information difficult to access in practice. Furthermore, the list of documents required to transfer property and land statistics are not publicly available.

Authorities might consider making this information readily accessible on a user-friendly, consolidated website. One model is Singapore, which centralizes all land-related information for both the registry and the cadastre. ⁴⁹ In economies where information on fees and documentary requirements is easily available, the process of completing property transfers tends to be more efficient. ⁵⁰

Additionally, in South Africa clients can file complaints directly with the registrar (at the land registry) or the surveyorgeneral (at the cadastre) for issues arising from their interactions with the corresponding agencies. However, this means clients are essentially faced with reporting their grievances to the same agency rather than to an independent body that has a specific mechanism for managing complaints. Having a separate complaint mechanism increases transparency, provides a higher level of impartiality and scrutiny in managing complaints and promotes consistent application of service standards. It also allows users to be more forthcoming about possible abuses. Most importantly, separate and independent complaint mechanisms enable governments to monitor recurring issues and improve

the overall land administration system.⁵¹ For example, in Malaysia clients can go through the registry's website to anonymously file complaints, which go straight to the director.⁵²

Strengthen protections and resolution mechanisms for landrelated issues and disputes

Many governments back their property registration system with a state guarantee. South Africa is among 41 economies covered by Doing Business in which the government does not do so. To abate land disputes, South Africa should consider legislative options to establish a guarantee over property registration such as title insurance—to compensate for losses resulting from erroneous information obtained from public agencies. This would create greater confidence in the land tenure system. In England and Wales users receive an indemnity in the event of losses incurred by a mistake in an official search or an official copy.

In the long term, South Africa should work toward faster resolution of land-related disputes. One way of decongesting courts is to establish alternative dispute resolution mechanisms such as voluntary mediation procedures. Moreover, judgments tend to be rendered faster in economies where statistics on the number of filed and resolved land disputes are available to the public.53 These types of statistics are not publicly available in South Africa, where land-related lawsuits generally last two to three years. In 32 economies—including Côte d'Ivoire—it takes on average less than a year to obtain a decision from the first-instance court. Globally, 111 economies outperform South Africa in this regard.

Expand geographic coverage

Since 1994, most of the South African territory has been surveyed, but not all land plots are diagrammed. Ideally the property registry and cadastre would cover all privately held land and make the information readily available to clients.⁵⁴ Although urban areas are diagrammed, the Office of

the Chief Surveyor-General is encouraged to expand coverage in rural areas.

Property registration should also be increased in both urban and rural areas. Georgia might serve as an example. It achieved 100% registration of privately held land plots in Tbilisi in 2015. The effort started in 2010, when Georgia introduced its Cadastre REG project. Over five years the project systematically mapped property rights throughout 12 pilot areas across Georgia, including Tbilisi.

Worldwide, 37 economies have achieved full coverage—mapping and registration. This has enhanced the ease of doing business and leveraged a stable source of public revenue through complete coverage for taxation purposes.⁵⁵

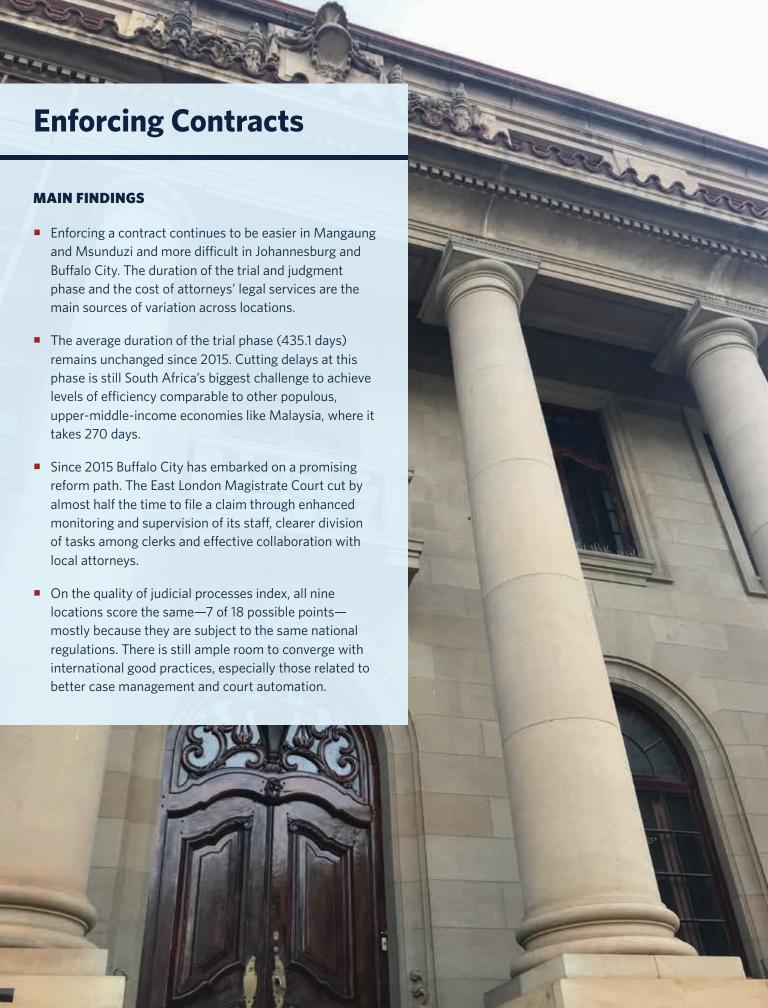
NOTES

- World Bank. 1989. World Development Report 1989. New York: Oxford University Press.
- World Bank. 2018. South Africa Systematic country diagnostic: an incomplete transition - overcoming the legacy of exclusion in South Africa. Washington, DC: World Bank Group. Available at http://documents.worldbank.org /curated/en/815401525706928690/pdf /WBG-South-Africa-Systematic-Country -Diagnostic-FINAL-for-board-SECPO -Edit-05032018.pdf.
- World Bank. 2018. South Africa Systematic country diagnostic: an incomplete transition - overcoming the legacy of exclusion in South Africa.
- Property information held in cadastres and land registries is part of the land information available to governments. Land-related information also includes other geographic, environmental and socioeconomic data that are useful for urban planning and development.
- Johnson, Simon, John McMillan and Christopher Woodruff. 2002. "Property Rights and Finance." The American Economic Review 92 (5): 1335-1356.
- Section 16 of the Deeds Registries Act 47 of 1937 asserts that "ownership of land may be conveyed from one person to another only by means of a deed of transfer executed or attested by the registrar."
- 7. Sections 15 and 18, Attorneys Act 53 of 1979.
- 8. Section 15, Deeds Registry Act 47 of 1937.

- When the transaction involves two firms, as described in the Doing Business case study for this indicator, the following list of documents applies: certificates of incorporation, registration certificates, documents reflecting the company's trade name, proof of authority for the person transacting on behalf of the company, certified copies of director's identification documents, copies of notice of registered office, documents reflecting business address, documents reflecting the income tax number, the memorandum of association, articles of association, registered documents reflecting listed registered directors, certificate to commence business. latest utility bill, proof that the company is not insolvent and copies of the seller's title deed.
- 10. Conveyancers conduct the check online via http://www.cipc.co.za/.
- 11. An electrical compliance certificate is required for property transfers in all nine locations.
- Contractual practice in Buffalo City, Cape Town, eThekwini, Msunduzi and Nelson Mandela Bay requires the transacting parties to obtain an entomologist's certificate for property transfers.
- 13. A plumbing certificate is required for property transfers in Cape Town.
- For more information, see the website of the South African Revenue Service at http://www.sarsefiling.co.za/.
- 15. For more details on this procedure, see *Doing Business in South Africa 2015*.
- 16. The new owner will be able to obtain a proof of ownership as soon as his or her name is captured by the data unit after execution, numbering and embossment, as DeedsWeb the deeds office's online database—will automatically be updated then.
- 17. Section 14, City of Cape Town Water By-law, 2018.
- Section 118 of the Local Government Municipal Systems Act 32 of 2000 requires a rates clearance certificate to transfer property.
- 19. Sources: Ekurhuleni Municipality, eThekwini Municipality and Mangaung Municipality.
- The information presented in *Doing Business in South Africa 2018* is current as of May 1, 2018.
- Rates clearance certificate fees vary from ZAR 59 (\$4.29) in Tshwane to ZAR 363 (\$26.39) in Mangaung. Cape Town requires an additional compliance certificate (plumbing certificate) worth ZAR 600 (\$43.62).
- World Bank. 2014. Doing Business 2015: Going Beyond Efficiency. "Registering property: Measuring the quality of land administration systems." Washington, DC: World Bank.
- 23. UN-Habitat. 2013. Tools to Support
 Transparency in Land Administration. Nairobi:
 UN-Habitat
- Government Gazette of February 28, 2017 (No. 40649, Notice No. R.175), available at http://www.deeds.gov.za/ITSODeedsWebB/deedsweb/LatestFees.pdf.
- 25. For more information, see the website of the Office of the Chief Surveyor-General at http://csg.dla.gov.za/.
- Information on fees is available at http://csg .dla.gov.za/fees.htm; information on time limits is available at http://csg.dla.gov.za /func.htm.

- Deininger, Klaus, Harris Selod and Anthony Burns. 2012. The Land Governance Assessment Framework: Identifying and Monitoring Good Practice in the Land Sector. Washington, DC: World Bank.
- 28. For each location, *Doing Business in South Africa 2018* measures one urban area. The proxy cities and their respective municipalities are as follows: East London (Buffalo City), Cape Town (Cape Town), Germiston (Ekurhuleni), Durban (eThekwini), Johannesburg (Johannesburg), Bloemfontein (Mangaung), Pietermaritzburg (Msunduzi), Port Elizabeth (Nelson Mandela Bay) and Pretoria (Tshwane).
- 29. Before apartheid, the Natives Land Act 27 of 1913 instituted a land tenure system where the South African territory was divided according to racial demography. Under the apartheid regime, African populations were moved to rural lands, reserved for them under the Natives Land Act. These areas were called homelands, also known as Bantustans, Homelands were not mapped or titled because their residents were considered occupants, not owners. At the end of apartheid in 1994, homelands ceased to exist and were reintegrated into the South African provinces, forming nine provinces altogether. In 2010 the Chief Surveyor-General's Office was commissioned to map the unmapped homelands. To date, most of South African land is surveyed but not diagrammed. This means that all subdivided land parcels are not yet captured by the cadastre.
- World Bank. 2014. Doing Business 2015: Going Beyond Efficiency. "Registering property: Measuring the quality of land administration systems."
- 31. Section 16, Deeds Registries Act 47 of 1937.
- Articles 9 and 25, Constitution of the Republic of South Africa; Articles 14 and 15, Matrimonial Property Act 88 of 1984.
- For more details on the former rates clearance certificate application system, see *Doing* Business in South Africa 2015.
- 34. This was formerly called a rates and water clearance certificate.
- 35. For more information, see the website of Lexis
 RatesClearance at http://ratesclearance.com.
- 36. The application itself must still be made in person in Tshwane.
- 37. The status of all types of rates (property valuation, meter readings or estimates, potential rezonings or others) can be checked on one screen in the billing system. Supervisors in charge of reviewing applications no longer need to check several screens to have a complete picture of payment status.
- 38. Since December 4, 2017, properties located in Nelson Mandela Bay fall under the jurisdiction of the King William's Town Deeds Office, pursuant to Registrar's Circular 6/2017 (Cape Town) and Registrar's Circular 5/2017 (King William's Town). These files were previously under the jurisdiction of the Cape Town Deeds Office.
- The transfer duty for the *Doing Business* case study has increased by 48% since 2015. For more information on transfer duty rates, see

- the SARS website at http://www.sars.gov.za/Tax-Rates/Pages/Transfer-Duty.aspx.
- Since June 1, 2018, the conveyancing fees recommended by the Law Society of South Africa have increased further. The updated sliding scale is available at http://www .ghostdigest.com/articles/conveyancing-fees -june-2018/55519.
- 41. Buffalo City and Mangaung use the RatesClearance website (http://ratesclearance.com); Cape Town and eThekwini use software systems called E4 and Korbitec.
- For more information, see the website of the City of Johannesburg at http://196.37.143.196/eclearance/.
- The Ekurhuleni electronic application system is expected to launch in the summer or fall of 2018.
- 44. Some conveyancers hire messengers to go to the municipality counter on their behalf.
- 45. The economies with a single database are Antigua and Barbuda; Armenia; Belarus; Cyprus; Czech Republic; Djibouti; Finland; Georgia; Ireland; Japan; Kosovo; Kyrgyz Republic; Lithuania; the former Yugoslav Republic of Macedonia; Malta; the Netherlands; New Zealand; Romania; the Russian Federation; Samoa; Taiwan, China; Turkey; and Uzbekistan.
- 46. The Bloemfontein Deeds Office covers Mangaung, and the Pietermaritzburg Deeds Office covers eThekwini and Msunduzi.
- World Bank. 2014. Doing Business 2015: Going Beyond Efficiency. "Registering property: Measuring the quality of land administration systems."
- 48. For more information, see the DeedsWeb database at http://www.deeds.gov.za /ITSODeedsWebB/deedsweb/welcome.jsp or the website of the Office of the Chief Surveyor-General at http://csg.dla.gov.za/fees.htm.
- For more information, see the website of the Singapore Land Authority at https://www.sla .gov.sg/Services.
- World Bank. 2017. Doing Business 2018: Reforming to Create Jobs. "Registering Property: Using information to curb corruption." Washington, DC: World Bank.
- 51. World Bank. 2017. *Doing Business 2018: Reforming to Create Jobs.* "Registering Property:
 Using information to curb corruption."
- For more information, see the website of the Department of the Director General of Land and Mines of Malaysia at http://www.kptg. gov.mv/en.
- World Bank. 2014. Doing Business 2015: Going Beyond Efficiency. "Registering property: Measuring the quality of land administration systems."
- 54. UNECE (United Nations Economic Commission for Europe). 2012. Policy Framework for Sustainable Real Estate Markets: Principles and Guidance for the Development of a Country's Real Estate Sector. Geneva: UNECE.
- Hanstad, Tim. 1998. "Designing Land Registration Systems for Developing Countries." American University International Law Review 13 (3): 647-703.



strong and efficient South African judiciary plays a central role in supporting the private sector investments that create the jobs citizens need to come out of poverty.¹ Growing private investments in South Africa are essential to reach the national goal of building an economy that provides full employment by 2030. Eleven million new jobs will be needed to meet that target.² Employment scenarios projected by the National Planning Commission suggest that new jobs will likely come from firms investing in domestic markets

and from growing small and medium-size companies.³

Studies have shown that sound legal institutions and efficient courts promote entrepreneurship and business growth.⁴ They provide firms and investors the confidence that legal disputes will be resolved within a reasonable time, with judicial decisions that are transparent and enforceable. Good contract enforcement stimulates companies to invest and establish new business relations. Conversely, poor judicial performance

and lengthy trials impose heavy costs on firms, undermine commercial trust and diminish the public's confidence in the justice system.⁵

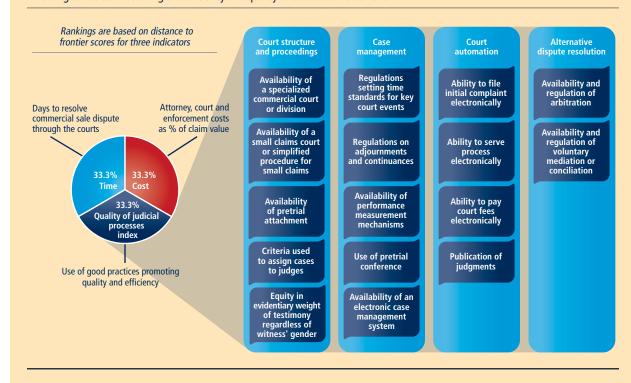
HOW DOES CONTRACT ENFORCEMENT WORK IN SOUTH AFRICA?

Under the South African Constitution, courts and their rules and procedures are governed nationally.⁶ The head of the judiciary is the chief justice, who establishes

WHAT DOES ENFORCING CONTRACTS MEASURE?

Doing Business measures the time, cost and quality of judicial processes for resolving a commercial dispute through a local first-instance court. The case study assumes that a seller delivers custom-made goods to a buyer who refuses to pay, alleging that the goods are of inadequate quality. To enforce the sales agreement, the seller files a claim with a local court, which hears arguments on the merits of the case. An expert is appointed to provide an opinion on the quality of the goods in dispute, which distinguishes the case from simple debt enforcement. The court decides in favor of the seller. Doing Business also incorporates a quality of judicial processes index that measures whether economies have adopted a series of good practices in their court system in four areas: court structure and proceedings, case management, court automation and alternative dispute resolution. This index was introduced in 2015 and replaces the indicator on the number of procedures to enforce a contract (see figure).

Enforcing contracts: measuring the efficiency and quality of contract enforcement



norms and standards applicable to judges and magistrates across the country and monitors performance against these standards. The Department of Justice, for its part, oversees court administration; it promotes public access to the court system and allocates resources to ensure courts can deliver their services. §

Courts are organized in two tiers. The top tier, the superior courts, includes the Constitutional Court, the Supreme Court of Appeal and the High Court. These courts can establish their own proceedings. Magistrates' courts make up the second tier. Unlike the higher courts, the jurisdiction and procedures of magistrates' courts are bound by statutory rules. Litigants can file breach of contract claims at either the High Court or a magistrates' court. However, because it is more affordable to ligate simple cases in the lower courts,9 litigants would still prefer district magistrates' courts for the assumed Doing Business case.10

While filing of claims and enforcement of judgments are relatively efficient processes, overcoming delays during the trial and judgment phase remains the main challenge.

Resolving a commercial dispute across the nine locations measured takes on average 546.7 days and costs 33.1% of the claim value. This is slightly faster than the average for OECD high-income economies (577.8 days) but slower than in New Zealand (216 days) or Rwanda (230 days). The cost is on par with Mexico's, but double that of China and the Russian Federation. On the quality of judicial processes index, South Africa's performance of 7 out of 18 possible points places it between the average for Sub-Saharan Africa (6.5 points) and East Asia and the Pacific (8 points) (figure 6.1).

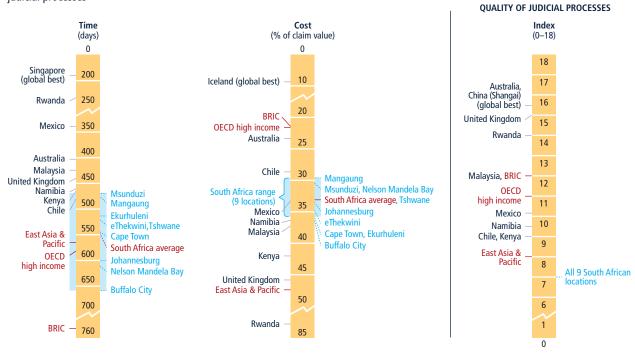
How the process compares

Enforcing contracts measures the time and cost throughout the three main phases of a court proceeding—filing and

service of process, trial and judgment and enforcement of judgment. While filing of claims and enforcement of judgments are relatively efficient processes, overcoming delays during the trial and judgment phase remains the main challenge. Contract enforcement continues to be easier in Mangaung and Msunduzi and more difficult in Johannesburg and Buffalo City (table 6.1). The duration of the trial and judgment phase and the cost of attorneys' legal services are the main sources of variation across locations

The total time to resolve a commercial dispute and have the judgment enforced ranges from over 15 months in Msunduzi to 22 months in Buffalo City. How quickly courts resolve cases depends on their resources and caseloads and how well

FIGURE 6.1 On average, South Africa enforces contracts faster than OECD high-income economies but trails on cost and the quality of judicial processes



Source: Doing Business database

Note: The OECD averages are based on economy-level data for the 33 OECD high-income economies. The East Asia & Pacific averages are based on economy-level data for the 25 economies of East Asia and the Pacific. The BRIC averages are based on economy-level data for Brazil, Russia, India and China.

TABLE 6.1 Enforcing contracts in South Africa—where is it easier?													
Location	Rank (1–9)	2018 Distance to frontier score (0-100)	2015 Distance to frontier score (0–100)	Time (days)	Cost (% of claim value)	Quality of judicial processes index (0–18)							
OECD high income average		66.76	66.55	577.8	21.5%	11							
BRIC average		64.29	62.54	752.3	21.4%	12							
South Africa average		55.60	55.49	546.7	33.1%	7							
East Asia & Pacific average		53.09	52.55	565.7	47.3%	7.9							
Mangaung (Bloemfontein)	1	59.01	59.01	473	29.4%	7							
Msunduzi (Pietermaritzburg)	2	58.78	58.78	469	30.3%	7							
Tshwane (Pretoria)	3	56.14	56.14	527	33.1%	7							
eThekwini (Durban)	4	55.74	55.74	521	34.6%	7							
Ekurhuleni (Germiston)	5	55.58	55.58	513	35.6%	7							
Nelson Mandela Bay (Port Elizabeth)	6	54.85	54.85	611	30.4%	7							
Cape Town (Cape Town)	7	54.71	54.71	545	35.6%	7							
Johannesburg (Johannesburg)	8	54.10	54.10	600	33.2%	7							
Buffalo City (East London)	9	51.48	50.52	661	35.8%	7							

Note: Rankings are based on the average distance to frontier score (DTF) for the time and cost associated with enforcing a contract as well as for the quality of judicial processes index. The DTF score is normalized to range from 0 to 100, with 100 representing the frontier of best practices (the higher the score, the better). The DTF score from the 2015 report includes all data revisions and methodological changes implemented since then. For more details, see the chapter "About Doing Business and Doing Business in South Africa 2018." The OECD averages are based on economy-level data for the 33 OECD high-income economies. The East Asia & Pacific averages are based on economy-level data for the 25 economies of East Asia and the Pacific. The BRIC averages are based on economy-level data for Brazil, the Russian Federation, India and China.

they manage them. For instance, in 2017 the Pietermaritzburg Magistrate Court received 2,200 more cases than its counterpart in East London, yet contract enforcement in Msunduzi is much faster. At the court in Pietermaritzburg, three magistrates hear trials; at the court in Buffalo City, only two.¹¹

Across South Africa the filing stage takes between 30 and 40 days. The duration depends on how long it takes the court to issue the summons and the sheriffs to serve process and return notice of service to the claimant's attorney. The sheriff's service normally takes between 7 and 14 days, but attorneys can pay an additional fee to expedite it.

As in 2015, the trial period still takes on average 435.1 days. It ranges from about a year in Msunduzi and Mangaung to over 18 months in Buffalo City (figure 6.2). After the parties close their pleadings and respond to the notice of discovery, they can apply for a pretrial date. Generally, a trial date will be allocated

only after pretrial proceedings. After the pretrial hearing the wait for trial ranges from three to five months in Mangaung and Msunduzi to nine months in other jurisdictions. The time for completing the trial stage varies depending on factors such as attorneys' diligence, courts congestion and availability of magistrates to preside over trials. According to attorneys, common causes of delay at this stage are court backlogs, frequency of adjournments and waiting periods between hearings—from one to four months.

It still takes 79.1 days to enforce a judgment, on average. The enforcement stage ranges from two months in Buffalo City to nearly three months in most of the other locations. This corresponds to how long it takes sheriffs to inventory, attach and sell the debtor's assets then organize and conduct a public sale of the property.

Enforcing a contract is cheaper in Mangaung and more expensive in Buffalo City—29.4% and 35.8% of the

claim value, respectively. Attorney fees represent the largest share of the cost of enforcing a contract (on average 68% of the total cost). Court rules provide tariffs for the attorneys' legal services. Lattorneys and their clients negotiate fees adhering to these tariffs or agree on an hourly rate considering the complexity of the claim, the attorney's experience and the time needed to prepare and litigate the case. Courts also use the tariffs to calculate court-awarded attorney fees. However, attorneys claim that there can be a substantial shortfall between the courts' award and the actual legal costs. However, award and the actual legal costs.

There are no court fees for filing a suit. Sheriffs' fees are regulated through a national tariff and applied evenly across locations. The average expert witness fee and cost of service of process by sheriffs add up to 7.6% of the claim value. Across locations, enforcement fees—including attachment, removal, storage, advertisement and organization of the public sale—equal 3.0% of the claim value, on average. The same regular and the sale requal 3.0% of the claim value, on average.

Singapore (global best) 6 Msunduzi 33 Filing and service period Mangaung 30 Trial and judgment period Ekurhuleni 30 Enforcement period eThekwini 33 Tshwane 30 Cape Town 31 South Africa average 32 East Asia & Pacific 48 OECD high income 34 Johannesburg 30 Nelson Mandela Bay 35 Buffalo City 40 BRIC 0 100 200 500 600 700 800 Time (days)

FIGURE 6.2 The length of the trial and judgment phase remains unchanged since 2015 and explains the variation among locations

Note: The OECD averages are based on economy-level data for the 33 OECD high-income economies. The East Asia & Pacific averages are based on economy-level data for the 25 economies of East Asia and the Pacific. The BRIC averages are based on economy-level data for Brazil, the Russian Federation, India and China. In this figure, all averages are rounded to the nearest whole number.

Going beyond efficiency—the quality of judicial processes index

Efficiency and quality go hand in hand. Good judicial quality promotes greater efficiency. Data from economies around the world show that efficient dispute resolution is usually paired with sound institutions, effective case management and court automation tools.¹⁷ In 2015 *Doing Business* introduced the quality of judicial processes index¹⁸ to measure whether economies have adopted a series of good practices in their court system in four areas: court structure and proceedings, case management, court automation and alternative dispute resolution. The index is scored on a scale from 0 to 18.¹⁹

All nine locations measured score 7 of 18 possible points on this index. This is mostly because they are subject to the same national regulations. Lagging 4 points behind the average for OECD high-income economies and with fewer

than half the points as the top-performing economies in the index, South Africa has ample room to converge with international good practices—especially those related to better case management and court automation (figure 6.3).

The court structure and proceedings index (scored from 0 to 5 points) looks at the existence of dedicated courts or specialized court divisions for commercial cases and small claims. While both matter for case allocation and contribute to managing case backlogs at courts of first instance, they serve different purposes. Commercial courts can translate into efficiency gains because adjudicators have specialized knowledge of commercial cases and can dispose of cases faster. Small claims courts promote greater access to justice. Each location measured has a small claims court where citizens can resolve simple disputes at no cost without an attorney (a score of 1.5 points).²⁰ There are various specialized courts in South Africa,²¹ but a dedicated commercial court for civil matters is not among them (O points). Commercial litigation happens at the civil divisions of the courts, with magistrates adjudicating civil and commercial matters. Additionally, case assignment is based on objective criteria but not automated in the competent court (a score of 0.5 out of 1). Lastly, pretrial attachment is available to plaintiffs only in extraordinary circumstances and is not typically granted by the courts in general commercial matters²² (a score of O points).²³

The case management index refers to principles that aim to improve case flow and reduce court backlogs. It includes provisions that enhance transparency and accountability from judges and parties for complying with the legal standards. South Africa has adopted some recognized case management principles (scoring 2 out of 6 possible points on this index). For example, it established legal time limits for at least three key court events, with the deadlines respected in more than 50% of cases (a score of 1 point).²⁴ It also makes pretrial conferences available

Efficient dispute resolution is usually paired with sound institutions, effective case management and court automation tools.

FIGURE 6.3 South Africa has ample room for improving the quality of its judicial processes, especially with regard to case management and automation

Court structure and proceedings (-1-5 points)						Case management (0-6 points)					Court automation (0-4 points)				Alternative dispute resolution (0-3 points)						
	Quality of judicial processes index (0–18 points)	Specialized commercial court or division	Small claims court or fast-track procedure	Pretrial attachment	Randomized case assignment	Legal time standards for key events	Legal limits on adjoumments	Performance reports	Pretrial conference	Electronic CMS features for judges	Electronic CMS features for attorneys	Electronic filing	Electronic service	Electronic payment of court fees	Electronic publication of judgments	Consolidated law for commercial arbitration	Limitations on arbitration matters	Enforcement of valid arbitration clauses	Voluntary mediation	Regulation of voluntary mediation	Financial incentives for mediation
Australia	15.5	•	•	•	•		•	•	•	•	•			•	•		•	•	•	•	
Singapore	15.0		•	•	•	•	•	•	•	•				•			•		•		
All 9 locations in South Africa	7.0		•		•				•						•		•	•	•	•	
		•	Full	Pa	rtial																

Note: CMS = case management system. Australia is the global best performer on the Quality of judicial processes index and Singapore is the global best performer on the Enforcing contracts indicator.

to narrow down issues and make trials more efficient (a score of 1 point).²⁵ However, there are no rules limiting the number of adjournments per case (a score of 0 points); hearings or trials can be adjourned at parties' request or by the court.²⁶ The Department of Justice publishes annual performance reports to inform the public on the results of its various programs, which include providing administrative support to the courts and court facilities.²⁷ However, neither these reports nor those published by the Office of the Chief Justice include data on individual court performance (a score of 0 points). Courts do not publish such kinds of reports either.²⁸ In terms of case management systems, in October 2017 the Department of Justice introduced a new integrated case management system for civil courts. The rollout is still ongoing, and the system has yet to fully replace manual case tracking (a score of 0 out of 2 possible points).

The level of automation at the courts is low (0.5 out of 4 points on this index). There is

no electronic case filing, and service of process must be done in person by the court sheriff. The rules allow the parties to receive notifications by e-mail, but only following effective service of process. There are no fees payable to the court. Most judgments are not published. Only decisions from the High Court provincial divisions and the Supreme Court of Appeal are published (0.5 points). Automation, however, is making its way into the courts. The judiciary has plans to roll out an e-filing pilot project for the superior courts.²⁹

Domestic commercial disputes can be settled through arbitration or voluntary mediation (2.5 out of 3 points on this index). All relevant disputes can be subject to arbitration (a score of 0.5), and arbitration clauses are usually enforced by the courts (0.5). Both types of alternative dispute resolution mechanisms are available (0.5 points for each) and are governed by comprehensive regulation (another 0.5 points).³⁰ There are no financial incentives for parties to attend mediation or conciliation (a score of

O points). Since it was established in 2014, the court-annexed mediation program has continued to expand. Currently there are mediation services and centers available at the local courts in four of the country's provinces.³¹ More recently, in October 2017, South Africa's president sanctioned the International Arbitration Act, adopting the Model Law on International Commercial Arbitration of the United Nations Commission on International Trade Law (UNCITRAL).

WHAT HAS CHANGED?

Since 2015 only one in nine locations improved—Buffalo City, for case filing. Registering a claim at the East London Magistrate Court and serving process on the defendant used to be a daunting process lasting two and a half months. Attorneys complained that there were frequent delays in the process of issuing summonses and that documents were misplaced at the court. Local officials

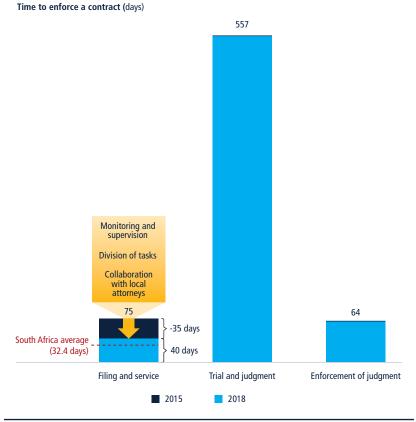
The South African judiciary has made case flow management a priority. It is putting emphasis on empowering judges to direct more pretrial processes to ensure that all cases are duly prepared for trial.

have since embarked on a promising path of reform, and service delivery has improved. The court enhanced monitoring and supervision to ensure compliance with time standards for all its services—including the issuance of summonses; it also reorganized its internal workflow with clearer division of tasks among the court's clerks and established better and more frequent collaboration with the local attorneys.32 The court now issues summonses more efficiently, and misplaced files are a thing of the past. As a result, the average time—for attorneys to prepare summonses, the court to issue them and sheriffs to serve process

on defendants—was almost halved, to 40 days (figure 6.4). This brings Buffalo City more in line with the other locations, where the average filing time is just over a month.

In the medium term, the trial phase may also become more efficient at the East London court. An additional magistrate is now sitting to hear trials, reinforcing the court's capacity to dispose of civil cases. Also, the acting senior magistrate of the East London Magistrate Court and representatives from the local attorneys association are collaborating to put guidelines in place for mandatory pretrial

FIGURE 6.4 Better procedures, enhanced supervision and court-attorney collaboration helped cut the time to file a claim in Buffalo City by nearly half



Source: Doing Business database.

meetings presided over by a magistrate. The aim is to avoid adjournments and unnecessary delays by ensuring that cases are properly prepared before they are set down for trial. These types of initiatives—aimed at better case management—are not unique to Buffalo City (box 6.1).

WHAT CAN BE IMPROVED?

Study magistrates' court caseloads to identify and eliminate causes of trial delay and consider limiting the frequency and causes of adjournments

The average duration of the trial phase at the district courts (14.5 months)—from service of process until expiration of the appeal period—remains unchanged since 2015. This time frame is somewhat comparable to the average in OECD high-income economies (about 14 months). However, results show that even in other populous, uppermiddle-income economies, faster trial time is achievable; in Malaysia the trial stage takes nine months. Delays in the trial phase are South Africa's biggest challenge. Across the country, attorneys identify the backlog in the courts and the frequency of adjournments as common causes of delay in this phase. Weak case management and the absence of legal rules limiting the number of adjournments or requiring their justification may lead courts to grant adjournments to manage their caseload or to adjourn cases due to lack of preparation.

Magistrates' court rules do not establish limits on the number of adjournments per case, nor do they reserve them for extraordinary or exceptional circumstances. Cases may thus be adjourned by parties' consensus or by the courts, per request or at their own discretion. If the court is processing a large volume of applications or hearings, there may be significant delay in resuming adjourned

BOX 6.1 The judiciary in South Africa is enhancing case flow management and encouraging the use of pretrial conferences to improve judicial quality and efficiency

In February 2014 the chief justice of South Africa issued a general directive with the norms and standards of performance applicable to all the courts and their judicial officers. The standards are aimed at improving the courts' delivery of service and establishing guiding criteria for judicial case flow management—including early and regular use of pretrial conferences.³

Pretrial conferences are valuable tools for the courts to clear backlogs and expedite resolution of cases. During the pretrial conference, the judge works with the parties to narrow down the issues in dispute, address evidentiary questions and discuss, among other things, the possibility of settlement.^b As of 2017, 96 economies measured by *Doing Business*, including South Africa, have made pretrial conferences available to foster better, more efficient case flow in the court system.^c Yet across South African jurisdictions, pretrial conferences happen in varied ways. They are mandatory at the high courts—though parties conduct the conference out of court and subsequently file minutes detailing the issues discussed in preparation for trial, as provided by the rules. The judge can then determine whether a further conference is required in his or her chambers.^d At the Gauteng Division of the High Court, cases involving expert testimony must now be certified as trial-ready through a "certification hearing" conducted by the court. At the lower courts, new civil practice directives issued in December 2017 by the Regional Court Presidents' Forum made pretrial conferences mandatory for all contested matters brought before the regional courts.^e District courts can establish practice guidelines to conduct pretrial proceedings. For both lower courts, whether at the regional or district level, magistrates can order parties to attend a pretrial conference if they deem it necessary to streamline the case and narrow down the issues for trial.^f

To comply with the chief justice's directive, courts at all levels have also established their own case flow management protocols. For example, in December 2017 the KwaZulu-Natal Division of the High Court implemented the "Rule 37 Trial Readiness Questionnaire." This is a form that the parties must submit to the court summarizing how they attempted to narrow down the issues and prepare the case for trial. These inputs allow the judge to certify the case's readiness for trial and estimate how long the trial will last. In February 2015 the civil division of the Johannesburg Magistrate Court published updated guidelines with forms to conduct mandatory "certification hearings," including a pretrial conference to formulate issues, before the parties can enroll their case for trial. The East London Magistrate Court will soon adopt its own pretrial protocol and pretrial conference questionnaire.

- a. "Norms and Standards for the Performance of Judicial Functions," issued by Chief Justice Mogoeng Mogoeng on February 28, 2014, as published by Government Gazette 37390 GN 147.
- b. Gramckow, Heike, Omniah Ebeid, Erica Bosio and Jorge Luis Silva Mendez. 2016. Good Practice for Courts: Helpful Elements for Good Court Performance and the World Bank's Quality of Judicial Process Indicators. Washington, DC: World Bank.
- c. Doing Business database.
- d. Rule 37 of the Uniform Rules of Court. Rules Regulating the Conduct of the Proceedings of the Several Provincial and Local Divisions of the High Court of South Africa, available at http://www.justice.gov.za/legislation/rules/UniformRulesCourt[26jun2009].pdf.
- e. Sections 2.3 to 2.10 of the Civil Practice Directives for the Regional Courts in South Africa, 2017 Fourth Revision, issued by the Regional Court Presidents' Forum.
- f. Rules 22 and 25 of the Rules Regulating the Conduct of the Proceedings of the Magistrates' Courts of South Africa, No. R. 740 (August 23, 2010) and Section 54 of the Magistrates' Court Act No 32 of 1944.
- g. The questionnaire is available at http://www.lawlibrary.co.za/notice/highcourts/kzn_pretrial_questionnaire_2017_12.pdf.
- h. The guidelines are available at http://www.justice.gov.za/mc/mcjhb/mcjhb_prac_trial.html.

cases. Countries that impose legal limits on adjournments have mostly focused on reserving them for unforeseen or exceptional circumstances. Australia, Singapore, the United States and another 50 economies globally have done this; 20% of them have also set a maximum number of adjournments per case.³³ Justified adjournments should also encompass the establishment in advance of a reasonably immediate date to reinstate the process.³⁴ In Latvia, for example, the capital's central court may not postpone a hearing without first setting a new hearing date.³⁵

Assess judicial capacity and resources needed to enhance case management and make it effective, especially in lower courts

Efficient case management systems reduce delays and case backlogs. They can also make legal services more affordable, as lawyers spend less time in court and judges exercise better control over dilatory practices. The South African judiciary has made case flow management a priority, in line with guiding principles of case management established by the

European Commission for the Efficiency of Justice (CEPEJ).³⁶ It is putting emphasis on empowering judges to direct more pretrial processes to ensure that all cases are duly prepared for trial. A Judicial Case Flow Management Committee has even been established, and there have been reported successes of case management pilot programs implemented at the High Court since 2012.³⁷ In the medium term, the administration and operation of the magistrates' courts—now under the umbrella of the Department of Justice—will transition to the Office of the Chief Justice.³⁸ This transition entails applying

It is important to assess lower courts' need of training or resources that enable them to succeed at implementing case flow management directives.

case flow management principles in the magistrates' courts. As part of this process, it is important to assess whether lower courts need additional training or resources (computerized tools, guidelines, support staff) to be able to succeed at implementing the case flow management directives.39 For instance, the new integrated case management system deployed in October 2017 aids the courts with collecting statistics on court performance. But the system is not yet fully operational to allow tracking the flow of cases and the number of cases backlogged. Court staff also need to be trained in using the system. In addition, because of the heavy caseload and magistrates' lack of specialization on civil commercial matters, they may not have the time or preparation to make effective use of pretrial conferences.⁴⁰

For example, in 2001 Pakistani authorities saw dramatic improvements in reducing court backlogs and case processing times after the implementation of a case management project in six districts. Pakistani judges visited courts in Singapore and attended training workshops every three months in Islamabad for a period of 16 months. As in South Africa, Pakistani courts established committees—which included local attorneys—to identify the key obstacles legal practitioners face in the judicial system and determine how best to address them. The project succeeded in increasing the courts' efficiency, improving judicial practices and changing the public's perception of the judiciary.⁴¹

Consider introducing specialized commercial courts or commercial sections in locations where needed

South African locations with large caseloads and lengthy trials could consider introducing specialized commercial courts, commercial divisions or

specialized judges within the existing courts to deal exclusively with commercial cases. In the past 10 years, 22 economies have reformed their contract enforcement by setting up commercial courts or specialized commercial divisions within existing courts. To date, more than half of the economies benchmarked by Doing Business have commercial courts or divisions, including Australia, Malaysia, Singapore, the United Kingdom and the United States. These are all top-ranked economies on the ease of enforcing contracts and are international reference points for good judicial practices.

Courts first analyze their respective caseload to determine the total share of commercial cases in the docket and whether these types of cases are backlogged. The outputs of such an analysis may justify the creation of a specialized commercial court or division. As a general principle, specialized courts tend to improve efficiency and promote consistency in the application of the law. This is because judges become experts on commercial matters and can dispose of cases faster. Nigeria (Lagos) and Côte d'Ivoire (Abidian) achieved significant time reductions at their local court of first instance after the creation of specialized commercial courts.42 However, studies conducted in Sub-Saharan African economies with specialized courts show that investments in these courts must be sustainable and non-detrimental to the functioning of the regular courts to maintain the overall quality of the judicial system. 43 Locations should thus identify the largest sources of delay, for example criminal cases or commercial cases, and channel their resources toward those. Such interventions could translate into overall efficiency gains at first-instance courts and promote speedier resolution of all cases, including commercial matters.

NOTES

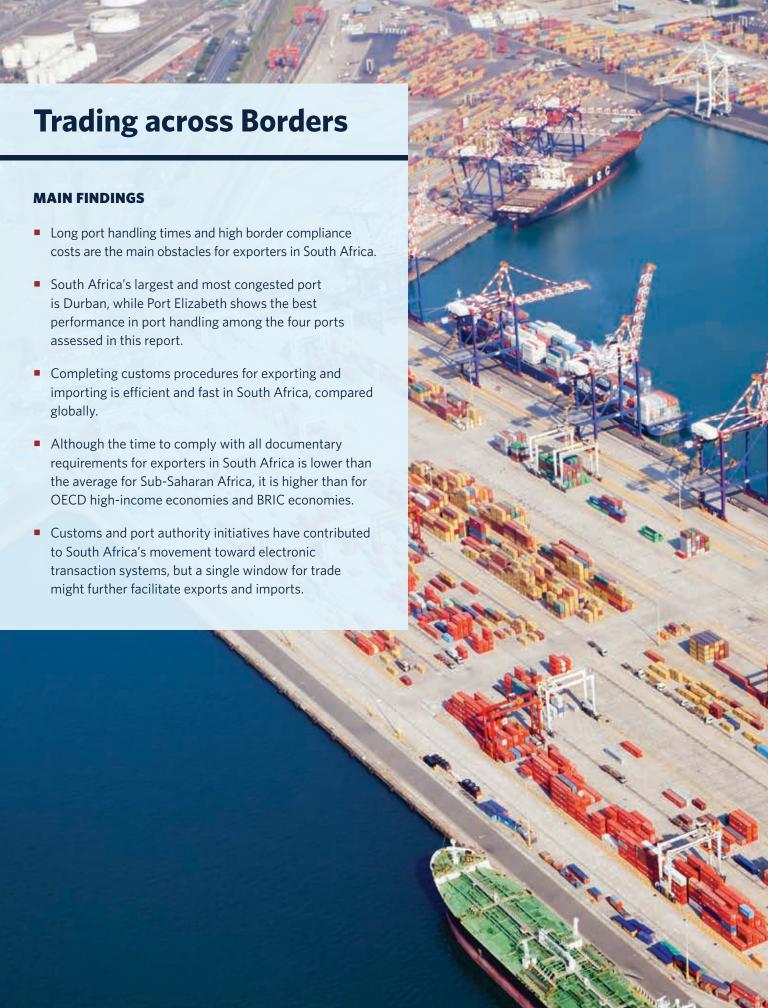
- World Bank calculations indicate that each job created in South Africa lifts about one person out of poverty. World Bank. 2017. South Africa Economic Update: Private Investment for Jobs. Washington, DC: World Bank.
- World Bank. 2017. South Africa Economic Update: Private Investment for Jobs.
- National Planning Commission. National Development Plan 2030: Our future - make it work
- Lanau, Sergi, Gianluca Esposito and Sebastiaan Pompe. 2014. Judicial System Reform in Italy—A Key to Growth. IMF Working Paper No. 14/32, February 2014.
- OECD. 2013. "What makes civil justice effective?" OECD Economics Department Policy Notes, No. 18, June 2013.
 - Section 171, Constitution of South Africa, 1996.
- In 2014 the Department of Justice and Constitutional Development merged with the Department of Correctional Services to become the Department of Justice and Correctional Services.
- Department of Justice of South Africa, Strategic Plan 2017-2020, available at http://www.justice.gov.za/MTSF/mtsf.htm.
- Advocates generally appear before the High Court. Because of their expertise and the fact that they deal with clients through attorneys, their legal fees may be considerably higher than the ones charged by attorneys.
- The lower courts are subdivided into regional and district magistrates' courts. Since 2014 district and regional courts have, respectively, a maximum monetary threshold of ZAR 200,000 (\$14,541) and ZAR 400,000 (\$29,081). Doing Business considers the competent court to be the local court with jurisdiction over commercial cases worth 200% income per capita (ZAR 150,750, or \$10,960).
- The number of civil cases filed in 2017 were 13,499 in Msunduzi and 11,296 in Buffalo City. The information was provided by officers of the Pietermaritzburg and East London Magistrate Courts.
- Rules Board for Courts of Law Act (107/1985): Amendment of the Rules of SCA, High Court and Magistrates Courts of South Africa, as published in Government Gazette 41142 of September 29, 2017.
- 13. The attorney of the successful plaintiff prepares and submits a bill of legal costs to the court. The court's taxation master reviews the bill and awards recoverable costs based on the applicable scale, normally on the "party to party" scale, which is the lowest one.
- 14. A study from 2010 indicates that the difference between court awards and actual legal costs of litigation can be up to 50%. Bradstock Sara, Graham Huntley and Peter Taylor. 2010. "At what cost? A Lovells multi jurisdictional guide to litigation costs." Lovells LLC.
- A list of sheriffs' fees is available at http:// www.sheriffs.org.za/wp-content/uploads /2017/07/NewSheriffsTariffsPart2of2 MagistratesCourt-1.pdf.

- For more details on the costs recorded by Doing Business, consult the data notes section of this report.
- World Bank. 2016. Doing Business 2016: Measuring Regulatory Quality and Efficiency. Washington, DC: World Bank.
- 18. The indicator of procedural complexity presented in *Doing Business in South Africa 2015* was replaced by a qualitative index as a result of the changes in methodology introduced by *Doing Business* in 2015. Most of the index components refer to the competent courts.
- 19. For further information, consult the data notes section of this report.
- 20. Small claims courts in South Africa were established by the Small Claims Courts Act (Act 61 of 1984). By Government Notice R.185 of April 2014, the monetary jurisdiction was amended for small claims courts to entertain civil cases of less than ZAR 15,000 (\$1,090). See http://www.justice.gov.za/scc/scc.htm. According to the Department of Justice of South Africa, there are initiatives to increase the monetary jurisdiction of the small claims courts to up to ZAR 25,000 (\$1,818).
- Competition Appeal Court, Electoral Court, Labour Court, Labour Appeal Court, Land Claims Court and Specialized Crimes Courts.
- Magistrates serve the lower courts. The district magistrates' courts, as part of the lower courts, are the competent courts for the purposes of the *Doing Business* case study.
- 23. According to Rule 56 of the Rules Regulating the Conduct of the Proceedings of the Magistrates' Courts, a plaintiff can file an application before the court to obtain an attachment order to secure payment of a claim. Attorneys comment that in general commercial cases, the mere fear of dissipation of assets from defendants will not move the court to grant such application. Disputes over lease agreements are typical cases where the courts admit pretrial attachment to secure payment of pending rent.
- 24. Time limits were established for notice of intention to defend (Rule 13 of the Rules Regulating the Conduct of the Proceedings of the Magistrates' Courts), notice of trial (Rule 22) and discovery of documents (Rule 23).
- See Section 54 of the Magistrates' Court Act No. 32 of 1944 and Rules 22 and 25 of the Rules Regulating the Conduct of the Proceedings of the Magistrates' Courts of South Africa No. R 740 (August 23, 2010).
- Rule 31 of the Rules Regulating the Conduct of the Proceedings of the Magistrates' Courts of South Africa.
- 27. The judicial functions of the magistrates' courts are under the purview of the Office of the Chief Justice. Court services reported by the Department of Justice refer to, among others, the quasi-judicial functions performed by the courts, such as default judgments and taxation of legal costs. See the Department of Justice's Annual Report 2016/2017, available at http://www.justice.gov.za/reportfiles/report_list.html.
- 28. Doing Business considers four types of reports available for the competent courts. In the case of South Africa the competent courts are the district magistrates' courts. The competent courts should produce at least two

- of the following to score on this item: time to disposition report, clearance rate report, age of pending cases report and single case progress report. Further details are available at http://www.doingbusiness.org/Methodology/Enforcing-Contracts.
- Office of the Chief Justice of the Republic of South Africa. Annual Performance Plan for 2018/19, available at http://judiciary.org.za /index.php/documents/annual-performance -plans.
- The Arbitration Act, 1965 and Chapter 2
 of the Rules Regulating the Conduct of the
 Proceedings of the Magistrates' Courts of
 South Africa, as published in Government
 Gazette No. R 183 of March 18, 2014.
- The four provinces with mediation centers are Gauteng, Limpopo, Mpumalanga and North West.
- 32. In February 2014 the Office of the Chief Justice issued Directive No 147 with norms and standards of performance applicable to judicial officers in the country. One of these standards mandates the courts to establish case management forums or committees to oversee the implementation of improved case flow management. Local committees established by the courts meet periodically with various stakeholders, including representatives from attorneys associations.
- Doing Business database.
- 34. Laws, Edward. 2016. "Addressing case delays caused by multiple adjournments."
 Governance and Social Development Resource Centre. Helpdesk Research Report.
- World Bank. 2018. Doing Business in the European Union 2018: Croatia, the Czech Republic, Portugal and Slovakia. Washington, DC: World Bank.
- The CEPEJ guidelines are at https://rm.coe.int /commission-europeenne-pour-l-efficacite -de-la-justice-cepej-cepej-guid/1680788300.
- "Progress on judicial case-flow management."
 De Rebus, May 2014:10 [2014] DEREBUS 65, available at http://www.saflii.org/za/journals/ /DEREBUS/2014/65.html.
- 38. Office of the Chief Justice of the Republic of South Africa. Annual Performance Plan for 2018/19
- 39. The case management project piloted at the High Court consists of two phases: The first corresponds to the courts' registrars. They oversee the monitoring and tracking of cases to ensure compliance with the rules from the filing of an application until the close of pleadings. The second phase deals with case management by the judge president of the court or the judge designated from the close of pleadings onwards. This information was provided by officials of the Bloemfontein Division of the High Court during a visit to the court.
- 40. Magistrates' courts are considered "creatures of statute," meaning that they must follow their procedures strictly according to the written applicable rules. World Bank experts identify lack of adequate judicial training and judges' narrow view that their work is limited to applying the law as detrimental factors to an effective implementation of pretrial conferences. Gramckow, Heike, Omniah Ebeid, Erica Bosio and Jorge Luis Silva Mendez. 2016.

- Good Practice for Courts: Helpful Elements for Good Court Performance and the World Bank's Quality of Judicial Process Indicators. Washington, DC: World Bank.
- Chemin, Matthieu. 2009. "The impact of the judiciary on entrepreneurship: Evaluation of Pakistan's "Access to Justice Programme," Journal of Public Economics 93 (1-2) 114-125.
- 42. World Bank. 2016. Doing Business 2016: Measuring Regulatory Quality and Efficiency.
- 43. Walsh, Barry. 2010. "In Search of Success: Case Studies in Justice Sector Development in Sub-Saharan Africa." Washington, DC: World Bank. Available at http://documents.worldbank.org/curated/en /291991468009961030/In-search-of -success-case-studies-in-justice-sector

-development-in-Sub-Saharan-Africa.



he southernmost point on its continent, South Africa is a prime geostrategic location for trade. Not only is it situated on major North-South and South-South international shipping routes, but its ports also offer sea access to neighboring landlocked countries, making it a gateway to many parts of Africa and an important player in international maritime transportation.¹

Trade is also a key element for the South African economy, representing over 60% of the country's GDP in 2016.² The vast majority of the country's imported and exported goods move by sea.³ South Africa's trade performance and global competitiveness are thus key for boosting economic growth and creating jobs.

Despite their large growth potential, South Africa's exports of goods and services have not risen significantly in recent years. They grew at an average annual rate of 2.5% between 2010 and 2016. This is considerably lower than the average export growth of middle-income economies (4.2%).⁴ Reviving South Africa's export growth rates is critical to boost economic growth.⁵ The government of South Africa aims to increase its capacity for exporting diversified and value-added goods and services to global markets; for this, efficient ports are key.

Research shows that reducing transit times and the unit cost of transport for imports and exports can have a significant impact on a country's trade flows. A recent report indicates that a 25% improvement in port performance can increase a country's GDP by 2%. It further identifies ports as facilitators of trade and integrators in the logistics supply chain in Africa.⁶

Doing Business in South Africa 2018 adopts Doing Business's new approach to measuring trade processes and applies it to the following four ports: Cape Town, Durban, Ngqura and Port Elizabeth (box 7.1). It measures the ease of trading across borders based on an import and export case study for each of the four ports.

The export case study assumes that each port exports its product of comparative advantage (largest export value)⁷ from Johannesburg to its natural export partner (the economy that is the largest purchaser of the product).⁸ In the import case study, it is assumed that each port imports a standardized shipment of 15 metric tons of containerized auto parts (HS 8708, under the Harmonized System classification code) from its natural import partner to Johannesburg (table 7.1 and figure 7.1).

WHAT DOES TRADING ACROSS BORDERS MEASURE?

In 2015 Doing Business introduced a new approach to measuring trade processes. These changes aim to enhance the economic and policy relevance of indicators, improve the consistency and replicability of the data and clarify the context in which the data should be interpreted, including important caveats to keep in mind. The updated methodology accounts for good practices in trade facilitation such as the use of customs unions and trade agreements.

Doing Business measures the time and cost (excluding tariffs) associated with the logistical process of exporting and importing goods. It assesses three sets of procedures—documentary compliance, border compliance and domestic transport—within the overall process of exporting or importing a shipment of goods (see figure).

Trading across borders: measuring the efficiency of exporting and importing across borders

Rankings are based on distance to frontier scores for eight indicators

Time for documentary compliance and border compliance when exporting the product of comparative advantage Cost for documentary compliance and border compliance when exporting the product of comparative advantage



Time for documentary compliance and border compliance when importing auto parts Cost for documentary compliance and border compliance when importing auto parts

Note: The time and cost for domestic transport and the number of documents to export and import are measured but do not count for the rankings.

HOW DOES MARITIME TRADE WORK IN SOUTH AFRICA?

South Africa's seaborne commerce depends on a myriad of players that have worked toward improving trade processes over the last decade. Two of the main players are Transnet, a state-owned enterprise founded in 1990, and the South African Revenue Service (SARS). which was established as an autonomous agency through the South African Revenue Service Act of 1997 (box 7.2). The National Ports Act, the primary piece of legislation regulating ports in South Africa, went into effect on November 26, 2006.9 The customs legislative framework is established in the Customs and Excise Act. 1964.

SARS customs authorities have been working in recent years to update, simplify and modernize customs procedures. Spurred by the need to keep pace with changes in international trade and meet the demands of an increasingly globalized world, South Africa passed

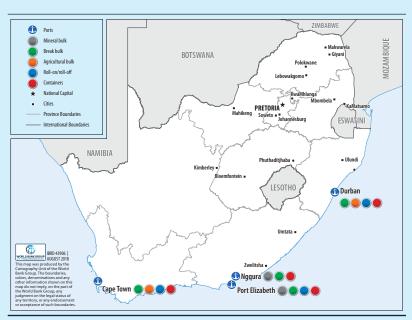
BOX 7.1 What are the four ports' main features?

The South African port system comprises both multipurpose ports and specialized bulk ports.^a All four ports in the case study are multipurpose ports, while Ngqura was developed predominantly for transshipment cargo.

The main differences among ports include size, depth, capacity, infrastructure, proximity to markets and the volumes or type of cargo or commodities passing through them. Tariffs are largely standardized, creating minimal competition and providing no financial incentive for traders to use one port over another.^b

Durban is the largest port in the country and the region. In 2017/18 its two piers handled some 2.8 million twenty-foot equivalent units (TEUs)—nearly 60% of the four ports combined. The port benefits from its proximity to Johannesburg and better road connections to neighboring countries.

At Cape Town port, agricultural cargo (edible fruit and nuts; peel of citrus fruit or melons) dominates exports to the Netherlands (24%), the United



Source: Transnet National Ports Authority (TNPA).

Kingdom (19%) and the United Arab Emirates (6%). As the westernmost of the ports measured, Cape Town's main challenge is strong winds, especially during the summer. Loading and unloading equipment automatically stops if the wind reaches a certain strength, causing delays.

The port of Ngqura, the deepest container terminal in Southern Africa, began operating in 2009 and is the newest commercial port. Developed to serve as a transshipment hub, it attracts larger vessels and has grown quickly. The port handled nearly 500,000 transshipments in the past year, 46% of the total handled in all four ports combined.

Port Elizabeth, located midway between Durban and Cape Town ports, is equipped with a manganese facility and a car terminal. However, with the creation of the Ngqura port only 20 kilometers away, its container volumes have declined by 20% over the past three years, especially for transshipments.

legislation four years ago to replace its outdated customs legislative framework. However, that legislation—the Customs Control Act, 2014, Customs Duty Act, 2014 and Customs and Excise Amendment Act, 2014—has yet to take effect. The new customs legislation is intended to ensure compliance with international requirements, including

the Revised Kyoto Convention and the World Customs Organization's SAFE Framework of Standards to secure and facilitate global trade. It will also accommodate the rapid growth in the use of information technology and ensure the efficiency, transparency and predictability of customs procedures for trade.¹⁰

Throughout the country, customs clearance is done electronically. Clearing agents upload export and import declarations to the SARS electronic data interchange (EDI). SARS' operating system and the clearing agent's system are directly connected through EDI. SARS receives the customs declaration (SAD 500), reviews it and sends a message

a. Multipurpose ports are those that handle a wide variety of cargo (containerized and non-containerized). Specialized bulk ports are ports that specialize in handling cargo that is unpacked or carried in unitized form.

b. Centre for Competition, Regulation and Economic Development. 2014. "Review of regulation in the Ports Sector." Available at http://www.tips.org.za/files/ccred-edd-recbp_regulation_in_the_ports_sector_-_farr_levin.pdf.

c. South African Revenue Service data on trade flows for the most recent four-year period were used to identify Cape Town's main trading partners—the economies to which it exports the largest value (price times quantity) of HS 08 (edible fruit and nuts; peel of citrus fruit or melons).

TABLE 7.1 Port case study assumptions*												
		Cape Town	Durban	Ngqura	Port Elizabeth							
Export	Product	HS 08 — Edible fruit and nuts; peel of citrus fruit or melons	HS 87 – Vehicles other than railway or tramway rolling-stock, and parts and accessories thereof	HS 84 – Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof	HS 84 – Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof							
	Trade partner	Netherlands	United States	United States	Germany							
luan aut	Product	HS 8708 – Parts and accessories of motor vehicles										
Import	Trade partner	Germany										

Source: Doing Business database and South African Revenue Service (SARS).

Note: The export products and trading partner for Durban are those used for South Africa in the annual global Doing Business assessment. To identify the trading partner and export product for South Africa, Doing Business collects data on trade flows for the most recent four-year period from the United Nations Commodity Trade Statistics Database (UN Comtrade). The product of comparative advantage for South Africa is HS 87 (vehicles other than railway or tramway rolling stock, and parts and accessories thereof). SARS data on trade flows for the most recent four-year period were used to identify the trading partners and export products for the other ports.

^{*}According to the *Doing Business* methodology, each economy exports the product of its comparative advantage to its natural export partner. Similarly, each economy imports a standardized shipment of 15 metric tons of containerized auto parts (HS 8708) from its natural import partner.

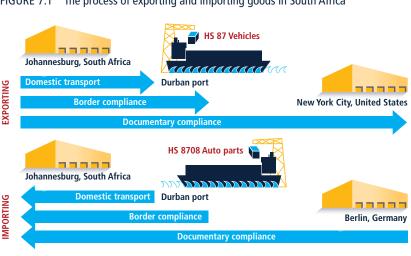


FIGURE 7.1 The process of exporting and importing goods in South Africa

Note: South Africa is represented by Durban in the Doing Business global ranking.

through the EDI system, asking the agent to answer additional queries or provide further supporting documentation, or simply informing the agent that the cargo will be released by the customs authorities.

Among the documents required for export and import are the customs declaration, bill of lading, cargo dues order, certificate of origin, commercial invoice, packing list and SOLAS certificate (Safety of Life at Sea). Once all documents have been processed with the respective South African government agencies, chambers of commerce and shipping line, the trader

loads all relevant information into the TPT terminal operating system and the shipment can be moved to the terminal gate.

While this clearing process is common for most South African exports, it is different for agricultural products. These goods are typically perishable, and a delay in obtaining all required

documentation may lead to loss of cargo. SARS allows exporters of these goods to submit supporting documents up to 14 days after the vessel's departure from port. Prior to the vessel's departure, the Perishable Products Export Control Board (PPECB) carries out product quality inspections on regulated perishable products destined for export under the Agricultural Products Standards Act. It also performs a second inspection during container loading to ensure compliance with cold chain protocols under the Perishable Products Export Control Act. Once the PPECB confirms that the shipment complies with export standards and requirements as well as with cold chain management protocols for perishable goods, it will issue an export certificate. In addition, the Department of Agriculture, Forestry and Fisheries issues a phytosanitary certificate to confirm that the shipment meets the importing country's requirements for plant products.11

In the case of imports into South Africa, a preclearance procedure allows clearing agents to clear customs before the vessel arrives in port. The preclearance process can begin as soon as an agent receives

Throughout the country, customs clearance is done electronically. SARS' operating system and the clearing agent's system are directly connected through the electronic data interchange.

BOX 7.2 Who are the main players in South African maritime trade?

- Transnet, a state-owned freight transport and handling company, controls South Africa's ports, rails and pipeline systems. The company has two operating divisions that deal with ports. Transnet National Ports Authority (TNPA) manages services and facilities in South Africa's eight major seaports. Transnet Port Terminals (TPT) handles operations, cargo and traffic at 16 port terminals.
- The SARS Customs Administration enforces customs laws, levies and collects duties, classifies tariffs and investigates customs infractions at the South African border.
- The International Trade Administration Commission of South Africa (ITAC) is responsible for customs tariff investigations, trade remedies and enforcement of import and export control measures in accordance with domestic laws and international agreements.
- The Ports Regulator of South Africa (PRSA) is responsible for the economic regulation of the country's port system.
- Clearing and freight forwarding agencies, shipping lines and carriers are important nongovernmental stakeholders in South
 African maritime trade. Although not legally required, using a clearing agent or customs broker is common practice in South
 Africa. These professionals facilitate trade by preparing and processing documents for the trader and booking shipments.

notification from the shipping line that the cargo is on board the vessel and on its way.

Initiatives for facilitating trade in South Africa

Various government initiatives have moved South Africa toward paperless transaction systems designed to make trade processes more efficient. With its introduction of the EDI system, SARS instituted electronic communication with traders, customs clearing agents and shipping lines. Customs receives the majority of declarations electronically and enables traders to submit any supporting documents by the same means. The customs authorities request supporting documentation for approximately 5% of exports and less than 15% of imports. This low rate of intervention is a result of SARS' implementation of a risk engine in its software that determines the level of risk in any shipment, indicating which shipments should be inspected and allowing most traders to get their goods cleared more quickly. It is part of SARS' customs modernization initiative, which is moving from the traditional "intervention for intervention's sake" toward an "intervention by exception" approach, or intervention based on identified risk.¹² As

is common around the world, customs interventions on imports in South Africa are higher than on exports.

In 2017 SARS launched the Customs Preferred Trader Programme, granting accreditation to 28 customs clients. While still in its initial stages, this initiative aims to facilitate the relationship between SARS customs authorities and clients, reduce physical and documentary checks, prioritize requests for tariff and valuation determinations and implement nonintrusive inspection techniques when goods are stopped or held for inspection. Each client is assigned a customs relationship manager, whose role is to help address clients' queries and resolve compliance issues. Despite the improvements implemented by SARS, there is still room for the different players in South African trade to coordinate their activities and streamline processes in order to avoid repeated requests for information and inspections.

Transnet Port Terminals (TPT) has strived to improve efficiency and transparency

by introducing a centralized terminal operating system, the Navis SPARCS N4, to consolidate supervision of port operations and fee payments. TPT now manages all its marine terminals from one integrated operating system with a central database in Durban, tracking the movement of cargo in real time. Transnet has also introduced a truck booking system in Durban, which aims to reduce traffic on the road leading to the Durban Container Terminal. Durban port plans to have a compulsory truck booking system in place by April 2019. Additionally, South Africa has invested in terminal infrastructure, including container handling and gate automation to enhance port efficiency.

How the process compares

Despite South Africa's initiatives to facilitate trade, challenges persist. Compared globally, maritime trade remains relatively cumbersome, time-consuming and costly. Border compliance¹³—which measures the time and cost of fulfilling customs requirements, mandatory inspections and port and terminal

Compared globally, maritime trade in South Africa remains relatively cumbersome, time-consuming and costly.

a. The eight major seaports are Cape Town, Durban, East London, Mossel Bay, Ngqura, Port Elizabeth, Richards Bay and Saldanha.

handling of cargo—takes 94 hours and costs \$666 on average for exports across the four South African ports measured. This lags considerably behind the 31-hour and \$325 average in OECD high-income economies trading by sea (table 7.2).

Documentary compliance captures the time and cost associated with the documentary requirements of all government agencies involved in the logistical process of exporting and importing goods. It includes the time and cost for obtaining, preparing, processing, presenting and submitting documents that are required for each shipment or more than once a year. While documentary compliance

for exports takes on average 5 hours in OECD high-income economies trading by sea, in South Africa it takes 15 times longer (75 hours) on average. In the case of imports, both the time and cost for border compliance are about 80% higher in South Africa than in OECD high-income economies trading by sea. Documentary compliance in South Africa costs slightly more than the OECD average and takes three times longer.

Border compliance time and documentary compliance time for exports by sea from South Africa are also higher than the average for the BRIC economies (Brazil, the Russian Federation, India and

China).¹⁴ Border compliance takes 1.5 times longer in South Africa and documentary compliance takes nearly 3 times longer. South Africa's border compliance costs for exports are only slightly above the BRIC average, while its documentary compliance costs for exports are less than half. Regarding the data on imports, South Africa performs better than the BRIC economies for all trading across borders indicators.

Border compliance time

Across the 190 economies covered by *Doing Business*, maritime transportation is the most common means of exporting in 115 economies and importing in 109

TABLE 7.2 Time and cost for border compliance and documentary compliance in South Africa's four ports													
			Ехр	ort	Import								
		Border co	ompliance	Documentar	y compliance	Border co	mpliance	Documentar	y compliance				
	Distance to frontier score	Time	Cost	Time	Cost	Time	Cost	Time	Cost				
	(0–100)	(hours)	(US\$)	(hours)	(US\$)	(hours)	(US\$)	(hours)	(US\$)				
OECD high income	93.92	13	150	2	35	9	112	4	26				
OECD high income (by sea)	84.37	31	325	5	65	34	376	12	64				
East Asia & Pacific	69.97	56	388	68	112	70	431	66	111				
East Asia & Pacific (by sea)	69.69	60	428	60	111	77	462	53	112				
South Africa average (by sea)	65.07	94	666	75	60	65	676	36	73				
BRIC	64.36	63	623	24	124	115	711	54	141				
BRIC (by sea)	62.66	63	623	24	124	140	753	58	138				
Sub-Saharan Africa	52.56	100	592	88	215	136	687	103	300				
Sub-Saharan Africa (by sea)	46.54	121	790	104	266	159	880	105	312				
Spain	100.00	0	0	1	0	0	0	1	0				
United Kingdom	93.76	24	280	4	25	3	0	2	0				
Malaysia	82.75	45	321	10	45	69	321	10	60				
Mexico	82.09	20	400	8	60	44	450	18	100				
Chile	80.56	60	290	24	50	54	290	36	50				
Rwanda	72.44	97	183	42	110	86	282	48	121				
Australia	70.65	36	749	7	264	39	525	4	100				
Port Elizabeth	69.25	80	451	68	55	54	676	36	73				
Ngqura	68.93	84	451	68	55	54	676	36	73				
Kenya	67.63	21	143	19	191	180	833	60	115				
Cape Town	62.47	118	503	96	73	66	676	36	73				
Namibia	61.47	120	745	90	348	6	145	3	63				
Durban	59.64	92	1257	68	55	87	676	36	73				
Brazil	59.78	49	959	12	226	63	970	48	107				
Ghana	52.32	108	490	89	155	89	553	76	474				

Source: Doing Business database.

Note: The distance to frontier score (DTF) is normalized to range from 0 to 100, with 100 representing the frontier of best practices (the higher the score, the better). The ranking of economies on the ease of trading across borders is determined by sorting the DTF scores for this category. These scores are the simple average of the DTF scores for border compliance and documentary compliance. The time and cost for domestic transport do not affect the ranking on the ease of trading across borders. For more details, see the chapter "About Doing Business and Doing Business in South Africa 2018." The OECD averages are based on economy-level data for the 33 OECD high-income economies, 13 of which export by sea and 8 of which import by sea. The East Asia & Pacific averages are based on economy-level data for the 25 economies of East Asia and the Pacific, 22 of which export and import by sea. The BRIC averages are based on economy-level data for Brazil, Russia, India and China, all which export by sea and of which Brazil, India and China also import by sea. The averages for Sub-Saharan Africa are based on economy-level data for the 48 economies in the region, 29 of which export by sea and 29 of which import by sea.

economies. In 45 of the 115 economies exporting by sea, border compliance can be achieved in 48 hours or less. These include some of the largest container ports, including Shanghai (China), Singapore, Incheon (Republic of Korea), Jebel Ali (United Arab Emirates), Hamburg (Germany) and Sydney (Australia). As noted above, the average time to comply with these border procedures across the four South African ports is almost three times the average for the high-income OECD economies that trade by sea and 50% longer than the average for the BRIC economies.¹⁵

Customs unions facilitate trade among member economies by streamlining border compliance. On average, border compliance takes 50 more hours for trade outside an economy's customs union. Moreover, if the data for land and sea transport are disaggregated, border compliance for the former takes significantly longer between economies trading outside a customs union (59 hours) than between those in a union (14 hours). For exports by sea, belonging to a customs union also reduces border compliance time, but to a lesser degree (72 versus 82 hours).

Regional cooperation enhances efficiency for economies, especially those trading by land. In Sub-Saharan Africa, 39 economies—including South Africa—belong to six different customs unions.16 Across Sub-Saharan Africa it takes 103 hours on average when exporting to an economy outside a country's customs union and 40 hours when the trading partners belong to the same union. In contrast, border compliance takes 20 hours for European Union (EU) member countries exporting to non-EU economies and 3 hours in the case of two EU trading partners. Although South Africa belongs to the Southern African Customs Union (SACU), only a small part of the country's trade is with other SACU members; its main trading partners include China, the United States and Germany. Enhanced cooperation among SACU members, as

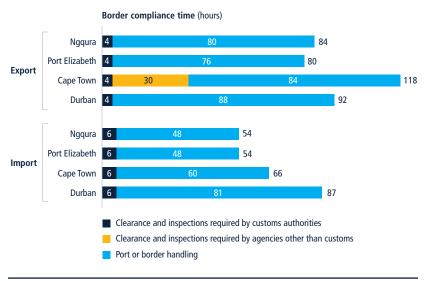
among EU member economies, could reduce overall delays and promote more regional trade.¹⁷

An analysis of outcomes shows that border compliance time is mostly dependent on the efficiency of regulations and their effective implementation by the agencies involved. Efficient border compliance procedures can generally be found across economies, irrespective of geography, the port location, import or export product and type of trading partner (within a customs union or not). For example, in Finland. Germany and the United Kingdom-which, like Port Elizabeth and Nggura in South Africa, export goods classified as HS 84 (nuclear reactors, boilers, machinery and mechanical appliances; parts thereof) to countries outside their customs union—border compliance requirements can be completed in 24 to 36 hours. In South Africa, by contrast, it takes 80 hours from Port Elizabeth and 84 hours from Nggura. Both Brazil and Guyana, which export agricultural products by sea to trading partners that are not within the same customs union, outperform Cape Town; the process is almost three days faster in Brazil and two days faster in Guyana.

The time to complete border compliance for exports across the four South African ports ranges from 80 hours in Port Elizabeth to 118 hours in Cape Town (figure 7.2). Completing this process for imports takes between 54 hours in Port Elizabeth and Nggura and 87 hours in Durban. This is high compared with OECD high-income economies trading by sea—where the average border compliance time to export is 31 hours and to import, 34 hours—but low compared with economies in Sub-Saharan Africa trading by sea, where the average border compliance time to export is 121 hours and to import, 159 (table 7.2).

Higher border compliance times in South Africa than in other economies, especially for exports, stem from inefficiencies in port handling. Across the four South African ports measured, the total average time a shipment remains at the port, beginning with its arrival at the queue to enter the port and ending with its departure from the port, is close to 40% higher than the average for all economies that trade by sea. And that handling time is more than twice as long as the overall average for trading across borders (by land and sea) in all 190 economies

FIGURE 7.2 The largest variations in border compliance times are related to port and terminal handling efficiency



Source: Doing Business database.

measured by Doing Business. In Cape Town, where agricultural products are the port's export of comparative advantage, an average of 30 hours is added on to the border compliance process for an inspection required by the Perishable Products Export Control Board. In the three other ports, which export manufacturing products, a physical inspection by agencies other than customs (such as the International Trade Administration Commission of South Africa or the National Regulator for Compulsory Specifications) is not required for more than 20% of shipments. In the case of imports, border compliance in South African ports takes on average less than half the time as in the BRIC economies that import by sea, primarily due to South Africa's preclearance processing.

The time exporters and importers spend completing customs clearances in South Africa is especially low. Globally exporters spend 23 hours completing customs procedures and importers spend 37 hours; in South Africa the average time is 4 hours for exports and 6 hours for imports. In contrast, the average time for BRIC economies that trade by sea is 16 hours for exports and 55 hours for imports. SARS' modernization of its customs operations has significantly reduced the time required for this process.

Significant variations in port handling times across ports are also recorded for imports, even when the import product is the same. This is due to differences in the volume of containers handled by each port, the road and sea congestion, and the ports' operating models. Among the four ports benchmarked, Durban, which handles the highest volume of containers, suffers most from port congestion. Both ship turnaround time and anchorage waiting time in Durban are over twice the average of the other three ports. Although Durban and Nggura have an automatic entry system for trucks, the average truck turnaround time is higher in Durban (from 35 minutes at Pier 1 to 72 at Pier 2) than in Nggura and Cape Town Significant variations in port handling times across ports are also recorded for imports, even when the import product is the same. This is due to differences in the volume of containers handled by each port, the road and sea congestion, and the ports' operating models.

(36 minutes) or Port Elizabeth (22 minutes). Port Elizabeth employs a straddle carrier system, which eliminates waiting times for handling equipment and allows consignees to pick up containers as soon as they are unloaded. In contrast, Ngqura and Pier 1 in Durban use a rubber-tired gantry crane system, which enhances the terminal's volume capacity but slows down cargo pickup.

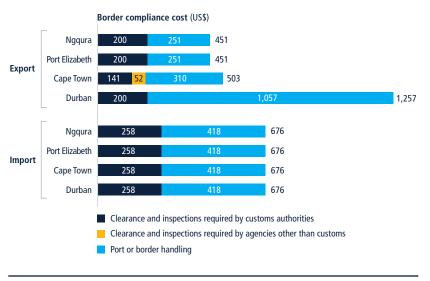
Border compliance cost

The country's export and import border compliance costs are higher than the global average and high compared with OECD high-income economies. The difference in cost is narrower when compared only with other economies that export by sea. Compared with BRIC economies trading by sea, South Africa's border compliance cost is just above the BRIC average for exports and just below the BRIC average for imports. Still, the average cost for border compliance for

exports across South Africa's four ports is 19% higher (\$104 more) than for all economies exporting by sea and over twice the cost for OECD high-income economies that trade by sea. The main factor behind this gap are the higher costs South Africa's traders pay to comply with customs clearance procedures, including customs broker fees.

Across the ports measured, variations in cost are mainly driven by the differences in port handling fees, which in turn vary depending on the export product and the type of cargo used (such as break bulk, dry bulk, liquid bulk or containers) (figure 7.3). In Ngqura and Port Elizabeth exporting a 15-metric-ton shipment of goods classified as HS 84 (nuclear reactors, boilers, machinery and mechanical appliances; parts thereof) costs on average \$451. Meanwhile, in Cape Town the border compliance cost for exporting agricultural goods classified as HS 08

FIGURE 7.3 The largest variations in border compliance costs are related to port and terminal handling charges



Source: Doing Business database.

(edible fruit and nuts; peel of citrus fruit or melons) averages \$503. The border compliance cost is highest in Durban, costing on average \$1,257—because HS 87 exports (vehicles other than railway or tramway rolling stock, and parts and accessories thereof) in South Africa have higher cargo dues and terminal handling charges for a shipment of 15 metric tons. But the cost for border compliance for imports is the same across all ports, since the *Doing Business* methodology assumes that the same goods are imported (auto parts, HS 8708).

To promote South African exports, port handling fees are lower for exports than for imports. These costs include cargo dues levied by Transnet Ports Authority, terminal handling charges imposed by Transnet Port Terminals (standard across ports) and other port service fees charged by the shipping lines. While the same terminal handling charges apply to exporting and importing a 20-foot container, cargo dues are three times higher for imports than for exports.¹⁹ Cargo dues are charged to the users (exporters, importers and shipping lines) to cover port infrastructure costs. Port handling costs for imports among South African ports are 34% steeper than for OECD high-income economies that import by sea.

Documentary compliance time

Traders in South Africa spend 75 hours on average to obtain and prepare all documents (physical and electronic) for exports. The average time to complete this documentary compliance is the same in Durban, Port Elizabeth and Nggura, 68 hours. In Cape Town, where the top export is an agricultural product, documentary compliance takes more than a day longer (96 hours). The required PPECB export permit and a phytosanitary certificate for agricultural products aim to ensure that the product meets health and food safety requirements. Those two documents are in addition to the documents required in all the other ports. Traders spend more time in South Africa complying with all documentary requirements than in both

The benchmarked South African ports are slower on average—in terms of both border and documentary compliance—than other economies that have the same product of comparative advantage.

OECD high-income economies and BRIC economies. This is principally due to the requirement for them to provide a hard copy of certain documents—such as the certificate of origin, the PPECB export permit and the phytosanitary certificate—and the delays in obtaining the bill of lading.

Documentary compliance takes South African importers the same amount of time across the four ports, on average 36 hours. Although this is faster than the average for economies in Sub-Saharan Africa and BRIC economies, documentary compliance time for exporters and importers in South Africa is high compared with OECD high-income economies (figure 7.4).

Documentary compliance cost

Lower costs for exports and imports can improve an economy's international trade transactions and business competitiveness. In South Africa document costs are substantially lower than the average for economies in Sub-Saharan Africa and BRIC economies and high compared to OECD high-income economies (figure 7.4). However, the cost is on a par with OECD high-income economies that export and import by sea. SARS does not charge for a customs declaration, and the automation of documents (through the EDI and Navis systems) has resulted in a reduction in costs for documents across the supply chain.

Overall performance with same export product

The benchmarked South African ports are slower on average—in terms of both border and documentary compliance—than other economies that have the same product of comparative advantage (figure 7.5). In terms of cost, the situation varies. Ngqura and Port Elizabeth are less

expensive when it comes to documentary compliance for exports and more expensive for border compliance. Durban is more expensive for border compliance, while Cape Town is less expensive for both these sets of procedures. Exporting 15 metric tons of fruit from Cape Town costs \$503, compared with \$1,034 in Grenada, \$585 in Guinea-Bissau and \$490 in Ghana.

Domestic transport time and cost

Port Elizabeth has the shortest transport time (in terms of kilometers per hour) and is the least expensive destination (as measured in U.S. dollars per kilometer) for a shipment from a warehouse in Johannesburg. Cape Town has the longest transport time due to heavier traffic volumes, while Durban is the most expensive because of higher road tolls. The times and costs also include those for loading and unloading the shipment at the warehouse.

WHAT CAN BE IMPROVED?

Further reduce and streamline documentary requirements and increase the use of electronic transaction systems

All agencies involved in the supply chain of goods being exported or imported should move toward paperless transaction systems and reduce hard copy requirements. Streamlining documentary requirements makes supply chains more efficient and reduces the time the shipment waits at the port.

According to the World Trade Organization's February 2017 Trade Facilitation Agreement (TFA), member countries should move toward the reduction of hard copy requirements by accepting, for example, a paper or

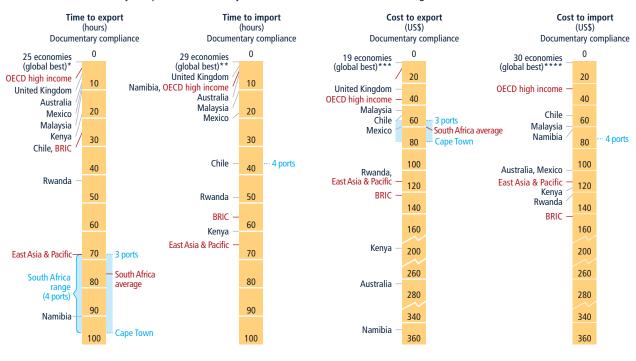


FIGURE 7.4 Documentary compliance costs nearly the same in South Africa as in OECD high-income economies but takes more time

Note: The OECD averages are based on economy-level data for the 33 OECD high-income economies. The East Asia & Pacific averages are based on economy-level data for the 25 economies of East Asia and the Pacific. The BRIC averages are based on economy-level data for Brazil, Russia, India and China.

electronic copy of a document of which the government agency holds the original.20 SARS and Transnet have moved toward electronic transaction systems over the years. For example, Transnet expanded the use of automation and an integrated operating system to reduce paperwork and track cargo in real time. SARS' introduction of the single administrative document (SAD) in 2006, the electronic customs clearance system and a risk-based inspection system have made clearance easier and more convenient for importers, exporters and cross-border traders. Yet South Africa still has many outdated, paper-based procedures, which are costly and more susceptible to fraud. An exporter of agricultural products is required to have a stamped phytosanitary certificate. Similarly, a paper copy of the certificate of origin is required by the local chamber of commerce and SARS. The documents that take the longest to obtain are the bill of lading, the phytosanitary certificate and the certificate of origin.

Traders in South Africa take 75 hours to complete documentary compliance for exports, more than a third longer than the global average of 55 hours. South Africa could take further action to reduce and streamline the information required of traders by automatically linking all the relevant stakeholders. In Brazil documentary compliance to export an agricultural product to China takes just 12 hours. In 2016/17 Brazil lowered the total time to comply with documentary requirements by implementing SISCOMEX,

a digital system that consolidates all documents required for foreign trade in a single place, streamlining procedures and eliminating the need for hard copies. During that same period Paraguay also reduced the time required for border and documentary compliance by introducing a single window for exporting (Ventanilla Única de Exportación). Export customs declarations and the certificate of origin can be obtained online through the single window, lowering the time for documentary compliance. Georgia has also made export and import documentary compliance faster. In 2015/16 it introduced an advanced electronic document submission option that reduced the total time for documentary compliance to two hours.

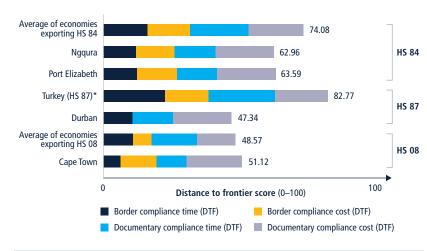
^{*}Top performers, time to export: Austria; Belgium; Canada; Croatia; the Czech Republic; Denmark; Estonia; France; Germany; Greece; Hong Kong SAR, China; Hungary; Ireland; Italy; Republic of Korea; Luxembourg; Netherlands; Poland; Portugal; Romania; San Marino; the Slovak Republic; Slovenia; Spain; and Sweden.

^{**} Top performers, time to import: Austria, Belgium, Bulgaria, Canada, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Republic of Korea, Latvia, Lithuania, Luxembourg, Malta, Netherlands, New Zealand, Poland, Portugal, Romania, the Slovak Republic, Slovenia, Spain and Sweden.

^{***} Top performers, cost to export: Austria, Belgium, Croatia, Czech Republic, Denmark, Estonia, France, Hungary, Italy, Luxembourg, Netherlands, Norway, Poland, Portugal, Romania, San Marino, the Slovak Republic, Slovenia and Spain.

^{****}Top performers, cost to import: Austria, Belarus, Belgium, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Italy, Kazakhstan, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, the Slovak Republic, Slovenia, Spain, Sweden and the United Kingdom.

FIGURE 7.5 On border compliance and documentary compliance times, South Africa underperforms other economies exporting the same goods



Note: The distance to frontier score (DTF) is normalized to range from 0 to 100, with 100 representing the frontier of best practices (the higher the score, the better). For more details, see the chapter "About Doing Business and Doing Business in South Africa 2018." The economies in Doing Business that export goods classified as HS 84 (nuclear reactors, boilers, machinery and mechanical appliances; parts thereof) by sea are Republic of Congo, Finland, Germany, Japan, Thailand and the United Kingdom. The economies that export goods classified as HS 08 (edible fruit and nuts; peel of citrus fruit or melons) by sea are Belize, Ecuador, Ghana, Grenada, Guinea-Bissau, Iraq, St. Lucia and the Syrian Arab Republic.

*The only other economy, in addition to South Africa, that exports goods classified as HS 87 (vehicles other than railway or tramway rolling stock, and parts and accessories thereof) by sea is Turkey.

Increase coordination of different agencies with a view to streamlining procedures

Coordination among the agencies involved in export and import processes is essential to trade facilitation. This is recognized in the TFA, which states: "Each Member shall ensure that its authorities and agencies responsible for border controls and procedures dealing with the importation, exportation, and transit of goods cooperate with one another and coordinate their activities in order to facilitate trade" In South Africa there is a lack of coordination between stakeholders involved in the maritime trade value chain—especially government departments. This yields redundancies and inefficiencies. For example, different government agencies end up inspecting the same consignment several times, at various stages of the logistics chain. Although physical inspections are not required in more than 20% of shipments of the case study products, when cargo is stopped by the automated risk engine for inspection this adds an average of three days to the border compliance process. If these agencies were more integrated and coordinated, container inspections could be carried out simultaneously. This could in turn speed up the export and import process and lower the cost.

SARS has already created working groups that bring together key stakeholders in the value chain (such as other government entities and clearing and forwarding companies). The groups meet monthly to exchange information, discuss trends and challenges, and advance port and system integration. However, various government agencies are still not linked electronically and continue to act independently.

The process could be more streamlined and faster if inspections by all government agencies (SARS, the South African Police Service, the National Regulator for Compulsory Specifications and others) could be coordinated and performed at the same time. Expanding automation and risk-based case selection to other agencies would enhance coordination and improve trade facilitation. This would be especially relevant for the export of agricultural goods. At present, the automated risk engine with set parameters used for case selection is implemented only by customs authorities.

Introduce an electronic single window for trade

South Africa might consider introducing the single window concept to link all relevant government departments electronically. Electronic platforms are already in wide use in trade; SARS and Transnet exchange information through the EDI system. However, the introduction of an electronic single window would allow everyone involved in South African trade to connect directly, avoid duplications, standardize processes and significantly increase efficiency. This happened in Korea, where an electronic single window brought together 69 government agencies as well as private sector operators involved in international trade, 21 significantly reducing border compliance time for exports and imports and document requirements. A successful implementation of the electronic single window requires collaboration across organizations. In Korea a task force was formed that involved various import- and export-related government agencies.²²

In fact, several economies have proved that single window systems produce positive economic outcomes and increase trade. Singapore's TradeNet, the world's first national single window, was launched in January 1989 and is considered a global good practice. By 2006 TradeNet was handling more than

The introduction of an electronic single window would allow everyone involved in South African maritime trade to connect directly, avoid duplications, standardize processes and significantly increase efficiency. 9 million trade declarations per year with over 90% of them processed within 10 minutes; by 2016 that figure was up to 99%.²³ Owing to this success, numerous countries have followed Singapore's model. Eleven economies in Sub-Saharan Africa have implemented a single window. Ghana, the first in the region to do this, launched its single window in 2002, using a phased approach to implementation in line with international good practices. According to the Ghana Revenue Authority's Customs Division, the implementation of the single window system has significantly increased government revenue and improved the productivity of port operations.²⁴

The single window concept can also work on a regional level. In Asia the ASEAN Single Window aims to facilitate trade and improve compliance by allowing agencies to exchange cargo clearance data among members of the Association of Southeast Asian Nations.²⁵ These economies are at different stages of developing the single window platform. Brunei Darussalam, Indonesia, Malaysia, Philippines and Thailand have had such a platform in place since January 2018,26 while Cambodia, the Lao People's Democratic Republic, Myanmar and Vietnam are at an earlier stage of development.²⁷ In Africa the Trans-Kalahari Single Window is an ongoing initiative to automate customs processes and exchanges between the customs authorities of Botswana, Namibia and South Africa. This project will first require the harmonization of international trade procedures among these countries.

Promote regional integration through the effective implementation of border cooperation agreements

Increasing intraregional trade within the Southern African Development Community (SADC) is key to unleashing the region's economic potential. Since the SADC established a free trade area in 2008, intraregional trade has increased only modestly. Intraregional trade represents 10% of trade in the SADC

region. Trade volumes are much higher among the ASEAN economies (25% of their total trade) and among those of the EU (40%).²⁸ Landlocked developing countries face the double challenge of access to seaports and development.²⁹ Seven of 15 countries in Southern Africa are landlocked, and there are many small, fragmented markets. It is thus crucial for SADC economies to develop a single integrated regional market.

South Africa, the most developed economy in the region, has a commanding geostrategic location, and a significant amount of trade passes through its economy from the region. It could particularly benefit from deeper regional integration and play a leading role in this effort.30 South Africa could identify the documents it uses to trade with other SADC countries, determine those required by law, eliminate those not legally required and harmonize documents where possible. It would be relevant to review the framework for customs and border agency regulations (regional and national) and adapt it to the TFA and other best practices.

Regional agreements converting a twostop border crossing point into a one-stop border are essential. SADC economies have worked toward border cooperation. In 2011 Malawi improved customs clearance procedures and transport links between Blantyre and the port of Beira in Mozambique. In 2009 Zambia eased trade by implementing a one-stop border post with Zimbabwe, launching webbased submission of customs declarations and introducing scanning machines at border posts. Under the WCO-SACU Connect Project (a joint initiative of the World Customs Organization and the Southern African Customs Union), South Africa and Eswatini have undertaken pilot programs and tests for establishing customs system interconnectivity and data exchange. A similar pilot with Mozambique has been concluded and is awaiting full implementation under the one-stop border post at Ressano Garcia.31

Further expanding or integrating customs unions in Africa and forming partnerships through trade agreements can strengthen regional integration, contribute to the growth of South Africa's ports and facilitate trade within and beyond the continent.32 Many countries have benefitted from doing this, resulting in increased regional trade and improved performance on the trading across borders indicator due to the gains in efficiency from reducing the number of checkpoints for cargo moving across borders. For example, in 2011 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. Uganda has made trading across borders easier by connecting customs stations electronically, linking banks to customs (for payment of duties) and enhancing cooperation at the Kenya-Uganda border through joint inspections. In Europe border cooperation between Norway, Sweden and Finland has saved time and costs both for the authorities and for traders crossing the border.33

Upgrade trade logistics infrastructure

Ports in South Africa have varying levels of congestion, operational efficiency and infrastructure development. Compared globally, handling speeds are low across the four ports. Durban, the most congested port in South Africa, handles nearly 2.8 million containers³⁴—the largest volume in Sub-Saharan Africa—and a rising volume of containers through this port risks causing further slowdown.

Increasing port capacity through investment in infrastructure and equipment could improve operational performance and efficiency.³⁵ A high-speed rail link between Johannesburg and Durban could ease congestion on the road. Infrastructure investments resulted in significant improvements in trade logistics performance in 11 economies in 2016/17. As part of its National Development Plan

2013-2017, Angola improved handling time and reduced border compliance time by upgrading the port of Luanda.³⁶ India reduced import border compliance time in Mumbai by improving port infrastructure at Nhava Sheva. Singapore, for its part, made exporting and importing easier by improving infrastructure and electronic equipment at the port.

NOTES

- South Africa's landlocked neighboring countries include Botswana, Lesotho, Eswatini, Zambia and Zimbabwe.
- World Bank Group. World Integrated Trade Solution. See South Africa profile at https:// wits.worldbank.org/countryprofile/en/country /ZAF/startyear/2012/endyear/2016/indicator /NE-TRD-GNFS-ZS.
- 3. Mineral products (25.11%), precious metals (16.57%), vehicles aircraft vessels (11.89%) and iron and steel (11.86%) represented a total of 65.4% of South Africa's exports in 2017. South Africa's main export trading partners in 2017 were China, the United States, Germany, Japan and India. SARS Trade Statistics, available at http://tools.sars.gov.za/tradestatsportal/. The Department of Transport's Maritime Branch states that in terms of volume, more than 96% of South Africa's imports and exports are shipped by sea. See the Maritime Branch's website at http://www.transport.gov.za/web/department-of-transport/maritime.
- 4. Economies such as Ghana and Kenya grew at an average rate of 13.8% and 4.4%, respectively, during the same period, according to the World Bank's World Development Indicators. Annual growth rate of exports of goods and services is based on constant local currency. Exports of goods and services represent the value of all goods and other market services provided to the rest of the world.
- Comprehensive Maritime Transport Policy (CMTP) for South Africa, available at http:// www.transport.gov.za/documents/11623 /44313/MaritimeTransportPolicyMay2017 FINAL.pdf/4fc1b8b8-37d3-4ad0-8862 -313a6637104c.
- PricewaterhouseCoopers. April 2018.
 "Strengthening Africa's gateways to trade: An analysis of port development in sub-Saharan Africa."
- Specific products are excluded: precious metal and gems, mineral fuels, oil products, live animals, residues and waste of foods and products, as well as pharmaceuticals. In these cases, the second largest product category is considered as needed.
- 8. For each of the 190 economies covered by Doing Business, it is assumed that a shipment is located in a warehouse in the largest

- business city of the exporting economy and travels to a warehouse in the largest business city of the importing economy. Johannesburg is the largest business city in South Africa.
- For more about the legal framework for ports, see the Transnet National Ports Authority website at http://www.transnetnationalportsauthority .net/Legal,%20Risk%20and%20Compliance /NationalPortAct/Pages/Port-Legal -Framework.aspx.
- For more about customs legislation, see the SARS website at http://www.sars .gov.za/ClientSegments/Customs-Excise /AboutCustoms/Pages/New-Customs -Legislation-update.aspx.
- Directorate International Trade, Department of Agriculture, Forestry and Fisheries. January 2014. Step-by-step export manual for exporters of South African processed fruits, vegetables and nuts.
- Widdowson, David. 2007. "The Changing Role of Customs: Evolution or Revolution?" World Customs Journal 1 (1): 31-37. Available at http://customscentre.com/wp-content /uploads/2012/09/the_changing_role_of _customs_evolution_or_revolution.pdf.
- 13. Border compliance captures the time and cost associated with compliance with a) the economy's customs regulations; b) inspections required by agencies other than customs that are mandatory in order for the shipment to cross the economy's border; and c) the time and cost for handling that takes place at its port. If customs clearance or inspections take place at the port at the same time, the time estimate for border compliance takes this simultaneity into account.
- 14. All four BRIC economies export by sea but only Brazil, India and China import by sea.
- 15. The calculation is based on *Doing Business* data. The OECD high-income economies that trade by sea are Australia, Chile, Finland, Germany, Greece, Iceland, Ireland, Israel, Japan, Latvia, New Zealand, Republic of Korea and the United Kingdom.
- 16. These are the Common Market for Eastern & Southern Africa (COMESA), the West African Economic and Monetary Union (UEMOA, by its French acronym), the Southern African Customs Union (SACU), the Economic and Monetary Community of Central Africa (CEMAC), the East African Community (EAC) and the Economic Community of West African States (ECOWAS).
- OECD. 2017. OECD Economic Surveys: South Africa 2017. Paris: OECD Publishing. Available at http://dx.doi.org/10.1787/eco_surveys-zaf-2017-en.
- 18. Data provided by Transnet National Ports Authority.
- According to TNPA Tariff Book 2018-19, the cargo dues for importing a 20-foot container in local currency are ZAR 2,146.78 and for exporting a 20-foot container in local currency are ZAR 636.03. Based on TPT Tariff Book 2018-19, terminal handling charges for importing and exporting a 20-foot container in local currency are ZAR 1801.
- 20. See the WTO Agreement on Trade Facilitation at https://www.wto.org/english/docs_e /legal_e/tfa-nov14_e.htm and information

- about South Africa's status at https://www .tfadatabase.org/members/south-africa. South Africa ratified the TFA on November 30, 2017.
- Private sector participants included traders, customs brokers, customs services, shipping lines, logistics firms, freight forwarders, insurance firms, trade-related associations and banks. For more details on the Korean experience, see https://www.uncitral.org /pdf/english/colloquia/EC/SHIM_Sang_Bee _brief3Korean_case.pdf.
- Yang, So Young. 2011. "Case Study on Single Window Implementation." Available at https:// www.wto.org/english/tratop_e/tradfa_e /case_studies_e/single_window_kor_e.doc.
- See the Singapore Customs Introduction Guide for Newly Registered Traders at https://www.customs.gov.sg/-/media/cus/ files/business/resources/eguide-for-newly-registered-traders-updated-as-of-19-apr -2016.pdf.
- 24. EBO-Ghana. 2018. "Paperless Port Boosts Half-Year Import Revenue." Available at http://www.eurboghana.eu/2018/08/10 /paperless-port-boosts-half-year-import -revenue/.
- The ASEAN members states are Brunei
 Darussalam, Cambodia, Indonesia, Lao PDR,
 Malaysia, Myanmar, Philippines, Singapore,
 Thailand and Vietnam.
- 26. Chia, Yan Min. 2016. "Asean Single Window a digital platform to simplify customs clearance." *The Business Times*. Available at https://www.businesstimes.com.sg/asean -business/asean-single-window-a-digital -platform-to-simplify-customs-clearance.
- 27. See the ASEAN Single Window Trade Facilitation website at http://asw.asean.org/component/content/category/13-static
- 28. OECD. 2017. OECD Economic Surveys: South Africa 2017.
- Arvis, J.F., et al. 2011. Connecting Landlocked Developing Countries to Markets: Trade Corridors in the 21st Century. Washington, DC: World Bank. Available at http://documents .worldbank.org/curated/en/489041468154790373 /pdf/608060PUB0Conn10Box358332B01P UBLIC1.pdf.
- 30. OECD. 2017. OECD Economic Surveys: South Africa 2017.
- 31. Interview with SARS representatives. May 16, 2018. Pretoria, South Africa.
- 32. OECD. 2017. OECD Economic Surveys: South Africa 2017.
- Communication from Norway on Border Agency Cooperation, available at http:// tfig.unece.org/contents/case-studies.htm.
- 34. Data provided by Transnet National Ports Authority.
- Gidago, Usman. 2015. "Consequences of Port Congestion on Logistics and Supply Chain in African Ports." Developing Country Studies 5(6): 160-168, available at https://pdfs .semanticscholar.org/ba11/5e33e5123e5a645 e359a265ede2b53c503a8.pdf.
- World Bank. Doing Business: Trading across Borders: Good Practices. Available at http:// www.doingbusiness.org/data/exploretopics /trading-across-borders/good-practices.

Data Notes

he indicators presented and analyzed in Doing Business in South Africa 2018 measure business regulation and the protection of property rights as well as their effect on businesses, especially small and medium-size domestic firms. First, the indicators document the complexity of regulation, such as the number of procedures to obtain construction approvals or to register a transfer of commercial property. Second, they gauge the time and cost to achieve a regulatory goal or comply with regulation, such as the time and cost to enforce a contract. Third, they measure the extent of legal protections, for example, the protections of property rights.

This report presents *Doing Business* indicators for nine urban areas and four maritime ports in South Africa. The data for all sets of indicators in *Doing Business in South Africa 2018* are current as of May 1, 2018. The data for the 189

other economies used for comparison are based on the indicators in *Doing Business* 2018: Reforming to Create Jobs, the 15th in a series of annual reports published by the World Bank Group.

METHODOLOGY

The data for *Doing Business in South Africa* 2018 were collected in a standardized way. To start, the team customized the *Doing Business* questionnaires for the specific study in South Africa. The questionnaires use a simple business case to ensure comparability across locations and economies and over time—with assumptions about the legal form of the business, its size, its location and the nature of its operations. Questionnaires were administered to local experts, including lawyers, conveyancers, business consultants, architects, engineers, clearing agents and freight forwarders,

public officials and other professionals routinely administering or advising on legal and regulatory requirements. These experts had several rounds of interaction with the project team, involving conference calls, written correspondence and visits by the team. The data from questionnaires were subjected to numerous rounds of verification, leading to revisions or expansions of the information collected.

The *Doing Business* methodology offers several advantages. It is transparent, using factual information about what laws and regulations say and allowing multiple interactions with local respondents to clarify potential misinterpretations of questions. Having representative samples of respondents is not an issue; *Doing Business* is not a statistical survey, and the texts of the relevant laws and regulations are collected and answers checked for accuracy. The methodology

Economy characteristics

Gross national income per capita

Doing Business in South Africa 2018 relies on 2016 income per capita data as published in the World Bank's World Development Indicators 2017. Income is calculated using the Atlas method (in current U.S. dollars). For cost indicators expressed as a percentage of income per capita, 2016 gross national income (GNI) per capita in current U.S. dollars is used as the denominator. South Africa's income per capita for 2016 is \$5,480 (ZAR 75,375).

Region and income group

Doing Business uses the World Bank regional and income group classifications, available at http://data.worldbank.org/about/country-and-lending-groups. Regional averages presented in figures and tables in *Doing Business in South Africa 2018* include economies from all income groups (low, lower middle, upper middle and high income).

Exchange rate

The exchange rate for the U.S. dollar used in this report is: \$1 = 13.7 South African rand (ZAR)

is inexpensive and easily replicable, so data can be collected in a large sample of locations and economies. Because standard assumptions are used in the data collection, comparisons and benchmarks are valid across locations. Finally, the data not only highlight the extent of specific regulatory obstacles to business but also identify their source and point to what could be improved.

LIMITS TO WHAT IS MEASURED

The Doing Business methodology has four limitations that should be considered when interpreting the data. First, the data often focus on a specific business form generally a limited liability company (or its legal equivalent) of a specified size—and may not be representative of the regulation on other businesses (for example, sole proprietorships). Second, transactions described in a standardized case scenario refer to a specific set of issues and may not represent the full set of issues that a business encounters. Third, the measures of time involve an element of judgment by the expert respondents. When sources indicate different estimates, the time indicators reported in Doing Business represent the median values of several responses given under the assumptions of the standardized case.

Finally, the methodology assumes that a business has full information on what is required and does not waste time when completing procedures. In practice, completing a procedure may take longer if the business lacks information or is unable to follow up promptly. Alternatively, the business may choose to disregard some burdensome procedures. For both reasons the time delays reported in *Doing Business* would differ from the recollection of entrepreneurs reported in the World Bank Enterprise Surveys or other firm-level surveys.

DEALING WITH CONSTRUCTION PERMITS

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, Doing Business compiles 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. Information is collected through a questionnaire administered to experts in construction licensing, including architects, civil engineers, construction lawyers, construction firms, utility service providers and public officials who deal with building regulations, including approvals, permit issuance and inspections.

The ranking of locations on the ease of dealing with construction permits is determined by sorting their distance to frontier scores for dealing with construction permits. These scores are the simple average of the distance to frontier scores for each of the component indicators (figure 8.1).

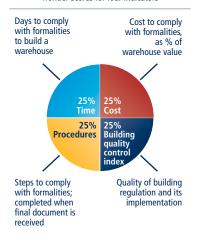
EFFICIENCY OF CONSTRUCTION PERMITTING

Doing Business divides the process of building a warehouse into distinct procedures in the questionnaire and solicits data for calculating the time and cost to complete each procedure (figure 8.2). These procedures include but are not limited to:

- Obtaining all plans and surveys required by the architect and the engineer to start the design of the building plans (for example, topographical surveys, location maps or soil tests).
- Obtaining and submitting to the authorities all relevant project-specific documents (for example, building plans, site maps and certificates of urbanism).
- Hiring external third-party supervisors, engineers or inspectors (if necessary).

FIGURE 8.1 Dealing with construction permits: efficiency and quality of building regulation

Rankings are based on distance to frontier scores for four indicators



- Obtaining all necessary clearances, licenses, permits and certificates.
- Submitting all required notifications for the start and end of construction and for inspections.
- Requesting and receiving all necessary inspections (unless completed by a private, third-party inspector).

Doing Business also records procedures for obtaining connections for water and sewerage. Procedures necessary to register the warehouse so that it can be used as collateral or transferred to another entity are also counted.

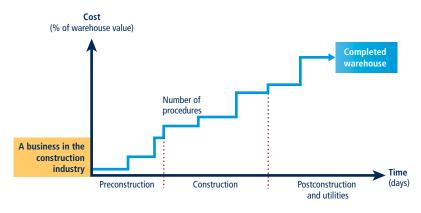
To make the data comparable across locations, several assumptions about the construction company, the warehouse project and the utility connections are used.

Assumptions about the construction company

The construction company (BuildCo):

- Is a limited liability company (or its legal equivalent).
- Operates in the selected city.
- Is 100% domestically and privately owned
- Has five owners, none of whom is a legal entity.

FIGURE 8.2 What are the time, cost and number of procedures to comply with formalities to build a warehouse?



- Is fully licensed and insured to carry out construction projects, such as building warehouses.
- Has 60 builders and other employees, all of them nationals with the technical expertise and professional experience necessary to obtain construction permits and approvals.
- Has a licensed architect and a licensed engineer, both 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, accident insurance for construction workers and third-person liability insurance).
- Owns the land on which the warehouse will be built and will sell the warehouse upon its completion.

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 peri urban area of the selected city (that is, on the fringes of the city but still within its official limits).
- 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 where freehold titles exist. However, when the land is owned by the government and leased by BuildCo, it is assumed that BuildCo will register the land in the cadastre or land registry or both, whichever is applicable, at the completion of the warehouse.
- Is valued at 50 times income per capita.
- Will be a new construction (there was no previous construction on the land), with no trees, natural water sources, natural reserves or historical monuments of any kind on the plot.
- Will have complete architectural and technical plans prepared by a licensed architect and a licensed engineer. 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 location, a borehole will be dug. If there is no sewerage infrastructure, a septic tank in the smallest size available will be installed or built.
- Will not require water for fire protection reasons; a fire extinguishing system (dry system) will be used instead. If a wet fire protection system is required by law, it is assumed that the water demand specified below also covers the water needed for fire protection.
- Will have an average water use of 662 liters (175 gallons) a day and an average wastewater flow of 568 liters (150 gallons) a day. Will have a peak water use of 1,325 liters (350 gallons) a day and a peak wastewater flow of 1,136 liters (300 gallons) a day.
- Will have a constant level of water demand and wastewater flow throughout the year.
- Will be 1 inch in diameter for the water connection and 4 inches in diameter for the sewerage connection.

Procedures

A procedure is any interaction of the company's employees or managers, or any party acting on behalf of the company, with external parties, including government agencies, notaries, the land registry, the cadastre, utility companies and public inspectors—and the hiring of external private inspectors and technical experts where needed. Interactions between company employees, such as development of the warehouse plans and

inspections conducted by employees, are not counted as procedures. However, interactions with external parties that are required for the architect to prepare the plans and drawings (such as obtaining topographic or geological surveys), or to have such documents approved or stamped by external parties, are counted as procedures. Procedures that the company undergoes to connect the warehouse to water and sewerage are included. All procedures that are legally required, or that are done in practice by the majority of companies, to build a warehouse are counted, even if they may be avoided in exceptional cases. This includes obtaining technical conditions for electricity or clearance of the electrical plans only if they are required to obtain a building permit (table 8.1).

Time

Time is recorded in calendar days. The measure captures the median duration that local experts indicate is necessary to complete a procedure in practice. It is

TABLE 8.1 What do the indicators on the efficiency of construction permitting measure?

Procedures to legally build a warehouse (number)

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

Submitting all required notifications and receiving all necessary inspections

Obtaining utility connections for water and sewerage

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

Time required to complete each procedure (calendar days)

Does not include time spent gathering information

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

Procedure considered completed once final document is received

No prior contact with officials

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

Official costs only, no bribes

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

Cost

Cost is recorded as a percentage of the warehouse value (assumed to be 50 times income per capita). Only official costs are recorded. All the fees associated with completing the procedures to legally build a warehouse are recorded, including those associated with obtaining land use approvals and preconstruction design clearances; receiving inspections before, during and after construction; obtaining utility connections; and registering the warehouse property. Nonrecurring taxes required for the completion of the warehouse project are also recorded. Sales taxes (such as value added tax) or capital gains taxes are not recorded. Nor are deposits that must be paid up front and are later refunded. The building code, information from local experts, and specific regulations and fee schedules are used as sources for costs. If several local partners provide different estimates, the median reported value is used.

BUILDING QUALITY CONTROL

The building quality control index complements the measure of efficiency. It is based on six other indices—the quality of building regulations, quality

control before construction, quality control during construction, quality control after construction, liability and insurance regimes, and professional certifications indices (table 8.2). The indicator is based on the same case study assumptions as the measures of efficiency.

Quality of building regulations index

The quality of building regulations index has two components:

- Whether building regulations are easily accessible. A score of 1 is assigned if building regulations (including the building code) or regulations dealing with construction permits are available on a website that is updated as new regulations are passed; 0.5 if the building regulations are available free of charge (or for a nominal fee) at the relevant permit-issuing authority; 0 if the building regulations must be purchased or if they are not made easily accessible anywhere.
- Whether the requirements for obtaining a building permit are clearly specified. A score of 1 is assigned if the building regulations (including the building code) or any accessible website, brochure or pamphlet clearly specifies the list of required documents to submit, the fees to be paid and all required preapprovals of the drawings or plans (for example, electrical, water and sewerage, or environmental clearances) by the relevant agencies; O if none of these sources specify any of these requirements or if these sources specify fewer than the three requirements mentioned here.

The index ranges from 0 to 2, with higher values indicating clearer and more transparent building regulations. In New Zealand, for example, all relevant legislation can be found on an official government website (a score of 1). The legislation specifies the list of required documents to submit, the fees to be paid, and all required preapprovals of the drawings or plans by the relevant agencies (a score of 1). Adding these numbers gives

TABLE 8.2 What do the indicators on building quality control measure?

Quality of building regulations index (0-2)

Accessibility of building regulations (0-1)

Clarity of requirements for obtaining a building permit (0-1)

Quality control before construction index (0–1)

Whether licensed or technical experts approve building plans (0–1)

Quality control during construction index (0–3)

Types of inspections legally mandated during construction (0–2)

Implementation of legally mandated inspections in practice (0-1)

Quality control after construction index (0–3)

Final inspection legally mandated after construction (0–2)

Implementation of legally mandated final inspection in practice (0–1)

Liability and insurance regimes index (0-2)

Parties held legally liable for structural flaws after building occupancy (0–1)

Parties legally mandated to obtain insurance to cover structural flaws after building occupancy or insurance commonly obtained in practice (0–1)

Professional certifications index (0-4)

Qualification requirements for individual who approves building plans (0–2)

Qualification requirements for individual who supervises construction or conducts inspections (0–2)

Building quality control index (0-15)

Sum of the quality of building regulations, quality control before construction, quality control during construction, quality control after construction, liability and insurance regimes, and professional certifications indices

New Zealand a score of 2 on the quality of building regulations index.

Quality control before construction index

The quality control before construction index has one component:

Whether by law a licensed architect or licensed engineer is part of the committee or team that reviews and approves building permit applications and whether that person has the authority to refuse an application if the plans are not in compliance with the building regulations. A score of 1 is assigned if the national association of architects or engineers (or its equivalent) must review the building plans, if an independent firm or expert who is a licensed architect or engineer must review the plans, if the architect or engineer who prepared the plans must submit an attestation to the permit-issuing authority stating that the plans are in compliance with the building regulations or if a licensed architect or engineer is part of the committee or team that approves the plans at the relevant permit-issuing authority; 0 if no licensed architect or engineer is involved in the review of the plans to ensure their compliance with the building regulations.

The index ranges from 0 to 1, with higher values indicating better quality control in the review of the building plans. In Rwanda, for example, the City Hall in Kigali must review the building permit application, including the plans and drawings, and both a licensed architect and a licensed engineer are part of the team that reviews the plans and drawings. Rwanda therefore receives a score of 1 on the quality control before construction index.

Quality control during construction index

The quality control during construction index has two components:

 Whether inspections are mandated by law during the construction process. A score of 2 is assigned if an in-house supervising engineer (that is, an employee of the building company), an external supervising engineer or a government agency is legally mandated to conduct risk-based inspections. A score of 1 is assigned if an in-house supervising engineer (that is, an employee of the building company), an external supervising engineer or an external inspections firm is legally mandated to conduct technical inspections at different stages during the construction of the

- building or if a government agency is legally mandated only to conduct technical inspections at different stages during the construction. A score of 0 is assigned if a government agency is legally mandated to conduct unscheduled inspections or if no technical inspections are mandated by law.
- Whether inspections during construction are implemented in practice. A score of 1 is assigned if the legally mandated inspections during construction always occur in practice; 0 if the legally mandated inspections do not occur in practice, if the inspections occur most of the time but not always or if inspections are not mandated by law regardless of whether or not they commonly occur in practice.

The index ranges from 0 to 3, with higher values indicating better quality control during the construction process. In Antigua and Barbuda, for example, the Development Control Authority is legally mandated to conduct phased inspections under the Physical Planning Act of 2003 (a score of 1). However, the Development Control Authority rarely conducts these inspections in practice (a score of 0). Adding these numbers gives Antigua and Barbuda a score of 1 on the quality control during construction index.

Quality control after construction index

The quality control after construction index has two components:

Whether a final inspection is mandated by law in order to verify that the building was built in accordance with the approved plans and existing building regulations. A score of 2 is assigned if an in-house supervising engineer (that is, an employee of the building company), an external supervising engineer or an external inspections firm is legally mandated to verify that the building has been built in accordance with the approved plans and existing building regulations or if a government agency is legally

mandated to conduct a final inspection upon completion of the building; O if no final inspection is mandated by law after construction and no third party is required to verify that the building has been built in accordance with the approved plans and existing building regulations.

 Whether the final inspection is implemented in practice. A score of 1 is assigned if the legally mandated final inspection after construction always occurs in practice or if a supervising engineer or firm attests that the building has been built in accordance with the approved plans and existing building regulations; 0 if the legally mandated final inspection does not occur in practice, if the legally mandated final inspection occurs most of the time but not always or if a final inspection is not mandated by law regardless of whether or not it commonly occurs in practice.

The index ranges from 0 to 3, with higher values indicating better quality control after the construction process. In Haiti, for example, the Municipality of Port-au-Prince is legally mandated to conduct a final inspection under the national Building Code of 2012 (a score of 2). However, most of the time the final inspection does not occur in practice (a score of 0). Adding these numbers gives Haiti a score of 2 on the quality control after construction index.

Liability and insurance regimes index

The liability and insurance regimes index has two components:

■ Whether any parties involved in the construction process are held legally liable for latent defects such as structural flaws or problems in the building once it is in use. A score of 1 is assigned if at least two of the following parties are held legally liable for structural flaws or problems in the building once it is in use: the architect or engineer who designed the plans for the building, the professional or agency that

conducted technical inspections, or the construction company; 0.5 if only one of the parties is held legally liable for structural flaws or problems in the building once it is in use; 0 if no party is held legally liable for structural flaws or problems in the building once it is in use, if the project owner or investor is the only party held liable, if liability is determined in court or if liability is stipulated in a contract.

Whether any parties involved in

the construction process are legally required to obtain a latent defect liability—or decennial (10-year) liability—insurance policy to cover possible structural flaws or problems in the building once it is in use. A score of 1 is assigned if the architect or engineer who designed the plans for the building, the professional or agency that conducted the technical inspections, the construction company, or the project owner or investor is required by law to obtain either a decennial liability insurance policy or a latent defect liability insurance policy to cover possible structural flaws or problems in the building once it is in use or if a decennial liability insurance policy or a latent defect liability insurance policy is commonly obtained in practice by the majority of any of these parties even if not required by law. A score of O is assigned if no party is required by law to obtain either a decennial liability insurance policy or a latent defect liability insurance policy and such insurance is not commonly obtained in practice by any party, if the requirement to obtain an insurance policy is stipulated in a contract, if any party must obtain a professional insurance or all-risk insurance policy to cover the safety of workers or any other defects during construction but not a decennial liability insurance or latent defect liability insurance policy that would cover defects after the building is in use, or if any party is required to pay for any damages caused on their own without having to obtain an insurance policy.

The index ranges from 0 to 2, with higher values indicating more stringent latent defect liability and insurance regimes. In Madagascar, for example, under article 1792 of the Civil Code both the architect who designed the plans and the construction company are held legally liable for latent defects for a period of 10 years after the completion of the building (a score of 1). However, there is no legal requirement for any party to obtain a decennial liability insurance policy to cover structural defects, nor do most parties obtain such insurance in practice (a score of 0). Adding these numbers gives Madagascar a score of 1 on the liability and insurance regimes index.

Professional certifications index

The professional certifications index has two components:

- The qualification requirements for professional responsible verifying that the architectural plans or drawings are in compliance with the building regulations. A score of 2 is assigned if this professional must have a minimum number of years of practical experience, must have a university degree (a minimum of a bachelor's) in architecture or engineering and must also either be a registered member of the national order (association) of architects or engineers or pass a qualification exam. A score of 1 is assigned if the professional must have a university degree (a minimum of a bachelor's) in architecture or engineering and must also either have a minimum number of years of practical experience or be a registered member of the national order (association) of architects or engineers or pass a qualification exam. A score of O is assigned if the professional must meet only one of the requirements, if the professional must meet two of the requirements but neither of the two is to have a university degree, or if the professional is subject to no qualification requirements.
- The qualification requirements for the professional who conducts the

technical inspections during construction. A score of 2 is assigned if the regulation mandates that the professional must have a minimum number of years of practical experience, must have a university degree (a minimum of a bachelor's) in engineering and must also either be a registered member of the national order of engineers or pass a qualification exam. A score of 1 is assigned if the regulation mandates that the professional must have a university degree (a minimum of a bachelor's) in engineering and must also either have a minimum number of years of practical experience or be a registered member of the national order (association) of engineers or architects or pass a qualification exam. A score of 0 is assigned if the regulation mandates that the professional must meet only one of the requirements, if they mandate that the professional must meet two of the requirements but neither of the two is to have a university degree, or if no national or state regulation determines the professional's qualification requirements.

The index ranges from 0 to 4, with higher values indicating greater professional certification requirements.

In Albania, for example, the professional conducting technical inspections during construction must have a minimum number of years of experience as well as a relevant university degree and must also be a registered architect or engineer (a score of 2). However, the professional responsible for verifying that the architectural plans or drawings are in compliance with building regulations must only have a minimum number of years of experience and a university degree in architecture or engineering (a score of 1). Adding these numbers gives Albania a score of 3 on the professional certifications index.

Building quality control index

The building quality control index is the sum of the scores on the quality of building regulations, quality control before construction, quality control during construction, quality control after construction, liability and insurance regimes, and professional certifications indices. The index ranges from 0 to 15, with higher values indicating better quality control and safety mechanisms in the construction regulatory system.

REFORMS

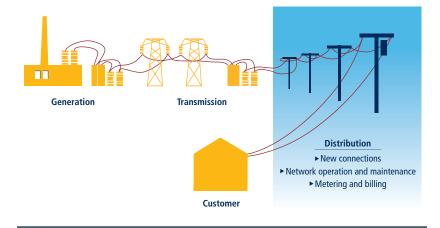
The dealing with construction permits indicator set for Doing Business in South Africa 2018 tracks changes related to the efficiency and quality of construction permitting systems since the previous study in 2015. Depending on their impact on the data, some changes will be classified as reforms. There are two types of reforms: those that facilitate dealing with construction permits and those that make it more difficult. The dealing with construction permits indicator set uses one criterion to recognize a reform. The aggregate gap on the distance to frontier of the indicator is used to assess the impact of data changes across years. Any data update that leads to a change of 2% or more on the distance to frontier gap between the current and the previous study is classified as a reform (for more details on the distance to the frontier score, see the chapter on "About Doing Business and Doing Business in South Africa 2018"). For example, if the implementation of a new electronic permitting system by a municipality reduces time in such a way that the overall gap between the past distance to frontier score and the current score decreases by 2% or more, such a change is classified as a positive reform. On the contrary, minor fee updates or other smaller changes in the indicators that have an aggregate impact of less than 2% on the gap are not classified as a reform, even though their impact is still reflected in the updated indicator set.

The data details on dealing with construction permits can be found at http://www.doingbusiness.org.

GETTING ELECTRICITY

Doing Business records all procedures required for a business to obtain a permanent electricity connection and supply for a standardized warehouse (figure 8.3). These procedures include applications and contracts with electricity utilities, all necessary inspections and clearances from the distribution utility and other agencies, and the external and final connection works. The questionnaire divides the process of getting an electricity connection into distinct procedures and solicits data for calculating the time and cost to complete each procedure.

FIGURE 8.3 Doing Business measures the connection process at the level of distribution utilities



In addition, Doing Business compiles the reliability of supply and transparency of tariffs index (included in the aggregate distance to frontier score and the ranking on the ease of doing business) and measures the price of electricity (omitted from these aggregate measures). The reliability of supply and transparency of tariffs index encompasses quantitative data on the duration and frequency of power outages as well as qualitative information on the mechanisms put in place by the utility for monitoring power outages and restoring power supply, the reporting relationship between the utility and the regulator for power outages, the transparency and accessibility of tariffs and whether the utility faces a financial deterrent aimed at limiting outages (such as a requirement to compensate customers or pay fines when outages exceed a certain cap).

The ranking of locations 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 all the component indicators except the price of electricity (figure 8.4).

Data on reliability of supply are collected from the electricity distribution utilities or regulators, depending on the specific technical nature of the data. The rest of the data, including data on the transparency of tariffs and the procedures for obtaining an electricity connection, are collected from all market players—the electricity distribution utility, electricity regulatory agencies and independent professionals such as electrical engineers, electrical contractors and construction companies. The electricity distribution utility consulted is the one serving the area (or areas) where warehouses are located. If there is a choice of distribution utilities, the one serving the largest number of customers is selected.

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

Assumptions about the warehouse

The warehouse:

- Is owned by a local entrepreneur.
- Is located in the selected 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).
- Is located in an area with no physical constraints. For example, the property is not near a railway.
- Is a new construction and is being connected to electricity for the first time
- Has 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 the storage of goods.

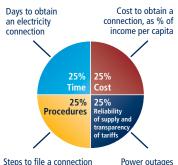
Assumptions about the electricity connection

The electricity connection:

- Is a permanent one.
- Is a three-phase, four-wire Y connection with a subscribed capacity of 140 kilovolt-amperes (kVA) with a power factor of 1, when 1 kVA = 1 kilowatt (kW)
- Has a length of 150 meters. The connection is to either the low-voltage or the medium-voltage distribution network and is 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-wide road (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 negligible length in the customer's private domain.
- Does not require work to install the internal wiring of the warehouse. This

FIGURE 8.4 Getting electricity: efficiency, reliability and transparency

Rankings are based on distance to frontier scores for four indicators



application, prepare a design, complete works, obtain approvals, go through inspections, install a meter and sign a supply contract Power outages and regulatory mechanisms in place to monitor and reduce them; transparency of tariffs

Note: The price of electricity is measured but does not count for the rankings.

has already been completed up to and including the customer's service panel or switchboard and the meter base.

Assumptions about the monthly consumption for March

- The warehouse operates 30 days a month from 9:00 a.m. to 5:00 p.m. (8 hours a day), with equipment utilized at 80% of capacity on average, and there are no electricity cuts (assumed for reasons of simplicity).
- The monthly energy consumption is 26,880 kilowatt-hours (kWh); hourly consumption is 112 kWh.
- 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 ware-house. Although March has 31 days,
 for calculation purposes only 30 days
 are used.

Procedures

A procedure is defined as any interaction of the company's employees or its main electrician or electrical engineer (that is, the one who may have done the internal wiring) with external parties, such as the electricity distribution utility, electricity supply utilities, government agencies, electrical contractors and electrical firms. Interactions between company employees and steps related to the internal electrical wiring, such as the design and execution of the internal electrical installation plans, are not counted as procedures. Procedures that must be completed with the same utility but with different departments are counted as separate procedures (table 8.3).

The company's employees are assumed to complete all procedures themselves unless the use of a third party is mandated (for example, if only an electrician registered with the utility is allowed to submit an application). If the company can, but is not required to, request the services of professionals (such as a private firm rather than the utility for the external works), these procedures are recorded if they are commonly done. The procedures counted include only the most likely cases (for example, more than 50% of the time the utility has the material) and those followed in practice for connecting a warehouse to electricity.

Time

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

Cost

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

Security deposit

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

Doing Business does not record the full amount of the security deposit. If the deposit is based on the customer's actual consumption, this basis is the one assumed in the case study. Rather than the full amount of the security deposit, Doing Business records the present value of the losses in interest earnings experienced by the customer because the utility holds the security deposit over a prolonged period, in most cases until the end of the contract (assumed to be after five years). In cases where the security deposit is used to cover the first monthly consumption bills, it is not recorded. To calculate the present value of the lost interest earnings, the end-2016 lending rates from the International Monetary Fund's International Financial Statistics are used. In cases where the security deposit is returned with interest, the difference between the lending rate and the interest paid by the utility is used to calculate the present value.

TABLE 8.3 What do the getting electricity indicators measure?

Procedures to obtain an electricity connection (number)

Submitting all relevant documents and obtaining all necessary clearances and permits

Completing all required notifications and receiving all necessary inspections

Obtaining external installation works and possibly purchasing material for these works

Concluding any necessary supply contract and obtaining final supply

Time required to complete each procedure (calendar days)

Is at least one calendar day

Each procedure starts on a separate day

Does not include time spent gathering information

Reflects the time spent in practice, with little follow-up and no prior contact with officials

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

Official costs only, no bribes

Value added tax excluded

Reliability of supply and transparency of tariffs index (0–8)

Duration and frequency of power 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

Note: While Doing Business measures the price of electricity, it does not include these data when calculating the distance to frontier score for getting electricity or the ranking on the ease of getting electricity.

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

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

In Hong Kong SAR, China, a customer requesting a 140-kVA electricity connection in March 2017 would have had to put up a security deposit of 63,600 Hong Kong dollars (about \$7,850) in cash or check, and the deposit would have been returned only at the end of the contract. The customer could instead have invested this money at the prevailing lending rate of 5.0%. Over the five years of the contract, this would imply a present value of lost interest earnings of 13,760 Hong Kong dollars (\$1,700). In contrast, if the customer chose to settle the deposit with a bank guarantee at an annual rate of 1.5%, the amount lost over the five years would be just 4,770 Hong Kong dollars (\$590).

Reliability of supply and transparency of tariffs index

Doing Business uses the system average interruption duration index (SAIDI) and the system average interruption frequency index (SAIFI) to measure the duration and frequency of power outages in each of the selected locations. SAIDI is the average total duration of outages over the course of a year for each customer served, while SAIFI is the average number of service interruptions experienced by a customer in a year. Annual data (covering the calendar year) are collected from distribution utility companies and national regulators on SAIDI and SAIFI. Both SAIDI and SAIFI estimates should include planned and unplanned outages as well as load shedding.

A location is eligible to obtain a score on the reliability of supply and transparency of tariffs index if the utility collects data on electricity outages (measuring the average total duration of outages per customer and the average number of outages per customer) and the SAIDI value is below a threshold of 100 hours and the SAIFI value below a threshold of 100 outages.

Because the focus is on measuring the reliability of the electricity supply, a location is not eligible to obtain a score if outages are too frequent or long-lasting for the electricity supply to be considered reliable—that is, if the SAIDI or SAIFI value exceeds the determined threshold. A location is also not eligible to obtain a score if data on power outages are not collected or are collected only partially (for example, if data on planned outages or load shedding are not included in the calculation of SAIDI and SAIFI) and if the minimum outage time considered for calculation of SAIDI and SAIFI is more than five minutes

For all locations that meet the criteria as determined by *Doing Business*, a score on the reliability of supply and transparency of tariffs index is calculated on the basis of the following six components:

- What the SAIDI and SAIFI values are. If SAIDI and SAIFI are 12 (equivalent to an outage of one hour each month) or below, a score of 1 is assigned. If SAIDI and SAIFI are 4 (equivalent to an outage of one hour each quarter) or below, 1 additional point is assigned. Finally, if SAIDI and SAIFI are 1 (equivalent to an outage of one hour per year) or below, 1 more point is assigned.
- What tools are used by the distribution utility to monitor power outages. A score of 1 is assigned if the utility uses automated tools, such as the supervisory control and data acquisition (SCADA) system; 0 if it relies solely on calls from customers and records and monitors outages manually.
- What tools are used by the distribution utility to restore power supply. A score of 1 is assigned if the utility uses automated tools, such as the SCADA system; 0 if it relies solely on manual

- resources for service restoration, such as field crews or maintenance
- Whether a regulator—that is, an entity separate from the utility monitors the utility's performance on reliability of supply. A score of 1 is assigned if the regulator performs periodic or real-time reviews; 0 if it does not monitor power outages and does not require the utility to report on reliability of supply.
- Whether financial deterrents exist to limit outages. A score of 1 is assigned if the utility compensates customers when outages exceed a certain cap, if the utility is fined by the regulator when outages exceed a certain cap or if both these conditions are met; 0 if no compensation mechanism of any kind is available.
- Whether electricity tariffs are transparent and easily available. A score of 1 is assigned if effective tariffs are available online and customers are notified of a change in tariff a full billing cycle (that is, one month) ahead of time; 0 if not.

The index ranges from 0 to 8, with higher values indicating greater reliability of electricity supply and greater transparency of tariffs. In the United Kingdom, for example, the distribution utility company UK Power Networks uses SAIDI and SAIFI metrics to monitor and collect data on power outages. In 2016 the average total duration of power outages in London was 0.326 hours per customer and the average number of outages experienced by a customer was 0.166. Both SAIDI and SAIFI are below the threshold and indicate that there was less than one outage a year per customer, for a total duration of less than one hour. Therefore, the economy not only meets the eligibility criteria for obtaining a score on the index; it also receives a score of 3 on the first component of the index. The utility uses the automatic GE PowerOn Control System to identify faults in the network (a score of 1) and to restore electricity

service (a score of 1). The Office of Gas and Electricity Markets, an independent national regulatory authority, actively reviews the utility's performance in providing reliable electricity service (a score of 1) and requires the utility to compensate customers if outages last longer than a maximum period defined by the regulator (a score of 1). Customers are notified of a change in tariffs ahead of the next billing cycle and can easily check effective tariffs online (a score of 1). Adding these numbers gives the United Kingdom a total score of 8 on the reliability of supply and transparency of tariffs index.

On the other hand, several economies receive a score of 0 on this index. The reason may be that outages occur more than once a month and none of the mechanisms and tools measured by the index are in place. A location may also receive a score of O if either the SAIDI or SAIFI value (or both) exceeds the threshold of 100 or if not, all outages were considered when calculating the indices. In Suriname, for example, the utility does not include load shedding in the calculation of SAIDI and SAIFI. Thus, based on the criteria established, Suriname cannot receive a score on the index even though the utility uses automated systems for monitoring outages and restoring power supply and there is transparency around electricity tariffs.

If economy location issued no electricity connections between January 2015 and May 1, 2018, or if electricity was not provided during that period, the economy receives a "no practice" mark on the procedures, time and cost indicators. In addition, a "no practice" economy receives a score of 0 on the reliability of supply and transparency of tariffs index even if, for example, there is regulatory oversight of utilities on power interruptions, for example.

Price of electricity

Doing Business measures the price of electricity but does not include these data when calculating the distance to frontier

score for getting electricity or the ranking on the ease of getting electricity. The data are available on the *Doing Business* website (http://www.doingbusiness.org) and are based on standardized assumptions to ensure comparability across economies.

The price of electricity is measured in U.S. cents per kilowatt-hour. On the basis of the assumptions about monthly consumption, a monthly bill for a commercial warehouse in each of the selected locations in South Africa is computed for the month of March. As noted, the warehouse uses electricity 30 days a month, from 9:00 a.m. to 5:00 p.m., so different tariff schedules may apply if a time-of-use tariff is available.

REFORMS

The indicator set on getting electricity tracks changes related to the efficiency of the connection process, as well as the reliability of power supply and transparency of tariffs. Depending on the impact on the data, certain changes are classified as reforms. Reforms are divided into two types: those that make it easier to do business and those changes that make it more difficult to do business. The getting electricity indicator set uses two criteria to recognize a reform.

First, the aggregate gap on the overall distance to frontier of the indicator set is used to assess the impact of data changes. Any data update that leads to a change of 2% or more on the distance to frontier gap is classified as a reform (for more details on the distance to frontier, see the chapter on "About Doing Business and Doing Business in South Africa 2018"). For example, if the implementation of a new single window at the utility reduces the time to process new connection requests in a way that the overall gap decreases by 2% or more, such a change is classified as a reform. On the other hand, minor fee updates from the utility or other small changes that have an aggregate impact of less than 2% on the gap are not classified as a reform, but their impact is still reflected in the most updated indicators for this topic.

Second, to be considered a reform, changes in the data must be tied to an initiative led by the utility or by the government—and not an exogenous event. For example, if outages increase considerably from one year to the next due to inclement weather, this cannot be considered a reform that makes doing business harder. Similarly, if the cost of electricity-related materials (such as cabling or transformers) decreases due to a currency appreciation, this cannot be considered a reform that makes doing business easier. However, if a utility establishes a one-stop shop to streamline the connection process or if it installs an automated system to improve monitoring of power outages and restoration of electricity services, these actions would be considered reforms that made doing business easier.

The data details on getting electricity can be found at http://www.doingbusiness.org. The initial methodology was developed by Carolin Geginat and Rita Ramalho ("Electricity Connections and Firm Performance in 183 Countries," Global Indicators Group, World Bank Group, Washington, DC, 2015) and is adopted here with minor changes.

REGISTERING PROPERTY

Doing Business records the full sequence of procedures necessary for a business (the buyer) to purchase a property from another business (the seller) and to transfer the property title to the buyer's name so that the buyer can use the property for expanding its business, use the property as collateral in taking new loans or, if necessary, sell the property to another business. It also measures the time and cost to complete each of these procedures. In addition, Doing Business measures the quality of the land administration system in each economy or location. The quality of land administration index has five dimensions: reliability of infrastructure, transparency of information, geographic coverage, land dispute resolution and equal access to property rights.

The ranking of locations on the ease of registering property is determined by sorting their distance to frontier scores for registering property. These scores are the simple average of the distance to frontier scores for each of the component indicators (figure 8.5).

EFFICIENCY OF TRANSFERRING PROPERTY

As recorded by Doing Business, the process of transferring property starts with obtaining the necessary documents, such as a copy of the seller's title if necessary, and conducting due diligence if required. The transaction is considered complete when it is opposable to third parties and when the buyer can use the property, use it as collateral for a bank loan or resell it (figure 8.6). Every procedure required by law or necessary in practice is included, whether it is the responsibility of the seller or the buyer or must be completed by a third party on their behalf. Local property lawyers or conveyancers, notaries and property registries provide information on procedures as well as the time and cost to complete each of them.

To make the data comparable across locations, several assumptions about the

FIGURE 8.5 Registering property: efficiency and quality of land administration system

Rankings are based on distance to frontier scores for four indicators

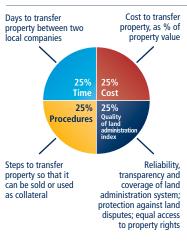


FIGURE 8.6 What are the time, cost and number of procedures required to transfer property between two local companies?



parties to the transaction, the property and the procedures are used.

Assumptions about the parties

The parties (buyer and seller):

- Are limited liability companies (or the legal equivalent).
- Are located in the periurban area of the selected city.
- Are 100% domestically and privately owned.
- Have 50 employees each, all of whom are nationals.
- Perform general commercial activities.

Assumptions about the property

The property:

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

land and building will be transferred in its entirety.

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

Procedures

A procedure is defined as any interaction of the buyer or the seller, their agents (if an agent is legally or in practice required) or the property with external parties, including government agencies, inspectors, notaries and lawyers. Interactions between company officers and employees are not considered. All procedures that are legally or in practice required for registering property are recorded, even if they may be avoided in exceptional cases (table 8.4). It is assumed that the buyer follows the fastest legal option available and used by the majority of property owners. Although the buyer may use lawyers or other professionals where necessary in the registration process, it is assumed that the buyer does not employ an outside facilitator in the registration process unless legally or in practice required to do so.

TABLE 8.4 What do the indicators on the efficiency of transferring property measure?

Procedures to legally transfer title on immovable property (number)

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

Registration procedures in the selected city

Postregistration procedures (for example, filing title with municipality)

Time required to complete each procedure (calendar days)

Does not include time spent gathering information

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

Procedure considered completed once final document is received

No prior contact with officials

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

Official costs only (such as administrative fees, duties and taxes)

Value added tax, capital gains tax and illicit payments are excluded

Time

Time is recorded in calendar days. The measure captures the median duration that property lawyers, notaries or registry officials indicate is necessary to complete a procedure. It is assumed that the minimum time required for each procedure is one day, except for procedures that can be fully completed online. for which the time required is recorded as half a day. Although procedures may take place simultaneously, they cannot start on the same day, again with the exception of procedures that can be fully completed online. It is assumed that the buyer does not waste time and commits to completing each remaining procedure without delay. If a procedure can be accelerated for an additional cost, the fastest legal procedure available and used by the majority of property owners is chosen. If procedures can be undertaken simultaneously, it is assumed that they are. It is assumed that the parties involved are aware of all requirements and their sequence from the beginning.

Time spent on gathering information is not considered. If time estimates differ among sources, the median reported value is used.

Cost

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

QUALITY OF LAND ADMINISTRATION

The quality of land administration index is composed of five other indices: the reliability of infrastructure, transparency of information, geographic coverage, land dispute resolution and equal access to property rights indices (table 8.5). Data are collected for each of the selected locations.

Reliability of infrastructure index

The reliability of infrastructure index has six components:

- How land titles are kept at the registry of the selected location. A score of 2 is assigned if the majority of land titles are fully digital; 1 if the majority are scanned; 0 if the majority are kept in paper format.
- Whether there is an electronic database for checking for encumbrances.
 A score of 1 is assigned if yes; 0 if no.
- How maps of land plots are kept at the mapping agency of the selected location. A score of 2 is assigned if the majority of maps are fully digital; 1 if the majority are scanned; 0 if the majority are kept in paper format.
- Whether there is a geographic information system—an electronic

- database for recording boundaries, checking plans and providing cadastral information. A score of 1 is assigned if yes; 0 if no.
- How the land ownership registry and mapping agency are linked. A score of 1 is assigned if land ownership information and maps are kept in a single database or in linked databases; 0 if there is no connection between the different databases.
- How immovable property is identified. A score of 1 is assigned if there is
 a unique number to identify property
 for the majority of land plots; 0 if there
 are multiple identifiers.

The index ranges from 0 to 8, with higher values indicating a higher quality of infrastructure for ensuring the reliability of information on property titles and boundaries. In Turkey, for example, the land registry offices in Istanbul maintain titles in a fully digital format (a score of 2) and have a fully electronic database to check for encumbrances (a score of 1). The Cadastral Directorate offices in Istanbul have digital maps (a score of 2), and the Geographical Information Directorate has a public portal allowing users to check the plans and cadastral information on parcels along with satellite images (a score of 1). Databases about land ownership and maps are linked through the TAKBIS system, an integrated information system for the land registry offices and cadastral offices (a score of 1). Finally, there is a unique identifying number for properties (a score of 1). Adding these numbers gives Turkey a score of 8 on the reliability of infrastructure index

Transparency of information index

The transparency of information index has 10 components:

 Whether information on land ownership is made publicly available. A score of 1 is assigned if information on land ownership is accessible by anyone; 0 if access is restricted.

TABLE 8.5 What do the indicators on the quality of land administration measure?

Reliability of infrastructure index (0-8)

Type of system for archiving information on land ownership (0–2)

Availability of electronic database to check for encumbrances (0-1)

Type of system for archiving maps (0-2)

Availability of geographic information system (0-1)

Link between property ownership registry and mapping system (0-2)

Transparency of information index (0-6)

Accessibility of information on land ownership (0-1)

Accessibility of maps of land plots (0-0.5)

Publication of fee schedules, lists of registration documents, service standards (0-2.5)

Availability of a specific and separate mechanism for complaints (0–1.5)

Publication of statistics about the number of property transactions (0–0.5)

Geographic coverage index (0-8)

Coverage of land registry at the level of the selected location and the economy (0-4)

Coverage of mapping agency at the level of the selected location and the economy (0-4)

Land dispute resolution index (0-8)

Legal framework for immovable property registration (0-2)

Mechanisms to prevent and resolve land disputes (0-6)

Equal access to property rights index (-2-0)

Unequal ownership rights to property between unmarried men and women

Unequal ownership rights to property between married men and women

Quality of land administration index (0-30)

Sum of the reliability of infrastructure, transparency of information, geographic coverage, land dispute resolution and equal access to property rights indices

- Whether the list of documents required for completing any type of property transaction is made publicly available. A score of 0.5 is assigned if the list of documents is accessible online or on a public board; 0 if it is not made available to the public or if it can be obtained only in person.
- Whether the fee schedule for completing any type of property transaction is made publicly available. A score of 0.5 is assigned if the fee schedule is accessible online or on a public board, free of charge; 0 if it is not made available to the public or if it can be obtained only in person.
- Whether the agency in charge of immovable property registration commits to delivering a legally binding document that proves property ownership within a specific time frame. A score of 0.5 is assigned if the service standard is accessible online

- or on a public board; O if it is not made available to the public or if it can be obtained only in person.
- Whether there is a specific and separate mechanism for filing complaints about a problem that occurred at the agency in charge of immovable property registration. A score of 1 is assigned if there is a specific and separate mechanism for filing a complaint; 0 if there is only a general mechanism or no mechanism.
- Whether there are publicly available official statistics tracking the number of transactions at the immovable property registration agency. A score of 0.5 is assigned if statistics are published about property transfers in the selected location in the past calendar year; 0 if no such statistics are made publicly available.
- Whether maps of land plots are made publicly available. A score of 0.5 is

- assigned if maps are accessible by anyone; 0 if access is restricted.
- Whether the fee schedule for accessing maps is made publicly available. A score of 0.5 is assigned if the fee schedule is accessible online or on a public board, free of charge; 0 if it is not made available to the public or if it can be obtained only in person.
- Whether the mapping agency commits to delivering an updated map within a specific time frame. A score of 0.5 is assigned if the service standard is accessible online or on a public board; 0 if it is not made available to the public or if it can be obtained only in person.
- Whether there is a specific and separate mechanism for filing complaints about a problem that occurred at the mapping agency. A score of 0.5 is assigned if there is a specific and separate mechanism for filing a complaint; 0 if there is only a general mechanism or no mechanism.

The index ranges from 0 to 6, with higher values indicating greater transparency in the land administration system. In the Netherlands, for example, anyone who pays a fee can consult the land ownership database (a score of 1). Information can be obtained at the office, by mail or online using the Kadaster website (http://www.kadaster.nl). Anyone can also get information online about the list of documents to submit for property registration (a score of 0.5), the fee schedule for registration (a score of 0.5) and the service standards (a score of 0.5). And anyone facing a problem at the land registry can file a complaint or report an error by filling in a specific form online (a score of 1). In addition, the Kadaster makes statistics about land transactions available to the public, reporting a total of 214,793 property transfers in Amsterdam in 2016 (a score of 0.5). Moreover, anyone who pays a fee can consult online cadastral maps (a score of 0.5). It is also possible to get public access to the fee schedule for map consultation (a score of 0.5),

the service standards for delivery of an updated plan (a score of 0.5) and a specific mechanism for filing a complaint about a map (a score of 0.5). Adding these numbers gives the Netherlands a score of 6 on the transparency of information index.

Geographic coverage index

The geographic coverage index has four components:

- How complete the coverage of the land registry is at the level of the selected location. A score of 2 is assigned if all privately held land plots in the location are formally registered at the land registry; 0 if not.
- How complete the coverage of the land registry is at the level of the economy. A score of 2 is assigned if all privately held land plots in the economy are formally registered at the land registry; 0 if not.
- How complete the coverage of the mapping agency is at the level of the selected location. A score of 2 is assigned if all privately held land plots in the location are mapped; 0 if not.
- How complete the coverage of the mapping agency is at the level of the economy. A score of 2 is assigned if all privately held land plots in the economy are mapped; 0 if not.

The index ranges from 0 to 8, with higher values indicating greater geographic coverage in land ownership registration and cadastral mapping. In the Republic of Korea, for example, all privately held land plots are formally registered at the land registry in Seoul (a score of 2) and in the economy as a whole (a score of 2). In addition, all privately held land plots are mapped in Seoul (a score of 2) and in the economy as a whole (a score of 2) and in the economy as a whole (a score of 2). Adding these numbers gives Korea a score of 8 on the geographic coverage index.

Land dispute resolution index

The land dispute resolution index assesses the legal framework for immovable property registration and the accessibility

of dispute resolution mechanisms. The index has eight components:

- Whether the law requires that all property sale transactions be registered at the immovable property registry to make them opposable to third parties. A score of 1.5 is assigned if yes; 0 if no.
- Whether the formal system of immovable property registration is subject to a guarantee. A score of 0.5 is assigned if either a state or a private guarantee over immovable property registration is required by law; 0 if no such guarantee is required.
- Whether there is a specific compensation mechanism to cover for losses incurred by parties who engaged in good faith in a property transaction based on erroneous information certified by the immovable property registry. A score of 0.5 is assigned if yes; 0 if no.
- Whether the legal system requires verification of the legal validity of the documents necessary for a property transaction. A score of 0.5 is assigned if there is a review of legal validity, either by the registrar or by a professional (such as a notary or lawyer); O if there is no review.
- Whether the legal system requires verification of the identity of the parties to a property transaction. A score of 0.5 is assigned if there is verification of identity, either by the registrar or by a professional (such as a notary or lawyer); 0 if there is no verification.
- Whether there is a national database to verify the accuracy of identity documents. A score of 1 is assigned if such a national database is available; 0 if not.
- How much time it takes to obtain a decision from a court of first instance (without appeal) in a standard land dispute between two local businesses over tenure rights worth 50 times income per capita and located in the selected location. A score of 3 is assigned if it takes less than one year; 2 if it takes between one and two years; 1 if it takes between two and

- three years; 0 if it takes more than three years.
- Whether there are publicly available statistics on the number of land disputes in the first instance. A score of 0.5 is assigned if statistics are published about land disputes in the economy in the past calendar year; 0 if no such statistics are made publicly available.

The index ranges from 0 to 8, with higher values indicating greater protection against land disputes. In Lithuania, for example, according to the Civil Code and the Law on the Real Property Register, property transactions must be registered at the land registry to make them opposable to third parties (a score of 1.5). The property transfer system is guaranteed by the state (a score of 0.5) and has a compensation mechanism to cover for losses incurred by parties who engaged in good faith in a property transaction based on an error by the registry (a score of 0.5). A notary verifies the legal validity of the documents in a property transaction (a score of 0.5) and the identity of the parties (a score of 0.5), in accordance with the Law on the Notary Office (Law I-2882). Lithuania has a national database to verify the accuracy of identity documents (a score of 1). In a land dispute between two Lithuanian companies over the tenure rights of a property worth \$770,000. the Vilnius District Court gives a decision in less than one year (a score of 3). Finally, statistics about land disputes are collected and published; there were a total of 549 land disputes in the country in 2016 (a score of 0.5). Adding these numbers gives Lithuania a score of 8 on the land dispute resolution index.

Equal access to property rights index

The equal access to property rights index has two components:

 Whether unmarried men and unmarried women have equal ownership rights to property. A score of -1 is assigned if there are unequal ownership rights to property; 0 if there is equality.

■ Whether married men and married women have equal ownership rights to property. A score of -1 is assigned if there are unequal ownership rights to property; 0 if there is equality.

Ownership rights cover the ability to manage, control, administer, access, encumber, receive, dispose of and transfer property. Each restriction is considered if there is a differential treatment for men and women in the law considering the default marital property regime. For customary land systems, equality is assumed unless there is a general legal provision stating a differential treatment.

The index ranges from -2 to 0, with higher values indicating greater inclusiveness of property rights. In Mali, for example, unmarried men and unmarried women have equal ownership rights to property (a score of 0). Similarly, married men and married women can use their property in the same way (a score of 0). Adding these numbers gives Mali a score of O on the equal access to property rights index—which indicates equal property rights between men and women. Conversely, in Tonga, according to the Land Act [Cap 132], sections 7, 45 and 82, unmarried men and unmarried women do not have equal ownership rights to property (a score of -1), and married men and married women are not permitted to use their property in the same way (a score of -1). Adding these numbers gives Tonga a score of -2 on the equal access to property rights index—which indicates unequal property rights between men and women.

Quality of land administration index

The quality of land administration index is the sum of the scores on the reliability of infrastructure, transparency of information, geographic coverage, land dispute resolution and equal access to

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

If between 2015 and 2018 it became impossible for private parties to register property transfers in a certain location, that location will receive a "no practice" mark on the indicators of efficiency (procedures, time and cost). In this case, the location with "no practice" will also receive a score of 0 on the quality of land administration index even if its legal framework includes provisions related to land administration.

REFORMS

The registering property indicator set for Doing Business in South Africa 2018 tracks changes related to the efficiency and quality of land administration systems since the previous study in 2015. Depending on their impact on the data, some changes will be classified as reforms. There are two types of reforms: those that facilitate registering a transfer of property and those that make it more difficult. The registering property indicator set uses one criterion to recognize a reform. The aggregate gap on the distance to frontier of the indicator is used to assess the impact of data changes across years. Any data update that leads to a change of 2% or more on the distance to frontier gap between the current and the previous study is classified as a reform (for more details on the distance to the frontier score, see the chapter on "About Doing Business and Doing Business in South Africa 2018"). For example, if the implementation of a new electronic property registration system reduces time in such a way that the overall gap between the past distance to the frontier score and the current score decreases by 2% or more, such a change is classified as a positive reform. On the contrary, minor fee updates or other smaller changes in the indicators that have an aggregate impact of less than 2% on the gap are not classified as a reform, even though their impact is still reflected in the updated indicator set.

The overall score on the quality of land administration index is another criterion. Any change of 1 point or more on the overall quality score is acknowledged as a reform. For instance, the completion of the geographic coverage of the land registry of the business city (2 points) is classified as a reform.

The data details on registering property can be found at http://www.doingbusiness.org.

ENFORCING CONTRACTS

Doing Business measures the time and cost for resolving a commercial dispute through a local first-instance court and also compiles the quality of judicial processes index, evaluating whether each economy or location has adopted a series of good practices that promote quality and efficiency in the court system. The data are collected through study of the codes of civil procedure and other court regulations as well as questionnaires completed by local litigation lawyers and judges. The ranking of locations on the ease of enforcing contracts is determined by sorting their distance to frontier scores for enforcing contracts. These scores are the simple average of the distance to frontier scores for each of the component indicators (figure 8.7).

EFFICIENCY OF RESOLVING A COMMERCIAL DISPUTE

The data on time and cost are built by following the step-by-step evolution of a commercial sale dispute (figure 8.8; table 8.6). The data are collected for a specific court for each location covered, under the assumptions about the case described below. The court is the one with jurisdiction over disputes worth 200% of income per capita or \$5,000, whichever is greater. Whenever more than one court has original jurisdiction over a case comparable to the standardized case study, the data are collected based

FIGURE 8.7 Enforcing contracts: efficiency and quality of commercial dispute resolution

Rankings are based on distance to frontier scores for three indicators



FIGURE 8.8 What are the time and cost to resolve a commercial dispute through a local first-instance court?

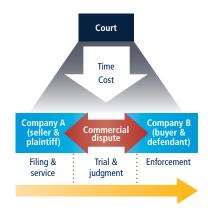


TABLE 8.6 What do the indicators on the efficiency of resolving a commercial dispute measure?

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)

Average attorney fees

Court costs

Enforcement costs

on the court that would be used by litigants in the majority of cases. The name of the relevant court in each economy is published on the *Doing Business* website at http://www.doingbusiness.org/data/exploretopics/enforcing-contracts.

Assumptions about the case

- The value of the claim is equal to 200% of the economy's income per capita or \$5,000, whichever is greater.
- The dispute concerns a lawful transaction between two businesses (Seller and Buyer), both located in the selected city. Pursuant to a contract between the businesses, Seller sells some custom-made furniture to Buyer worth 200% of the economy's income per capita or \$5,000, whichever is greater. After Seller delivers the goods to Buyer, Buyer refuses to pay the contract price, alleging that the goods are not of adequate quality. Because they were custom-made, Seller is unable to sell them to anyone else.
- Seller (the plaintiff) sues Buyer (the defendant) to recover the amount under the sales agreement. The dispute is brought before the court located in the selected location with jurisdiction over commercial cases worth 200% of income per capita or \$5,000, whichever is greater.
- At the outset of the dispute, Seller decides to attach Buyer's movable assets (for example, office equipment and vehicles) because Seller fears that Buyer may hide its assets or otherwise become insolvent.
- The claim is disputed on the merits because of Buyer's allegation that the quality of the goods was not adequate. Because the court cannot decide the case on the basis of documentary evidence or legal title alone, an expert opinion is given on the quality of the goods. If it is standard practice in the economy for each party to call its own expert witness, the parties each call one expert witness. If it is standard practice for the judge to appoint an independent expert, the judge does

- so. In this case the judge does not allow opposing expert testimony.
- Following the expert opinion, the judge decides that the goods delivered by Seller were of adequate quality and that Buyer must pay the contract price. The judge thus renders a final judgment that is 100% in favor of Seller.
- Buyer does not appeal the judgment. Seller decides to start enforcing the judgment as soon as the time allocated by law for appeal lapses. Seller takes all required steps for prompt enforcement of the judgment. The money is successfully collected through a public sale of Buyer's movable assets (for example, office equipment and vehicles). It is assumed that Buyer has no money in its bank account, making it impossible for the judgment to be enforced through a seizure of Buyer's account.

Time

Time is recorded in calendar days, counted from the moment Seller decides to file the lawsuit in court until payment. This includes both the days when actions take place and the waiting periods in between. The average duration of the following three stages of dispute resolution is recorded: (i) filing and service; (ii) trial and judgment; and (iii) enforcement. Time is recorded considering the case study assumptions detailed above and only as applicable to the competent court. Time is recorded in practice, regardless of time limits set by law if such time limits are not respected in the majority of cases.

The filing and service phase includes the following:

- The time for Seller to try to obtain payment out of court through a nonlitigious demand letter, including the time to prepare the letter and the deadline provided to Buyer to comply.
- The time necessary for a local lawyer to write the initial complaint and gather all supporting documents needed for filing, including authenticating or notarizing them if required.

- The time necessary to file the complaint at the court.
- The time necessary for Buyer (defendant) to be served, including the processing time at the court and the waiting periods between unsuccessful attempts to serve Buyer, if more than one attempt is usually required.

The trial and judgment phase includes the following:

- The time between the moment a notice of the case is served on Buyer and the moment a pretrial conference is held, if a pretrial conference is part of the case management techniques used by the competent court.
- The time between the pretrial conference and the first hearing, if a pretrial conference is part of the case management techniques used by the competent court. If not, the time between the moment a notice of the case is served on Buyer and the moment the first hearing is held.
- The time to conduct all trial activities, including exchanges of briefs and evidence, multiple hearings, waiting times in between hearings and the obtaining of an expert opinion.
- The time necessary for the judge to issue a written final judgment once the evidence period has closed.
- The time limit for appeal.

The enforcement phase includes the following:

- The time it takes to obtain an enforceable copy of the judgment and contact the relevant enforcement office.
- The time it takes to locate, identify, seize and transport Buyer's (losing party) movable assets (including the time necessary to obtain an order from the court to attach and seize the assets, if applicable).
- The time it takes to advertise, organize and hold the auction. If more than one auction is usually required to fully recover the value of the claim in a case comparable to the standardized case, the time between multiple auction attempts is recorded.

The time it takes for Seller (winning party) to fully recover the value of the claim once the auction is successfully completed.

Cost

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

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

QUALITY OF JUDICIAL PROCESSES

The quality of judicial processes index measures whether each location has adopted a series of good practices in its court system in four areas: court structure and proceedings, case management, court automation and alternative dispute resolution (table 8.7).

Court structure and proceedings index

The court structure and proceedings index has five components:

- Whether a specialized commercial court or a section dedicated solely to hearing commercial cases is in place.
 A score of 1.5 is assigned if yes; 0 if no.
- Whether a small claims court or a fast-track procedure for small claims is in place. A score of 1 is assigned if such a court or procedure is in place,

TABLE 8.7 What do the indicators on the quality of judicial processes measure?

Court structure and proceedings index (-1–5)

Availability of specialized commercial court, division or section (0-1.5)

Availability of small claims court or simplified procedure for small claims (0-1.5)

Availability of pretrial attachment (0–1)

Criteria used to assign cases to judges (0–1)

Evidentiary weight of a woman's testimony (-1-0)

Case management index (0-6)

Regulations setting time standards for key court events (0-1)

Regulations on adjournments or continuances (0–1)

Availability of performance measurement reports (0-1)

Availability of pretrial conference (0-1)

Availability of electronic case management system for judges (0–1)

Availability of electronic case management system for lawyers (0–1)

Court automation index (0-4)

Ability to file initial complaint electronically (0-1)

Ability to serve initial complaint electronically (0-1)

Ability to pay court fees electronically (0-1)

Publication of judgments (0-1)

Alternative dispute resolution index (0-3)

Arbitration (0-1.5)

Voluntary mediation or conciliation (0–1.5)

Quality of judicial processes index (0-18)

Sum of the court structure and proceedings, case management, court automation and alternative dispute resolution indices

it is applicable to all civil cases and the law sets a cap on the value of cases that can be handled through this court or procedure. If small claims are handled by a stand-alone court, the point is assigned only if this court applies a simplified procedure. An additional score of 0.5 is assigned if parties can represent themselves before this court or during this procedure. If no small claims court or simplified procedure is in place, a score of 0 is assigned.

 Whether plaintiffs can obtain pretrial attachment of the defendant's movable assets if they fear that the assets may be moved out of the jurisdiction or otherwise dissipated. A score of 1 is assigned if yes; 0 if no.

- Whether cases are assigned randomly and automatically to judges throughout the competent court. A score of 1 is assigned if the assignment of cases is random and automated; 0.5 if it is random but not automated; 0 if it is neither random nor automated.
- Whether a woman's testimony carries the same evidentiary weight in court as a man's. A score of −1 is assigned if the law differentiates between the evidentiary value of a woman's testimony and that of a man's testimony in any type of civil case, including family cases; 0 if it does not.

The index ranges from 0 to 5, with higher values indicating a more sophisticated and streamlined court structure. In Bosnia and Herzegovina, for example, a specialized commercial court is in place (a score of 1.5), and small claims can be resolved through a dedicated court in which selfrepresentation is allowed (a score of 1.5). Plaintiffs can obtain pretrial attachment of the defendant's movable assets if they fear dissipation during trial (a score of 1). Cases are assigned randomly through an electronic case management system (a score of 1). A woman's testimony carries the same evidentiary weight in court as a man's (a score of 0). Adding these numbers gives Bosnia and Herzegovina a score of 5 on the court structure and proceedings index.

Case management index

The case management index has six components:

Whether any of the applicable laws or regulations on civil procedure contain time standards for at least three of the following key court events: (i) service of process; (ii) first hearing; (iii) filing of the statement of defense; (iv) completion of the evidence period; (v) filing of testimony by expert; and (vi) submission of the final judgment. A score of 1 is assigned if such time standards are available and respected

- in more than 50% of cases; 0.5 if they are available but not respected in more than 50% of cases; 0 if there are time standards for less than three of these key court events.
- Whether there are any laws regulating the maximum number of adjournments or continuances that can be granted, whether adjournments are limited by law to unforeseen and exceptional circumstances and whether these rules are respected in more than 50% of cases. A score of 1 is assigned if all three conditions are met; 0.5 if only two of the three conditions are met; 0 if only one of the conditions is met or if none are.
- Whether there are any performance measurement reports that can be generated about the competent court to monitor the court's performance, to track the progress of cases through the court and to ensure compliance with established time standards. A score of 1 is assigned if at least two of the following four reports are made publicly available: (i) time to disposition report (measuring the time the court takes to dispose or adjudicate its cases); (ii) clearance rate report (measuring the number of cases resolved relative to the number of incoming cases); (iii) age of pending cases report (providing a snapshot of all pending cases according to case type, case age, last action held and next action scheduled); and (iv) single case progress report (providing a snapshot of the status of one case). A score of 0 is assigned if only one of these reports is available or if none are.
- Whether a pretrial conference is among the case management techniques used before the competent court and at least three of the following issues are discussed during the pretrial conference: (i) scheduling (including the time frame for filing motions and other documents with the court); (ii) case complexity and projected length of trial; (iii) possibility of settlement or alternative dispute resolution; (iv) exchange of witness

- lists; (v) evidence; (vi) jurisdiction and other procedural issues; and (vii) the narrowing down of contentious issues. A score of 1 is assigned if a pretrial conference in which at least three of these events are discussed is held within the competent court; 0 if not
- Whether judges within the competent court can use an electronic case management system for at least four of the following purposes: (i) to access laws, regulations and case law; (ii) to automatically generate a hearing schedule for all cases on their docket; (iii) to send notifications (for example, e-mails) to lawyers; (iv) to track the status of a case on their docket: (v) to view and manage case documents (briefs, motions); (vi) to assist in writing judgments; (vii) to semi-automatically generate court orders; and (viii) to view court orders and judgments in a particular case. A score of 1 is assigned if an electronic case management system is available that judges can use for at least four of these purposes; 0 if not.
- Whether lawyers can use an electronic case management system for at least four of the following purposes: (i) to access laws, regulations and case law; (ii) to access forms to be submitted to the court; (iii) to receive notifications (for example. e-mails): (iv) to track the status of a case; (v) to view and manage case documents (briefs, motions); (vi) to file briefs and documents with the court: and (vii) to view court orders and decisions in a particular case. A score of 1 is assigned if an electronic case management system is available that lawyers can use for at least four of these purposes; 0 if not.

The index ranges from 0 to 6, with higher values indicating a higher-quality and more efficient case management system. In Australia, for example, time standards for at least three key court events are established in applicable civil procedure instruments and are respected

in more than 50% of cases (a score of 1). The law stipulates that adjournments can be granted only for unforeseen and exceptional circumstances, and this rule is respected in more than 50% of cases (a score of 0.5). A time to disposition report, a clearance rate report and an age of pending cases report can be generated about the competent court (a score of 1). A pretrial conference is among the case management techniques used before the District Court of New South Wales (a score of 1). An electronic case management system satisfying the criteria outlined above is available to judges (a score of 1) and to lawyers (a score of 1). Adding these numbers gives Australia a score of 5.5 on the case management index, the highest score attained by any economy on this index.

Court automation index

The court automation index has four components:

- Whether the initial complaint can be filed electronically through a dedicated platform (not e-mail or fax) within the relevant court. A score of 1 is assigned if such a platform is available and litigants are not required to follow up with a hard copy of the complaint; 0 if not. Electronic filing is acknowledged regardless of the percentage of users, as long as no additional in-person interactions are required and local experts have used it enough to be able to confirm that it is fully functional.
- Whether the initial complaint can be served on the defendant electronically, through a dedicated system or by e-mail, fax or SMS (short message service) for cases filed before the competent court. A score of 1 is assigned if electronic service is available and no further service of process is required; 0 if not. Electronic service is acknowledged regardless of the percentage of users, as long as no additional in-person interactions are required and local experts have used it enough to be able to confirm that it is fully functional.

- Whether court fees can be paid electronically for cases filed before the competent court, either through a dedicated platform or through online banking. A score of 1 is assigned if fees can be paid electronically and litigants are not required to follow up with a hard copy of the receipt or produce a stamped copy of the receipt; 0 if not. Electronic payment is acknowledged regardless of the percentage of users, as long as no additional in-person interactions are required and local experts have used it enough to be able to confirm that it is fully functional.
- Whether judgments rendered by local courts are made available to the general public through publication in official gazettes, in newspapers or on the internet. A score of 1 is assigned if judgments rendered in commercial cases at all levels are made available to the general public; 0.5 if only judgments rendered at the appeal and supreme court level are made available to the general public; O in all other instances. No points are awarded if judgments need to be individually requested from the court or if the case number or parties' details are required in order to obtain a copy of a judgment.

The index ranges from 0 to 4, with higher values indicating a more automated, efficient and transparent court system. In Estonia, for example, the initial summons can be filed online (a score of 1), it can be served on the defendant electronically (a score of 1), and court fees can be paid electronically as well (a score of 1). In addition, judgments in commercial cases at all levels are made publicly available through the internet (a score of 1). Adding these numbers gives Estonia a score of 4 on the court automation index.

Alternative dispute resolution index

The alternative dispute resolution index has six components:

Whether domestic commercial arbitration is governed by a consolidated

- law or consolidated chapter or section of the applicable code of civil procedure encompassing substantially all its aspects. A score of 0.5 is assigned if yes; 0 if no.
- Whether commercial disputes of all kinds—aside from those dealing with public order, public policy, bankruptcy, consumer rights, employment issues or intellectual property—can be submitted to arbitration. A score of 0.5 is assigned if yes: 0 if no.
- Whether valid arbitration clauses or agreements are enforced by local courts in more than 50% of cases. A score of 0.5 is assigned if yes; 0 if no.
- Whether voluntary mediation, conciliation or both are a recognized way of resolving commercial disputes. A score of 0.5 is assigned if yes; 0 if no.
- Whether voluntary mediation, conciliation or both are governed by a consolidated law or consolidated chapter or section of the applicable code of civil procedure encompassing substantially all their aspects. A score of 0.5 is assigned if yes; 0 if no.
- Whether there are any financial incentives for parties to attempt mediation or conciliation (for example, if mediation or conciliation is successful, a refund of court filing fees, an income tax credit or the like). A score of 0.5 is assigned if yes; 0 if no.

The index ranges from 0 to 3, with higher values associated with greater availability of mechanisms of alternative dispute resolution. In Israel, for example, arbitration is regulated through a dedicated statute (a score of 0.5), all relevant commercial disputes can be submitted to arbitration (a score of 0.5), and valid arbitration clauses are usually enforced by the courts (a score of 0.5). Voluntary mediation is a recognized way of resolving commercial disputes (a score of 0.5), it is regulated through a dedicated statute (a score of 0.5), and part of the filing fees is reimbursed if the process is successful (a score of 0.5). Adding these numbers gives Israel a score of 3 on the alternative dispute resolution index.

Quality of judicial processes index

The quality of judicial processes index is the sum of the scores on the court structure and proceedings, case management, court automation and alternative dispute resolution indices. The index ranges from 0 to 18, with higher values indicating better and more efficient judicial processes.

REFORMS

The indicator set on enforcing contracts tracks changes related to the efficiency and quality of commercial dispute resolution systems since 2015. Depending on the impact on the data, certain changes are classified as reforms. Reforms are divided into two types: those that make it easier to enforce a contract and those changes that make it more difficult. The enforcing contracts indicator set uses three criteria to recognize a reform.

First, changes in laws and regulations that have any impact on the location's score on the quality of judicial processes index are classified as reforms. Examples of reforms that affect the quality of judicial processes index include measures to introduce electronic filing of the initial complaint, the creation of a commercial court or division, or the introduction of dedicated systems to resolve small claims. Changes affecting the quality of judicial processes index can be different in magnitude and scope and still be considered a reform. For example, implementing a new electronic case management system for the use of judges and lawyers represents a reform with a 2-point increase in the index, while introducing incentives for the parties to use mediation represents a reform with a 0.5-point increase in the index.

Second, changes that have an impact on the time and cost to resolve a dispute may also be classified as reforms depending on the magnitude of the changes. According to the enforcing contracts methodology, any updates in legislation leading to a change of 2% or more on the distance to frontier gap of the time

and cost indicators are classified as a reform (for more details, see the chapter on "About Doing Business and Doing Business in South Africa 2018"). Changes with lower impact are not classified as reforms but they are still reflected in the most updated indicators data.

The third types of reforms are legislative changes of exceptional magnitude, such as sizeable revisions of the applicable civil procedure, or enforcement laws, that are anticipated to have a significant impact on time and cost in the future.

The data details on enforcing contracts can be found for each economy at http://www.doingbusiness.org. This methodology was initially developed by Simeon Djankov, Rafael La Porta, Florencio López-de-Silanes and Andrei Shleifer ("Courts," Quarterly Journal of Economics 118, no. 2 [2003]: 453-517) and is adopted here with several changes. The quality of judicial processes index was introduced in Doing Business 2016. The good practices tested in this index were developed on the basis of internationally recognized good practices promoting judicial efficiency.

TRADING ACROSS BORDERS

Doing Business records the time and cost associated with the logistical process of exporting and importing goods. 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. Figure 8.9, using the example of Brazil (as exporter) and China (as importer), shows the process of exporting a shipment from a warehouse in the origin economy to a warehouse in an overseas trading partner through a port. Figure 8.10, using the example of Kenya (as exporter) and Uganda (as importer), shows the process of exporting a shipment from a warehouse in the origin economy to a warehouse in a regional trading partner through a land border. 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 (figure 8.11).

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. The main reason for this is that the time and cost for domestic transport are affected by many external factors such as the geography and topography of the transit territory, road capacity and general infrastructure, proximity to the nearest port or border, and the location of warehouses where the traded goods are stored—and so are not directly influenced by an economy's trade policies and reforms.

The data on trading across borders are gathered through a questionnaire administered to local freight forwarders, customs brokers, port authorities and traders.

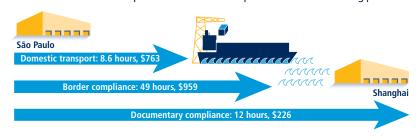
If an economy has no formal, large-scale, cross-border trade taking place in the private sector as a result of government restrictions, armed conflict or a natural disaster, it is considered a "no practice" economy. A "no practice" economy receives a distance to frontier score of 0 for all the trading across borders indicators.

Assumptions of the case study

To make the data comparable across locations, several assumptions are made about the traded goods and the transactions:

• For each of the locations covered by Doing Business in South Africa 2018, it

FIGURE 8.9 What makes up the time and cost to export to an overseas trading partner?



Source: Doing Business database.

FIGURE 8.10 What makes up the time and cost to export to a regional trading partner?



Source: Doing Business database.

is assumed that a shipment is located at a warehouse in the largest business city of the exporting economy (Johannesburg) and travels to a warehouse in the largest business city of the importing economy.

FIGURE 8.11 Trading across borders: time and cost to export and import

Rankings are based on distance to frontier scores for eight indicators



Note: The time and cost for domestic transport and the number of documents to export and import are measured but do not count for the rankings.

- The import and export case studies assume different traded products. It is assumed that each location 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 location 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. The export products and trading partner for Durban are those used for South Africa in the annual global Doing Business assessment. Precious metal and gems, mineral fuels, oil products, live animals, residues and waste of foods and products as well as pharmaceuticals are excluded from the list of possible export products, however, and in these cases the second largest product category is considered as needed.1
- 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.
- 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/importing firm hires and pays for a freight forwarder or customs broker (or both) and pays for all costs related to domestic transport, clearance and mandatory inspections by customs and other agencies, port or border handling, documentary compliance fees and the like.
- 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 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 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, central banks and any other government authorities.

Time

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

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. Contributors are private sector experts in international trade logistics and are informed about exchange rates and their movements.

Documentary compliance

Documentary compliance captures the time and cost associated with compliance with the documentary requirements of all government agencies of the origin economy, the destination economy and any transit economies (table 8.8). The aim is to measure the total burden of preparing the bundle of documents that will enable completion of the international trade for the product and partner pair assumed in the case study. As a shipment moves from Mumbai to New York City, for example, the freight forwarder must prepare and submit documents to the customs agency in India, to the port authorities in Mumbai and to the customs agency in New York City.

The time and cost for documentary compliance include the time and cost for

obtaining documents (such as time spent to get the document issued and stamped); preparing documents (such as time spent gathering information to complete the customs declaration or certificate of origin); processing documents (such as time spent waiting for the relevant authority to issue a phytosanitary certificate); presenting documents (such as time spent showing a port terminal receipt to port authorities); and submitting documents (such as time spent submitting a customs declaration to the customs agency in person or electronically).

All electronic or paper 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. All documents prepared by the freight forwarder or customs broker for the product and partner pair assumed in the case study are included regardless of whether they are required by law or in practice. Any documents prepared and submitted so as to get access to preferential treatment—for example, a certificate of origin—are included in the calculation of the time and cost for documentary compliance. Any documents prepared and submitted because of a perception that they ease the passage of the shipment are also included (for

example, freight forwarders may prepare a packing list because in their experience this reduces the probability of physical or other intrusive inspections).

In addition, any documents that are mandatory for exporting or importing are included in the calculation of time and cost. Documents that need to be obtained only once are not counted, however. And *Doing Business* does not include documents needed to produce and sell in the domestic market—such as certificates of third-party safety standards testing that may be required to sell toys domestically—unless a government agency needs to see these documents during the export process.

Border compliance

Border compliance captures the time and cost associated with compliance with the economy's customs regulations and with regulations relating to other inspections that are mandatory in order for the shipment to cross the economy's border, as well as the time and cost for handling that takes place at its port or border. The time and cost for this segment include time and cost for customs clearance and inspection procedures conducted by other agencies. For example, the time and cost for conducting a phytosanitary inspection would be included here.

The computation of border compliance time and cost depends on where the border compliance procedures take place, who requires and conducts the procedures and what the probability is that inspections will be conducted. If all customs clearance and other inspections take place at the port or border at the same time, the time estimate for border compliance takes this simultaneity into account. It is entirely possible that the border compliance time and cost could be negligible or zero, as in the case of trade between members of the European Union or other customs unions.

If some or all customs or other inspections take place at other locations, the

TABLE 8.8 What do the indicators on the time and cost to export and import cover?

Documentary compliance

Obtaining, preparing and submitting documents during transport, clearance, inspections and port or border handling in origin economy

Obtaining, preparing and submitting documents required by destination economy and any transit economies

Covers all documents required by law and in practice, including electronic submissions of information as well as non-shipment-specific documents necessary to complete the trade

Border compliance

Customs clearance and inspections by customs

Inspections by other agencies (if applied to more than 10% of shipments)

Port or border handling at most widely used port or border of economy

Domestic transport

Loading and unloading of shipment at warehouse, dry port or border

Transport by most widely used mode between warehouse and terminal or dry port

Transport by most widely used mode between terminal or dry port and most widely used border or port

Traffic delays and road police checks while shipment is en route

time and cost for these procedures are added to the time and cost for those that take place at the port or border. In Kazakhstan, for example, all customs clearance and inspections take place at a customs post in Almaty that is not at the land border between Kazakhstan and China. In this case border compliance time is the sum of the time spent at the terminal in Almaty and the handling time at the border.

Doing Business asks contributors to estimate the time and cost for clearance and inspections by customs agencies defined as documentary and physical inspections for the purpose of calculating duties by verifying product classification, confirming quantity, determining origin and checking the veracity of other information on the customs declaration. (This category includes all inspections aimed at preventing smuggling.) These are clearance and inspection procedures that take place in the majority of cases and thus are considered the "standard" case. The time and cost estimates capture the efficiency of the customs agency of the economy.

Doing Business also asks contributors to estimate the total time and cost for clearance and inspections by customs and all other agencies for the specified product. These estimates account for inspections related to health, safety, phytosanitary standards, conformity and the like, and thus capture the efficiency of agencies that require and conduct these additional inspections.

If inspections by agencies other than customs are conducted in 20% or fewer cases, the border compliance time and cost measures take into account only clearance and inspections by customs (the standard case). If inspections by other agencies take place in more than 20% of cases, the time and cost measures account for clearance and inspections by all agencies. Different types of inspections may take place with different probabilities—for example, scanning may

take place in 100% of cases while physical inspection occurs in 5% of cases. In situations like this, *Doing Business* would count the time only for scanning because it happens in more than 20% of cases while physical inspection does not. The border compliance time and cost for an economy do not include the time and cost for compliance with the regulations of any other economy.

Domestic transport

Domestic transport captures the time and cost associated with transporting the shipment from a warehouse in the location measured to the seaport or land border (if applicable). This set of procedures captures the time for (and cost of) the actual transport; any traffic delays and road police checks; as well as time spent loading or unloading at the warehouse or border. For a coastal economy with an overseas trading partner, domestic transport captures the time and cost from the loading of the shipment at the warehouse until the shipment reaches the economy's port (figure 8.9). For an economy trading through a land border, domestic transport captures the time and cost from the loading of the shipment at the warehouse until the shipment reaches the economy's land border (figure 8.10).

The time and cost estimates are based on the most widely used mode of transport (truck, train, riverboat) and the most widely used route (road, border posts) as reported by contributors. The time and cost estimates are based on the mode and route chosen by the majority of contributors.

In the export case study, as noted, *Doing Business* does not assume a containerized shipment, and time and cost estimates may be based on the transport of 15 tons of noncontainerized products. In the import case study, auto parts are assumed to be containerized. In the cases where cargo is containerized, the time and cost for transport and other procedures are based on a shipment consisting of homogeneous cargo belonging

to a single Harmonized System (HS) classification code. This assumption is particularly important for inspections, because shipments of homogeneous products are often subject to fewer and shorter inspections than shipments of products belonging to various HS codes.

In some cases the shipment travels from the warehouse to a customs post or terminal for clearance or inspections and then travels onward to the port or border. In these cases the domestic transport time is the sum of the time for both transport segments. The time and cost for clearance or inspections are included in the measures for border compliance, however, not in those for domestic transport.

The data details on trading across borders can be found for each economy at http://www.doingbusiness.org. This methodology was initially developed by Djankov and others (2008) and was revised in 2015.

NOTE

 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.

Location Profiles

BUFFALO CITY (East London)

		2015	2018
x	Dealing with construction permits (rank)	5	6
	Distance to frontier score (0–100)	71.80	71.66
	Procedures (number)	18	18
	Time (days)	104	104
	Cost (% of warehouse value)	2.3	2.4
	Building quality control index (0–15)	11	11
	Getting electricity (rank)	3	5
		_	_
	Distance to frontier score (0–100)	59.47	59.40
	Procedures (number)	5	5
	Time (days)	76	76
	Cost (% of income per capita)	287.9	313.0
	Reliability of supply and transparency of tariffs index (0–8)	0	0

	2015	2018
Registering property (rank)	4	6
Distance to frontier score (0–100)	59.22	57.81
Procedures (number)	8	8
Time (days)	24	21
Cost (% of property value)	6.3	7.6
Quality of land administration index (0–30)	14.5	15
Enforcing contracts (rank)	9	9
Distance to frontier score (0–100)	50.52	51.48
Time (days)	696	661
Cost (% of claim value)	35.8	35.8
Quality of judicial processes index (0–18)	7	7

✓ Reform making it easier to do business

★ Change making it more difficult to do business

DEALING WITH CONSTRUCTION PERMITS

LIST OF PROCEDURES

Warehouse value: ZAR 3,768,738 (\$274,000) Data as of: May 1, 2018

Procedure 1. Obtain geotechnical survey of the land plot

Agency: Private firm Time: 14 days Cost: ZAR 22,695

Procedure 2*. Obtain topographical survey of the land plot

Agency: Private firm Time: 14 days Cost: ZAR 15,000

Procedure 3. Conduct pre-application consultation

Agency: Town Planning Division of Buffalo City

Metropolitan Municipality

Time: 22 days Cost: No cost

Procedure 4. Obtain approval of the building plans from the municipal authority

Agency: Building Control of Buffalo City Metropolitan Municipality Time: 35 days

Cost: ZAR 41,496 (ZAR 6,381 per square meter

multiplied by 0.5%)

Procedure 5. Submit notification of commencement of building work to the provincial authority

Agency: Department of Labour

Time: 1 day Cost: No cost

Procedure 6*. Submit notification of commencement of building work to the municipal authority

Agency: Building Control of Buffalo City

Metropolitan Municipality

Time: 1 day Cost: No cost

Procedure 7*. Apply for water and sewage connection

Agency: Water and Sanitation Department of Buffalo City Metropolitan Municipality

Time: 1 day

Cost: ZAR 12,775 (ZAR 8,650 for water connection; ZAR 4,125 for sewerage connection)

Procedure 8. Receive inspection from the municipal water and sanitation authority

Agency: Water and Sanitation Department of Buffalo

City Metropolitan Municipality

Time: 1 day
Cost: No cost

Procedure 9. Receive final water connection from the municipal water and sanitation authority

Agency: Water and Sanitation Department of Buffalo

City Metropolitan Municipality

Time: 14 days Cost: No cost

Procedure 10*. Receive inspection of compliance with construction regulations

Agency: Department of Labour

Time: 1 day
Cost: No cost

Procedure 11. Receive inspection of all foundation trenches from the municipal authority

Agency: Building Inspectorate of Buffalo City

Metropolitan Municipality

Time: 1 day
Cost: No cost

Source: Doing Business database.

^{*}Simultaneous with previous procedure

Procedure 12. Receive open drainage inspection from the municipal authority

Agency: Building Inspectorate of Buffalo City Metropolitan Municipality

Time: 1 day Cost: No cost

Procedure 13. Receive inspection of dampproof course from the municipal authority

Agency: Building Inspectorate of Buffalo City Metropolitan Municipality

Time: 1 day
Cost: No cost

Procedure 14. Receive final drainage inspection from the municipal authority

Agency: Building Inspectorate of Buffalo City

Metropolitan Municipality

Time: 1 day Cost: No cost

Procedure 15. Submit notification of completion of building work to the municipal authority

Agency: Building Control of Buffalo City Metropolitan Municipality

Time: 1 day Cost: No cost

Procedure 16. Receive final inspection from the municipal authority

Agency: Building Control of Buffalo City

Metropolitan Municipality

Time: 1 day Cost: No cost

Procedure 17*. Receive inspection from the municipal fire authority

Agency: Fire and Rescue Services of Buffalo City

Metropolitan Municipality

Time: 1 day
Cost: No cost

Procedure 18. Obtain Occupancy Certificate from the municipal authority

Agency: Building Control of Buffalo City

Metropolitan Municipality

Time: 7 days Cost: No cost

Note: For more details on each procedure, refer to http://doingbusiness.org/southafrica.

*Simultaneous with previous procedure

BUILDING QUALITY CONTROL INDEX	
	Score
Building quality control index (0–15)	11
Quality of building regulations index (0–2)	2
Quality control before construction index (0–1)	1
Quality control during construction index (0–3)	1
Quality control after construction index (0–3)	3
Liability and insurance regimes index (0–2)	0
Professional certifications index (0–4)	4

Note: For a list of all component questions and results on this index, refer to the "Details on quality indices" section.

	Relevant departments, agencies and other stakeholders		
Regulatory area	National level	Local level	
 Consider differentiating projects by risk and introducing risk-based inspections Increase efficiency by improving coordination, consolidating procedures and implementing electronic platforms Introduce stringent liability and insurance regimes for latent defects Involve private-sector professionals in the construction permitting process 	 Department of Labour Department of Rural Development and Land Reform South African Bureau of Standards (SABS) National Regulator for Compulsory Specifications (NRCS) 	Land use management/town planning department Building control department Building inspections department Roads and stormwater department Utility providers Fire department Health department Solid waste department	

Note: All recommendations are detailed in the "What can be improved?" section of the corresponding indicator chapter.

GETTING ELECTRICITY

LIST OF PROCEDURES

Name of Utility: Electricity Department of Buffalo City Metropolitan Municipality Data as of: May 1, 2018

Procedure 1. Submit an application for electricity connection to distribution utility and obtain connection fee estimate

Agency: Electricity Department of Buffalo City

Metropolitan Municipality

Time: 30 days

Cost: ZAR 229,268 (ZAR 207,008 for the connection fee, including material and labor cost + ZAR 22,260 for the network upgrade charge of ZAR 159 per kVA)

Procedure 2*. Await external site inspection by distribution utility

Agency: Electricity Department of Buffalo City

Metropolitan Municipality

Time: 1 day Cost: No cost

Procedure 3. Await completion of external connection works by distribution utility

Agency: Electricity Department of Buffalo City

Metropolitan Municipality

Time: 45 days

Cost: No cost (Included in procedure 1)

Procedure 4*. Sign supply contract and submit proof of payment of security deposit to distribution utility

Agency: Electricity Department of Buffalo City

Metropolitan Municipality

Time: 1 day

Cost: ZAR 6,416 (ZAR 6,416 for the present value of lost interest earnings on the security deposit of ZAR 84,980, considering that a bank guarantee is accepted + ZAR 252 for the energizing fee)

Procedure 5. Obtain certificate of compliance (COC) for the internal wiring and submit to distribution utility to obtain final connection

Agency: Private electrical engineer / consultant / contractor

Time: 1 day
Cost: No cost

Note: For more details on each procedure, refer to http://doingbusiness.org/southafrica.

*Simultaneous with previous procedure

RELIABILITY OF SUPPLY AND TRANSPARENCY OF TARIFFS INDEX

	Score
Reliability of supply and transparency of tariffs index (0-8)	0
Total duration and frequency of outages per customer a year (0–3)	_
Mechanisms for monitoring outages (0–1)	1
Mechanisms for restoring service (0–1)	1
Regulatory monitoring (0–1)	1
Financial deterrents aimed at limiting outages (0–1)	0
Communication of tariffs and tariff changes (0–1)	1

Note: Locations that do not use the SAIDI and SAIFI benchmarks to calculate outages are ineligible to score on the reliability of supply and transparency of tariffs index and thus receive 0 points on this indicator component. For more information please refer to the data notes. For a list of all component questions and results on this index, refer to the "Details on quality indices" section.

POLICY RECOMMENDATIONS TO IMPROVE THE EASE OF GETTING ELECTRICITY

	Relevant departments, agencies and other stakeholders		
Regulatory area	National level	Local level	
Start monitoring the reliability of supply using the SAIDI and SAIFI methodology	National Energy Regulator of South Africa (NERSA)	Municipal distribution utilities	
Streamline the wayleave and excavation permit systems	• Eskom		
 Identify bottlenecks in the internal process to reduce time 	Department of Energy		
Make the cost and process of getting electricity more transparent to the customer	Department of Energy		
 Upgrade geographic information system to eliminate external site inspection 			
Reduce the burden of the security deposit			

Note: All recommendations are detailed in the "What can be improved?" section of the corresponding indicator chapter.

Source: Doing Business database.

REGISTERING PROPERTY

LIST OF PROCEDURES

Property value: ZAR 3,768,738 (\$274,000) Data as of: May 1, 2018

Procedure 1. Obtain a rates clearance certificate

Agency: Buffalo City Municipality's Directorate of Financial Services

Time: 10 days Cost: ZAR 191

Procedure 2*. The conveyancer prepares and collects all the required documentation

Agency: Conveyancer Time: 10 days

Cost: No cost (Included in procedure 7)

Procedure 3*. Obtain an electrical compliance

certificate

Agency: Certified electrician

Time: 7 days Cost: ZAR 1,250

Procedure 4*. Obtain an entomologist's certificate

Agency: Certified entomologist

Time: 7 days Cost: ZAR 600

Procedure 5*. Obtain a transfer duty receipt

Agency: South African Revenue Service

Time: 2 days

Cost: ZAR 247,561 (ZAR 80,500 plus 11% on value above ZAR 2,250,000 for a property valued between ZAR 2,250,001 and ZAR 10,000,000)

Procedure 6*. The conveyancer conducts a title search and checks encumbrances on the property

Agency: Deeds Registry of King William's Town **Time:** Less than one day (online procedure) **Cost:** No cost (Included in procedure 7)

Procedure 7. Parties sign all the documentation at the conveyancer's office

Agency: Conveyancer's Office

Time: 1 day

Cost: ZAR 36,581 (For properties valued above ZAR 1,000,000 and up to and including ZAR 5,000,000: ZAR 17,200 for the first ZAR 1,000,000 plus ZAR 700 per ZAR 100,000 or

part thereof above that)

Procedure 8. The conveyancer lodges the deed

Agency: Deeds Registry of King William's Town

Time: 9 days

Cost: ZAR 1,275 (For properties valued above ZAR 2,000,000 and up to ZAR 4,000,000: ZAR 1,275)

Note: For more details on each procedure, refer to http://doingbusiness.org/southafrica.

*Simultaneous with previous procedure

QUALITY OF LAND ADMINISTRATION INDEX	
	Score
Quality of land administration index (0–30)	15
Reliability of infrastructure index (0–8)	5
Transparency of information index (0–6)	3.5
Geographic coverage index (0–8)	2
Land dispute resolution index (0–8)	4.5
Equal access to property rights index (-2–0)	0

Note: For a list of all component questions and results on this index, refer to the "Details on quality indices" section.

POLICY RECOMMENDATIONS TO IMPROVE THE EASE OF REGISTERING PROPERTY

	Relevant departments, agencies and other stakeholders		
Regulatory area	National level	Local level	
Streamline issuance of rates clearance certificates	Office of the Chief Registrar of Deeds	Municipalities	
 Improve coordination among stakeholders and consider implementing a one-stop shop for property registration 	Office of the Chief Surveyor-General	Local deeds offices Local surveyor-general's offices	
Reinforce transparency in the land administration system	Department of Rural Development and Land Reform	Local surveyor general 5 offices	
Strengthen protections and resolution mechanisms for land- related issues and disputes	Department of Justice*		
Expand geographic coverage			

^{*} For the purpose of this study, the Department of Justice and Correctional Services is referred to as the Department of Justice. Note: All recommendations are detailed in the "What can be improved?" section of the corresponding indicator chapter.

ENFORCING CONTRACTS

INDICATOR DETAILS							
Time (days)			Cost (% of claim value)				
Filing and service	Trial and judgment	Enforcement of judgement	Total time	Attorney fees	Court fees	Enforcement fees	Total cost
40	557	64	661	25.2%	7.6%	3.0%	35.8%

QUALITY OF JUDICIAL PROCESSES INDEX	
	Score
Quality of judicial processes index (0–18)	7
Court structure and proceedings (-1–5)	2
Case management (0–6)	2
Court automation (0–4)	0.5
Alternative dispute resolution (0–3)	2.5

Note: For a list of all component questions and results on this index, refer to the "Details on quality indices" section.

POLICY RECOMMENDATIONS TO IMPROVE THE EASE OF ENFORCING CONTRACTS				
	Relevant departments, agencies and other stakeholders			
Regulatory area	National level	Local level		
Study magistrates' court caseloads to identify and eliminate causes of trial delay and consider limiting the frequency and causes of adjournments	Office of the Chief Justice Department of Justice*	Magistrates' courts		
 Assess judicial capacity and resources needed to enhance case management and make it effective, especially in lower courts 				
Consider introducing specialized commercial courts or commercial sections in locations where needed				

^{*} For the purpose of this study, the Department of Justice and Correctional Services is referred to as the Department of Justice. Note: All recommendations are detailed in the "What can be improved?" section of the corresponding indicator chapter.

CAPE TOWN (Cape Town)

		2015	2018
c	Dealing with construction permits (rank)	1	1
	Distance to frontier score (0–100)	76.19	75.48
	Procedures (number)	16	17
	Time (days)	95	88
	Cost (% of warehouse value)	2.3	2.4
	Building quality control index (0–15)	12	12
,	Catting all attitudes (made)	2	4
	Getting electricity (rank)	2	1
	Distance to frontier score (0–100)	60.27	79.81
	Procedures (number)	4	4
	Time (days)	97	91
	Cost (% of income per capita)	640.0	597.2
	Reliability of supply and transparency of tariffs index (0–8)	0	6

	2015	2018
Registering property (rank)	8	7
Distance to frontier score (0-100)	56.45	54.69
Procedures (number)	9	9
Time (days)	29.5	29.5
Cost (% of property value)	6.3	7.6
Quality of land administration index (0-30)	14.5	15
Enforcing contracts (rank)	7	7
Distance to frontier score (0–100)	54.71	54.71
Time (days)	545	545
Cost (% of claim value)	35.6	35.6
Quality of judicial processes index (0–18)	7	7

✓ Reform making it easier to do business

★ Change making it more difficult to do business

DEALING WITH CONSTRUCTION PERMITS

LIST OF PROCEDURES

Warehouse value: ZAR 3,768,738 (\$274,000) Data as of: May 1, 2018

Procedure 1. Obtain geotechnical survey of the land plot

Agency: Private firm Time: 14 days Cost: ZAR 22,695

Procedure 2*. Obtain topographical survey of the land plot

Agency: Private firm Time: 14 days Cost: ZAR 15,000

Procedure 3. Conduct pre-application consultation

Agency: Building Development Management Department of City of Cape Town Metropolitan Municipality

Time: 7 days Cost: No cost

Procedure 4. Obtain approval of the building plans from the municipal authority

Agency: Building Development Management Department of City of Cape Town Metropolitan Municipality

Time: 37 days

Cost: ZAR 44,444 (ZAR 693 as fixed cost for the first 25 square meters + ZAR 34.3 for each additional square meter)

square meter)

Procedure 5. Submit Integrated Waste Management Plan for approval

Agency: Solid Waste Department of City of Cape Town Metropolitan Municipality

Time: 1 day
Cost: No cost

Procedure 6. Submit notification of commencement of building work to the provincial authority

Agency: Department of Labour

Time: 1 day Cost: No cost

Procedure 7*. Submit notification of commencement of building work to the municipal authority

Agency: Building Development Management Department of City of Cape Town Metropolitan Municipality

Time: 1 day Cost: No cost

Procedure 8*. Apply for water and sewage connection

Agency: Water and Sanitation Department of City of Cape Town Metropolitan Municipality

Time: 1 day

Cost: ZAR 10,050 (ZAR 8,190 for water connection; ZAR 1,860 for sewerage connection)

Procedure 9. Receive inspection from the municipal water and sanitation authority

Agency: Water and Sanitation Department of City of Cape Town Metropolitan Municipality

Time: 1 day
Cost: No cost

Procedure 10. Receive final water connection from the municipal water and sanitation authority

Agency: Water and Sanitation Department of City of

Cape Town Metropolitan Municipality

Time: 14 days Cost: No cost

Procedure 11*. Receive inspection of compliance with construction regulations

Agency: Department of Labour

Time: 1 day Cost: No cost

Procedure 12. Receive inspection of all foundation trenches from the municipal authority

Agency: Building Inspectorate of City of Cape Town Metropolitan Municipality

Time: 1 day

Cost: No cost

Procedure 13. Receive inspection of wastewater drainage systems

Agency: Building Inspectorate of City of Cape Town Metropolitan Municipality

Time: 1 day Cost: No cost

^{*}Simultaneous with previous procedure

Procedure 14. Submit notification of completion of building work to the municipal authority

Agency: Building Development Management Department of City of Cape Town Metropolitan Municipality

Time: 1 day Cost: No cost

Procedure 15. Receive final inspection from the municipal authority

Agency: Building Development Management Department of City of Cape Town Metropolitan

Municipality **Time:** 1 day **Cost:** No cost

Procedure 16*. Receive inspection from the municipal fire authority

Agency: Fire and Rescue Services of City of Cape Town Metropolitan Municipality

Time: 1 day
Cost: No cost

Procedure 17. Obtain Occupancy Certificate from the municipal authority

Agency: Building Development Management Department of City of Cape Town Metropolitan

Municipality **Time:** 5 days **Cost:** No cost

Note: For more details on each procedure, refer to http://doingbusiness.org/southafrica.

*Simultaneous with previous procedure

BUILDING QUALITY CONTROL INDEX	
	Score
Building quality control index (0–15)	12
Quality of building regulations index (0–2)	2
Quality control before construction index (0–1)	1
Quality control during construction index (0–3)	2
Quality control after construction index (0–3)	3
Liability and insurance regimes index (0–2)	0
Professional certifications index (0–4)	4

Note: For a list of all component questions and results on this index, refer to the "Details on quality indices" section.

Regulatory area	Relevant departments, ager National level	ncies and other stakeholders Local level
Consider differentiating projects by risk and introducing risk-based inspections Increase efficiency by consolidating procedures and expanding the scope of online services in construction permitting Introduce stringent liability and insurance regimes for latent defects Involve private-sector professionals in the construction permitting process	 Department of Labour Department of Rural Development and Land Reform South African Bureau of Standards (SABS) National Regulator for Compulsory Specifications (NRCS) 	Land use management/town planning department Building control department Building inspections department Roads and stormwater department Utility providers Fire department Health department Solid waste department

Note: All recommendations are detailed in the "What can be improved?" section of the corresponding indicator chapter.

GETTING ELECTRICITY

LIST OF PROCEDURES

Name of Utility: Electricity Generation and Distribution Department of City of Cape Town Metropolitan Municipality Data as of: May 1, 2018

Procedure 1. Submit an application for electricity connection to distribution utility and obtain connection fee estimate

Agency: Electricity Generation and Distribution Department of City of Cape Town Metropolitan Municipality

Time: 25 days

Cost: ZAR 450,125 (ZAR 350,625 for the shared-network charge at MV/LV + ZAR 94,484 for the quotation fee, including material and labor cost + ZAR 5,016 for the present value of lost interest earnings on the security deposit of ZAR 12,800)

Procedure 2*. Await external site inspection by distribution utility

Agency: Electricity Generation and Distribution Department of City of Cape Town Metropolitan Municipality

Time: 12 days Cost: No cost

Procedure 3. Await completion of external connection works by distribution utility

Agency: Electricity Generation and Distribution Department of City of Cape Town Metropolitan Municipality

Time: 60 days

Cost: No cost (Included in procedure 1)

Procedure 4. Obtain certificate of compliance (COC) for the internal wiring and submit to distribution utility to obtain final connection

Agency: Private electrical engineer / consultant / contractor

Time: 6 days Cost: No cost

Note: For more details on each procedure, refer to http://doingbusiness.org/southafrica.

*Simultaneous with previous procedure

RELIABILITY OF SUPPLY AND TRANSPARENCY OF TARIFFS INDEX	
	Score
Reliability of supply and transparency of tariffs index (0-8)	6
Total duration and frequency of outages per customer a year (0-3)	2
Mechanisms for monitoring outages (0–1)	1
Mechanisms for restoring service (0–1)	1
Regulatory monitoring (0–1)	1
Financial deterrents aimed at limiting outages (0–1)	0
Communication of tariffs and tariff changes (0–1)	1

Note: For a list of all component questions and results on this index, refer to the "Details on quality indices" section.

	Relevant departments, agencies and other stakeholders		
Regulatory area	National level	Local level	
 Continue the installation of an outage management system Streamline the wayleave and excavation permit systems Identify bottlenecks in the internal process to reduce time Make the cost and process of getting electricity more transparent to 	National Energy Regulator of South Africa (NERSA) Eskom	Municipal distribution utilities	
Upgrade geographic information system to eliminate external site inspection	Department of Energy		
Reduce the burden of the security deposit			

Note: All recommendations are detailed in the "What can be improved?" section of the corresponding indicator chapter.

REGISTERING PROPERTY

LIST OF PROCEDURES

Property value: ZAR 3,768,738 (\$274,000) Data as of: May 1, 2018

Procedure 1. The conveyancer conducts a title search and checks encumbrances on the property

Agency: Deeds Registry of Cape Town Time: Less than one day (online procedure) Cost: No cost (Included in procedure 8)

Procedure 2. Obtain a rates clearance certificate

Agency: City of Cape Town's Revenue Department

Time: 14 days Cost: ZAR 75

Procedure 3*. The conveyancer prepares and collects all the required documentation

Agency: Companies and Intellectual Property

Commission Time: 10 days

Cost: No cost (Included in procedure 8)

Procedure 4*. Obtain an electrical compliance certificate

Agency: Certified electrician

Time: 7 days Cost: ZAR 1,250

Procedure 5*. Obtain a plumbing certificate

Agency: Certified plumber

Time: 7 days Cost: ZAR 600

Procedure 6*. Obtain an entomologist's

certificate

Agency: Certified entomologist

Time: 7 days Cost: ZAR 600

Procedure 7*. Obtain a transfer duty receipt

Agency: South African Revenue Service

Time: 2 days

Cost: ZAR 247,561 (ZAR 80,500 plus 11% on value above ZAR 2,250,000 for a property valued between

ZAR 2,250,001 and ZAR 10,000,000)

Procedure 8. Parties sign all the documentation at the conveyancer's office

Agency: Conveyancer's Office

Time: 1 day

Cost: ZAR 36,581 (For properties valued above ZAR 1,000,000 and up to and including ZAR 5,000,000: ZAR 17,200 for the first ZAR 1,000,000 plus ZAR 700 per ZAR 100,000 or

part thereof above that)

Procedure 9. The conveyancer lodges the deed

Agency: Deeds Registry of Cape Town

Time: 14 days

Cost: ZAR 1,275 (For properties valued above ZAR 2,000,000 and up to ZAR 4,000,000:

ZAR 1,275)

Note: For more details on each procedure, refer to http://doingbusiness.org/southafrica.
*Simultaneous with previous procedure

QUALITY OF LAND ADMINISTRATION INDEX Score Quality of land administration index (0–30) Reliability of infrastructure index (0–8) Transparency of information index (0–6) 3.5 Geographic coverage index (0–8) 2 Land dispute resolution index (0–8) 4.5 Equal access to property rights index (-2–0) Note: For a list of all component questions and results on this index, refer to the "Details on quality indices" section.

POLICY RECOMMENDATIONS TO IMPROVE THE EASE OF REGISTERING PROPERTY Relevant departments, agencies and other stakeholders Regulatory area **National level** Local level • Further streamline issuance of rates clearance certificates Municipalities • Office of the Chief Registrar of Deeds Improve coordination among stakeholders and consider Local deeds offices • Office of the Chief Surveyor-General implementing a one-stop shop for property registration · Local surveyor-general's offices · Department of Rural Development and · Reinforce transparency in the land administration system Land Reform Strengthen protections and resolution mechanisms for landrelated issues and disputes · Department of Justice*

· Expand geographic coverage

^{*} For the purpose of this study, the Department of Justice and Correctional Services is referred to as the Department of Justice. Note: All recommendations are detailed in the "What can be improved?" section of the corresponding indicator chapter.

ENFORCING CONTRACTS

INDICATOR DETA	ILS						
	Time	e (days)			Cost (% o	f claim value)	
Filing and service	Trial and judgment	Enforcement of judgement	Total time	Attorney fees	Court fees	Enforcement fees	Total cost
31	438	76	545	25.0%	7.6%	3.0%	35.6%

QUALITY OF JUDICIAL PROCESSES INDEX	
	Score
Quality of judicial processes index (0–18)	7
Court structure and proceedings (-1–5)	2
Case management (0–6)	2
Court automation (0–4)	0.5
Alternative dispute resolution (0–3)	2.5

Note: For a list of all component questions and results on this index, refer to the "Details on quality indices" section.

POLICY RECOMMENDATIONS TO IMPROVE THE EASE OF ENFORCING CONTRACTS				
	Relevant departments, agencies and other stakeholders			
Regulatory area	National level Local level			
 Study magistrates' court caseloads to identify and eliminate causes of trial delay and consider limiting the frequency and causes of adjournments 	Office of the Chief Justice Department of Justice*	Magistrates' courts		
 Assess judicial capacity and resources needed to enhance case management and make it effective, especially in lower courts 				
 Consider introducing specialized commercial courts or commercial sections in locations where needed 				

^{*} For the purpose of this study, the Department of Justice and Correctional Services is referred to as the Department of Justice. Note: All recommendations are detailed in the "What can be improved?" section of the corresponding indicator chapter.

EKURHULENI (Germiston)

	2015	2018
Dealing with construction permits (rank)	4	4
Distance to frontier score (0–100)	71.82	71.81
Procedures (number)	17	17
Time (days)	144	144
Cost (% of warehouse value)	2.1	2.2
Building quality control index (0–15)	12	12
Getting electricity (rank)	5	6
Distance to frontier score (0–100)	52.35	52.09
Procedures (number)	6	6
Time (days)	104	104
Cost (% of income per capita)	258.5	343.4
Reliability of supply and transparency of tariffs index (0-8)	0	0

		2015	2018	
×	Registering property (rank)	3	4	
	Distance to frontier score (0–100)	60.25	58.48	
	Procedures (number)	7	7	
	Time (days)	33	33	
	Cost (% of property value)	6.3	7.6	
	Quality of land administration index (0–30)	14.5	15	
	Enforcing contracts (rank)	5	5	
	Distance to frontier score (0–100)	55.58	55.58	
	Time (days)	513	513	
	Cost (% of claim value)	35.6	35.6	
	Quality of judicial processes index (0–18)	7	7	

[✓] Reform making it easier to do business

★ Change making it more difficult to do business

DEALING WITH CONSTRUCTION PERMITS

LIST OF PROCEDURES

Warehouse value: ZAR 3,768,738 (\$274,000) Data as of: May 1, 2018

Procedure 1. Obtain geotechnical survey of the land plot

Agency: Private firm Time: 14 days Cost: ZAR 22,695

Procedure 2*. Obtain topographical survey of the land plot

Agency: Private firm Time: 14 days Cost: ZAR 15,000

Procedure 3. Obtain Site Development Plan (SDP) approval

Agency: Town Planning of City of Ekurhuleni

Metropolitan Municipality

Time: 60 days Cost: ZAR 400

Procedure 4. Obtain approval of the building plans from the municipal authority

Agency: Building Control of City of Ekurhuleni

Metropolitan Municipality

Time: 30 days

Cost: ZAR 27,267 (ZAR 15.5 per square meter: submission fee + ZAR 6,100: application for permission to occupy a building before issuing the Certificate of Occupancy + 5%: application for Certificate of Occupancy)

Procedure 5. Submit notification of commencement of building work to the provincial authority

Agency: Department of Labour

Time: 1 day
Cost: No cost

Procedure 6*. Submit notification of commencement of building work to the municipal authority

Agency: Building Control of City of Ekurhuleni

Metropolitan Municipality

Time: 1 day Cost: No cost

Procedure 7*. Apply for water and sewage connection

Agency: Water and Sanitation Department of City of Ekurhuleni Metropolitan Municipality

Time: 1 day

Cost: ZAR 15,755 (ZAR 6,290 for water connection;

ZAR 9,465 for sewerage connection)

Procedure 8. Receive inspection from the municipal water and sanitation authority

Agency: Water and Sanitation Department of City of

Ekurhuleni Metropolitan Municipality

Time: 1 day Cost: No cost Procedure 9. Receive final water connection from the municipal water and sanitation authority

Agency: Water and Sanitation Department of City of Ekurhuleni Metropolitan Municipality

Time: 21 days Cost: No cost

Procedure 10*. Receive inspection of compliance with construction regulations

Agency: Department of Labour

Time: 1 day Cost: No cost

Procedure 11. Receive inspection of all foundation trenches from the municipal authority

Agency: Building Inspectorate of City of Ekurhuleni

Metropolitan Municipality **Time:** 1 day

Cost: No cost

Procedure 12. Receive inspection of first-floor slab from the municipal Building Inspectorate authority

Agency: Building Inspectorate of City of Ekurhuleni Metropolitan Municipality

Time: 1 day Cost: No cost

Source: Doing Business database.

Procedure 13. Receive inspection of wastewater drainage systems

Agency: Building Inspectorate of City of Ekurhuleni

Metropolitan Municipality

Time: 1 day Cost: No cost

Procedure 14. Submit notification of completion of building work to the municipal authority

authority

Agency: Building Control of City of Ekurhuleni Metropolitan Municipality

Time: 1 day

Cost: No cost

Procedure 15. Receive final inspection from the municipal authority

Agency: Building Control of City of Ekurhuleni

Metropolitan Municipality

Time: 1 day Cost: No cost

Procedure 16*. Receive inspection from the municipal fire authority

Agency: Fire Station Department of City of Ekurhuleni Metropolitan Municipality

Time: 1 day
Cost: No cost

Procedure 17. Obtain Occupancy Certificate from the municipal authority

Agency: Building Control of City of Ekurhuleni

Metropolitan Municipality

Time: 8 days Cost: No cost

Note: For more details on each procedure, refer to http://doingbusiness.org/southafrica.

*Simultaneous with previous procedure

BUILDING QUALITY CONTROL INDEX	
	Score
Building quality control index (0–15)	12
Quality of building regulations index (0–2)	2
Quality control before construction index (0–1)	1
Quality control during construction index (0-3)	2
Quality control after construction index (0–3)	3
Liability and insurance regimes index (0–2)	0
Professional certifications index (0–4)	4

Note: For a list of all component questions and results on this index, refer to the "Details on quality indices" section.

Regulatory area	Relevant departments, agencies and other stakeholders National level Local level		
Consider differentiating projects by risk and introducing risk-based inspections Increase efficiency by improving coordination, consolidating procedures and implementing electronic platforms Introduce stringent liability and insurance regimes for latent defects Involve private-sector professionals in the construction permitting process	Department of Labour Department of Rural Development and Land Reform South African Bureau of Standards (SABS) National Regulator for Compulsory Specifications (NRCS)	Land use management/town planning department Building control department Building inspections department Roads and stormwater department Utility providers Fire department Health department Solid waste department	

Note: All recommendations are detailed in the "What can be improved?" section of the corresponding indicator chapter.

GETTING ELECTRICITY

LIST OF PROCEDURES

Name of Utility: Energy Department of City of Ekurhuleni Metropolitan Municipality Data as of: May 1, 2018

Procedure 1. Submit an application for electricity connection to distribution utility and obtain connection fee estimate

Agency: Energy Department of City of Ekurhuleni

Metropolitan Municipality

Time: 25 days

Cost: ZAR 218,629 (ZAR 120,629 for the connection fee, including material and labor cost + ZAR 98,000 for the transformer capacity)

Procedure 2*. Await external site inspection by distribution utility

Agency: Energy Department of City of Ekurhuleni

Metropolitan Municipality

Time: 1 day Cost: No cost

Procedure 3. Sign supply contract and submit proof of payment of security deposit

Agency: Energy Department of City of Ekurhuleni Metropolitan Municipality

Time: 2 days

Cost: ZAR 40,216 (Equal to the present value of lost interest earnings on the security deposit of

ZAR 102,620)

Procedure 4. Await utility's inspection of meter

Agency: Energy Department of City of Ekurhuleni

Metropolitan Municipality

Time: 14 days Cost: No cost

Procedure 5. Await completion of external connection works by distribution utility

Agency: Energy Department of City of Ekurhuleni

Metropolitan Municipality

Time: 60 days

Cost: No cost (Included in procedure 1)

Procedure 6. Await final inspection and submit certificate of compliance (COC) for the internal wiring to distribution utility to obtain final connection

Agency: Private electrical engineer / consultant / contractor

Time: 3 days Cost: No cost

Note: For more details on each procedure, refer to http://doingbusiness.org/southafrica.

*Simultaneous with previous procedure

RELIABILITY OF SUPPLY AND TRANSPARENCY OF TARIFFS INDEX

	Score
Reliability of supply and transparency of tariffs index (0-8)	0
Total duration and frequency of outages per customer a year (0–3)	-
Mechanisms for monitoring outages (0–1)	1
Mechanisms for restoring service (0–1)	1
Regulatory monitoring (0–1)	1
Financial deterrents aimed at limiting outages (0–1)	0
Communication of tariffs and tariff changes (0–1)	1

Note: Locations that do not use the SAIDI and SAIFI benchmarks to calculate outages are ineligible to score on the reliability of supply and transparency of tariffs index and thus receive 0 points on this indicator component. For more information please refer to the data notes. For a list of all component questions and results on this index, refer to the "Details on quality indices" section.

POLICY RECOMMENDATIONS TO IMPROVE THE EASE OF GETTING ELECTRICITY

	Relevant departments, agencies and other stakeholders		
Regulatory area	National level	Local level	
Start monitoring the reliability of supply using the SAIDI and SAIFI methodology Streamline the wayleave and excavation permit systems Identify bottlenecks in the internal process to reduce time Make the cost and process of getting electricity more transparent to the customer	National Energy Regulator of South Africa (NERSA) Eskom Department of Energy	Municipal distribution utilities	
 Upgrade geographic information system to eliminate external site inspection 			
Reduce the burden of the security deposit			

Note: All recommendations are detailed in the "What can be improved?" section of the corresponding indicator chapter.

Source: Doing Business database.

REGISTERING PROPERTY

LIST OF PROCEDURES

Property value: ZAR 3,768,738 (\$274,000) Data as of: May 1, 2018

Procedure 1. Obtain a rates clearance certificate

Agency: Ekurhuleni Municipality's Finance Department

Time: 21 days Cost: ZAR 237

Procedure 2*. The conveyancer prepares and collects all the required documentation

Agency: Companies and Intellectual Property

Commission Time: 10 days

Cost: No cost (Included in procedure 6)

Procedure 3*. Obtain an electrical compliance certificate

Agency: Certified electrician

Time: 7 days Cost: ZAR 1,250

Procedure 4*. Obtain a transfer duty receipt

Agency: South African Revenue Service

Time: 2 days

Cost: ZAR 247,561 (ZAR 80,500 plus 11% on value above ZAR 2,250,000 for a property valued between ZAR 2,250,001 and ZAR 10,000,000)

Procedure 5*. The conveyancer conducts a title search and checks encumbrances on the property

Agency: Deeds Registry of Johannesburg **Time:** Less than one day (online procedure) Cost: No cost (Included in procedure 6)

Procedure 6. Parties sign all the documentation at the conveyancer's office

Agency: Conveyancer's Office

Cost: ZAR 36,581 (For properties valued above ZAR 1,000,000 and up to and including ZAR 5,000,000: ZAR 17,200 for the first ZAR 1,000,000 plus ZAR 700 per ZAR 100,000 or

part thereof above that)

Procedure 7. The conveyancer lodges the deed

Agency: Deeds Registry of Johannesburg

Time: 11 days

Cost: ZAR 1,275 (For properties valued above ZAR 2,000,000 and up to ZAR 4,000,000:

ZAR 1,275)

Note: For more details on each procedure, refer to http://doingbusiness.org/southafrica.

*Simultaneous with previous procedure

QUALITY OF LAND ADMINISTRATION INDEX	
	Score
Quality of land administration index (0-30)	15
Reliability of infrastructure index (0–8)	5
Transparency of information index (0–6)	3.5
Geographic coverage index (0–8)	2
Land dispute resolution index (0–8)	4.5
Equal access to property rights index (-2–0)	0

Note: For a list of all component questions and results on this index, refer to the "Details on quality indices" section.

POLICY RECOMMENDATIONS TO IMPROVE THE EASE OF REGISTERING PROPERTY Relevant departments, agencies and other stakeholders Regulatory area **National level** Local level • Streamline issuance of rates clearance certificates · Office of the Chief Registrar of Deeds Municipalities Improve coordination among stakeholders and consider Local deeds offices • Office of the Chief Surveyor-General implementing a one-stop shop for property registration · Local surveyor-general's offices · Department of Rural Development and • Reinforce transparency in the land administration system Land Reform • Strengthen protections and resolution mechanisms for landrelated issues and disputes Department of Justice* Expand geographic coverage

^{*} For the purpose of this study, the Department of Justice and Correctional Services is referred to as the Department of Justice. Note: All recommendations are detailed in the "What can be improved?" section of the corresponding indicator chapter.

ENFORCING CONTRACTS

INDICATOR DETAILS							
	Time	e (days)			Cost (% o	of claim value)	
Filing and service	Trial and judgment	Enforcement of judgement	Total time	Attorney fees	Court fees	Enforcement fees	Total cost
30	400	83	513	25.0%	7.6%	3.0%	35.6%

QUALITY OF JUDICIAL PROCESSES INDEX	
	Score
Quality of judicial processes index (0–18)	7
Court structure and proceedings (-1–5)	2
Case management (0–6)	2
Court automation (0–4)	0.5
Alternative dispute resolution (0–3)	2.5

Note: For a list of all component questions and results on this index, refer to the "Details on quality indices" section.

POLICY RECOMMENDATIONS TO IMPROVE THE EASE OF ENFORCING CONTRACTS			
	Relevant departments, agencies and other stakeholders		
Regulatory area	National level	Local level	
 Study magistrates' court caseloads to identify and eliminate causes of trial delay and consider limiting the frequency and causes of adjournments 	Office of the Chief Justice Department of Justice*	Magistrates' courts	
 Assess judicial capacity and resources needed to enhance case management and make it effective, especially in lower courts 			
 Consider introducing specialized commercial courts or commercial sections in locations where needed 			

^{*} For the purpose of this study, the Department of Justice and Correctional Services is referred to as the Department of Justice. Note: All recommendations are detailed in the "What can be improved?" section of the corresponding indicator chapter.

eTHEKWINI (Durban)

		2015	2018
×	Dealing with construction permits (rank)	2	2
	Distance to frontier score (0–100)	73.67	73.65
	Procedures (number)	17	17
	Time (days)	117	117
	Cost (% of warehouse value)	2.2	2.2
	Building quality control index (0–15)	12	12
/	Getting electricity (rank)	4	2
	Distance to frontier score (0–100)	57.52	69.40
	Procedures (number)	5	5
	Time (days)	93	100
	Cost (% of income per capita)	323.6	277.2
	Reliability of supply and transparency of tariffs index (0–8)	0	4

		2015	2018
c	Registering property (rank)	6	8
	Distance to frontier score (0-100)	58.62	54.58
	Procedures (number)	8	8
	Time (days)	29	48
	Cost (% of property value)	6.3	7.6
	Quality of land administration index (0–30)	14.5	15
	- ()		
	Enforcing contracts (rank)	4	4
	Distance to frontier score (0–100)	55.74	55.74
	Time (days)	521	521
	Cost (% of claim value)	34.6	34.6
	Quality of judicial processes index (0–18)	7	7

✓ Reform making it easier to do business

★ Change making it more difficult to do business

DEALING WITH CONSTRUCTION PERMITS

LIST OF PROCEDURES

Warehouse value: ZAR 3,768,738 (\$274,000) Data as of: May 1, 2018

Procedure 1. Obtain geotechnical survey of the land plot

Agency: Private firm Time: 14 days Cost: ZAR 22,695

Procedure 2*. Obtain topographical survey of the land plot

Agency: Private firm Time: 14 days Cost: ZAR 15,000

Procedure 3. Submits Pre-Assessment Plan (PA Plan) to the municipal Land Use Management authority

Agency: Land Use Management Branch of eThekwini

Metropolitan Municipality

Time: 30 days Cost: No cost

Procedure 4. Obtain approval of the building plans from the municipal authority

Agency: Development Applications and Approvals Branch of eThekwini Metropolitan Municipality

Time: 36 days

Cost: ZAR 25,606 (Calculated based on a three-tier system. 0-100 square meters: ZAR 10 per square meter; 101-1,000: ZAR 22.5 per square meter; 1,000 or more square meters: ZAR 10.5 per square meter)

Procedure 5. Submit notification of commencement of building work to the provincial authority

Agency: Department of Labour

Time: 1 day
Cost: No cost

Procedure 6*. Submit notification of commencement of building work to the municipal authority

Agency: Building Inspectorate Branch of eThekwini

Metropolitan Municipality

Time: 1 day Cost: No cost

Procedure 7*. Apply for water and sewage connection

Agency: Water and Sanitation Department of eThekwini Metropolitan Municipality

Time: 1 day

Cost: ZAR 21,040 (ZAR 11,565 for water connection

+ ZAR 9,475 for sewerage connection)

Procedure 8. Receive inspection from the municipal water and sanitation authority

Agency: Water and Sanitation Department of eThekwini Metropolitan Municipality

Time: 1 day
Cost: No cost

Procedure 9. Receive final water connection from the municipal water and sanitation authority

Agency: Water and Sanitation Department of eThekwini Metropolitan Municipality

Time: 14 days Cost: No cost

Procedure 10*. Receive inspection of compliance with construction regulations

Agency: Department of Labour

Time: 1 day Cost: No cost

Procedure 11. Receive inspection of all foundation trenches from the municipal authority

Agency: Building Inspectorate Branch of eThekwini

Metropolitan Municipality

Time: 1 day Cost: No cost

Procedure 12. Receive inspection of wastewater drainage systems

Agency: Building Inspectorate Branch of eThekwini

Metropolitan Municipality

Time: 1 day
Cost: No cost

Source: Doing Business database

Procedure 13. Receive inspection of roof trusses from the municipal Building Inspectorate authority

Agency: Building Inspectorate Branch of eThekwini Metropolitan Municipality

Time: 1 day Cost: No cost

Procedure 14. Submit notification of completion of building work to the municipal authority

Agency: Building Inspectorate Branch of eThekwini

Metropolitan Municipality

Time: 1 day Cost: No cost

Procedure 15. Receive final inspection from the municipal authority

Agency: Building Inspectorate Branch of eThekwini Metropolitan Municipality

Time: 1 day Cost: No cost

Procedure 16*. Receive inspection from the municipal fire authority

Agency: Fire Department of eThekwini Metropolitan

Municipality **Time:** 1 day **Cost:** No cost

Procedure 17. Obtain Occupancy Certificate from the municipal authority

Agency: Building Inspectorate Branch of eThekwini Metropolitan Municipality

Time: 12 days Cost: No cost

Note: For more details on each procedure, refer to http://doingbusiness.org/southafrica.

*Simultaneous with previous procedure

BUILDING QUALITY CONTROL INDEX	
	Score
Building quality control index (0–15)	12
Quality of building regulations index (0–2)	2
Quality control before construction index (0–1)	1
Quality control during construction index (0–3)	2
Quality control after construction index (0–3)	3
Liability and insurance regimes index (0–2)	0
Professional certifications index (0–4)	4

Note: For a list of all component questions and results on this index, refer to the "Details on quality indices" section.

	Relevant departments, agencies and other stakeholders		
Regulatory area	National level	Local level	
 Consider differentiating projects by risk and introducing risk-based inspections Increase efficiency by improving coordination, consolidating procedures and implementing electronic platforms Introduce stringent liability and insurance regimes for latent defects Involve private-sector professionals in the construction permitting process 	 Department of Labour Department of Rural Development and Land Reform South African Bureau of Standards (SABS) National Regulator for Compulsory Specifications (NRCS) 	Land use management/town planning department Building control department Building inspections department Roads and stormwater department Utility providers Fire department Health department Solid waste department	

Note: All recommendations are detailed in the "What can be improved?" section of the corresponding indicator chapter.

GETTING ELECTRICITY

LIST OF PROCEDURES

Name of Utility: eThekwini Electricity Data as of: May 1, 2018

Procedure 1. Submit an application for electricity connection to distribution utility and obtain connection fee estimate

Agency: eThekwini Electricity

Time: 29 days

Cost: ZAR 164,275 (ZAR 123,982 for the basic component, including recovery of proportional costs of transformer + ZAR 4,807 for metering + ZAR 1,237 for sundry + ZAR 34,249 for the service mains component, including cable installation)

Procedure 2. Await utility's inspection of meter

box

Agency: eThekwini Electricity

Time: 7 days Cost: No cost Procedure 3*. Open customer account, sign supply contract and submit proof of payment of security deposit to distribution utility

Agency: eThekwini Electricity

Time: 1 day

Cost: ZAR 44,677 (Equal to the present value of lost interest earnings on the security deposit of

ZAR 114,000)

Procedure 4. Await completion of external connection works by distribution utility

Agency: eThekwini Electricity

Time: 60 days

Cost: No cost (Included in procedure 1)

Procedure 5. Obtain certificate of compliance (COC) for the internal wiring and submit to distribution utility to obtain final connection

Agency: Private electrical engineer / consultant / contractor

Time: 4 days Cost: No cost

Score

*Note: For more details on each procedure, refer to http://doingbusiness.org/southafrica.

RELIABILITY OF SUPPLY AND TRANSPARENCY OF TARIFFS INDEX Reliability of supply and transparency of tariffs index (0–8)

Reliability of supply and transparency of tariffs index (0-8)	4
Total duration and frequency of outages per customer a year (0–3)	0
Mechanisms for monitoring outages (0–1)	1
Mechanisms for restoring service (0–1)	1
Regulatory monitoring (0–1)	1
Financial deterrents aimed at limiting outages (0–1)	0
Communication of tariffs and tariff changes (0–1)	1

Note: For a list of all component questions and results on this index, refer to the "Details on quality indices" section.

POLICY RECOMMENDATIONS TO IMPROVE THE EASE OF GETTING ELECTRICITY

	Relevant departments, agencies and other stakeholders		
Regulatory area	National level	Local level	
Continue the installation of an advanced distribution management system Streamline the wayleave and excavation permit systems Identify bottlenecks in the internal process to reduce time Make the cost and process of getting electricity more transparent to the customer	National Energy Regulator of South Africa (NERSA) Eskom Department of Energy	Municipal distribution utilities	
 Upgrade geographic information system to eliminate external site inspection 			
Reduce the burden of the security deposit			

Note: All recommendations are detailed in the "What can be improved?" section of the corresponding indicator chapter.

Source: Doing Business database.

^{*}Simultaneous with previous procedure

REGISTERING PROPERTY

LIST OF PROCEDURES

Property value: ZAR 3,768,738 (\$274,000) Data as of: May 1, 2018

Procedure 1. Obtain a rates clearance certificate

Agency: eThekwini Municipality's Revenue Department

Time: 33 days Cost: ZAR 189

Procedure 2*. The conveyancer prepares and collects all the required documentation

Agency: Companies and Intellectual Property

Commission Time: 10 days

Cost: No cost (Included in procedure 7)

Procedure 3*. Obtain an electrical compliance certificate

Agency: Certified electrician

Time: 7 days Cost: ZAR 1,250

Procedure 4*. Obtain an entomologist's certificate

Agency: Certified entomologist

Time: 7 days Cost: ZAR 600

Procedure 5*. Obtain a transfer duty receipt

Agency: South African Revenue Service

Time: 2 days

Cost: ZAR 247,561 (ZAR 80,500 plus 11% on value above ZAR 2,250,000 for a property valued between

ZAR 2,250,001 and ZAR 10,000,000)

Procedure 6*. The conveyancer conducts a title search and checks encumbrances on the property

Agency: Deeds Registry of Pietermaritzburg Time: Less than one day (online procedure) Cost: No cost (Included in procedure 7)

Procedure 7. Parties sign all the documentation at the conveyancer's office

Agency: Conveyancer's Office

Time: 1 day

Cost: ZAR 36,581 (For properties valued above ZAR 1,000,000 and up to and including ZAR 5,000,000: ZAR 17,200 for the first ZAR 1,000,000 plus ZAR 700 per ZAR 100,000 or

part thereof above that)

Procedure 8. The conveyancer lodges the deed

Agency: Deeds Registry of Pietermaritzburg

Time: 14 days

Cost: ZAR 1,275 (For properties valued above ZAR 2,000,000 and up to ZAR 4,000,000:

ZAR 1,275)

Note: For more details on each procedure, refer to http://doingbusiness.org/southafrica.

*Simultaneous with previous procedure

QUALITY OF LAND ADMINISTRATION INDEX	
	Score
Quality of land administration index (0-30)	15
Reliability of infrastructure index (0–8)	5
Transparency of information index (0–6)	3.5
Geographic coverage index (0–8)	2
Land dispute resolution index (0–8)	4.5
Equal access to property rights index (-2–0)	0

Note: For a list of all component questions and results on this index, refer to the "Details on quality indices" section.

POLICY RECOMMENDATIONS TO IMPROVE THE EASE		ncies and other stakeholders
Regulatory area	National level	Local level
 Streamline issuance of rates clearance certificates Improve coordination among stakeholders and consider implementing a one-stop shop for property registration Reinforce transparency in the land administration system Strengthen protections and resolution mechanisms for land-related issues and disputes Expand geographic coverage 	Office of the Chief Registrar of Deeds Office of the Chief Surveyor-General Department of Rural Development and Land Reform Department of Justice*	Municipalities Local deeds offices Local surveyor-general's offices

^{*} For the purpose of this study, the Department of Justice and Correctional Services is referred to as the Department of Justice. Note: All recommendations are detailed in the "What can be improved?" section of the corresponding indicator chapter.

ENFORCING CONTRACTS

INDICATOR DETA	ILS						
Time (days)		Cost (% of claim value)					
Filing and service	Trial and judgment	Enforcement of judgement	Total time	Attorney fees	Court fees	Enforcement fees	Total cost
33	408	80	521	24.0%	7.6%	3.0%	34.6%

QUALITY OF JUDICIAL PROCESSES INDEX	
	Score
Quality of judicial processes index (0–18)	7
Court structure and proceedings (-1–5)	2
Case management (0–6)	2
Court automation (0–4)	0.5
Alternative dispute resolution (0–3)	2.5

Note: For a list of all component questions and results on this index, refer to the "Details on quality indices" section.

POLICY RECOMMENDATIONS TO IMPROVE THE EASE OF ENFORCING CONTRACTS

	Relevant departments, agencies and other stakeholders		
Regulatory area	National level	Local level	
 Study magistrates' court caseloads to identify and eliminate causes of trial delay and consider limiting the frequency and causes of adjournments 	Office of the Chief Justice Department of Justice*	Magistrates' courts	
 Assess judicial capacity and resources needed to enhance case management and make it effective, especially in lower courts 			
 Consider introducing specialized commercial courts or commercial sections in locations where needed 			

^{*} For the purpose of this study, the Department of Justice and Correctional Services is referred to as the Department of Justice. *Note:* All recommendations are detailed in the "What can be improved?" section of the corresponding indicator chapter.

JOHANNESBURG (Johannesburg)

	2015	2018
Dealing with construction permits (rank)	8	8
Distance to frontier score (0–100)	67.98	68.16
Procedures (number)	20	20
Time (days)	155	155
Cost (% of warehouse value)	2.2	2.0
Building quality control index (0–15)	12	12
Getting electricity (rank)	8	3
Distance to frontier score (0–100)	41.81	68.77
Procedures (number)	5	5
Time (days)	226	109
Cost (% of income per capita)	729.5	165.4
Reliability of supply and transparency of tariffs index (0–8)	0	4

2015	2018
1	2
61.45	59.68
7	7
23	23
6.3	7.6
14.5	15
8	8
54.10	54.10
600	600
33.2	33.2
7	7
	1 61.45 7 23 6.3 14.5 8 54.10 600 33.2

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Change making it more difficult to do business.

DEALING WITH CONSTRUCTION PERMITS

LIST OF PROCEDURES

Warehouse value: ZAR 3,768,738 (\$274,000) Data as of: May 1, 2018

Procedure 1. Obtain geotechnical survey of the land plot

Agency: Private firm Time: 14 days Cost: ZAR 22,695

Procedure 2*. Obtain topographical survey of the land plot

Agency: Private firm Time: 14 days Cost: ZAR 15,000

Procedure 3*. Obtain stamp on the plans from the Roads and Stormwater Department

Agency: Johannesburg Roads Agency

Time: 7 days Cost: No cost

Procedure 4*. Obtain stamp on the plans from the Energy Department

Agency: City Power Time: 7 days Cost: No cost

Procedure 5*. Obtain stamp on the plans from the Fire Department

Agency: Fire Department of City of Johannesburg

Time: 4 days Cost: No cost

Procedure 6*. Obtain stamp on the plans from the Water and Sanitation Department

Agency: Johannesburg Water

Time: 4 days Cost: No cost

Procedure 7. Obtain Site Development Plan (SDP) approval

Agency: Land Use Development Management of City of Johannesburg Metropolitan Municipality

Time: 53 days Cost: ZAR 840

Procedure 8. Obtain approval of the building plans from the municipal authority

Agency: Building Development Management of City of Johannesburg Metropolitan Municipality

Time: 60 days

Cost: ZAR 23,110 (For the first 1,000 m^2 = ZAR 18/ m^2 and for the second 1,000 m^2 = ZAR 17/ m^2)

Procedure 9. Submit notification of commencement of building work to the provincial authority

Agency: Department of Labour

Time: 1 day
Cost: No cost

Procedure 10*. Submit notification of commencement of building work to the municipal authority

Agency: Building Development Management of City of Johannesburg Metropolitan Municipality

Time: 1 day Cost: No cost

Procedure 11*. Apply for water and sewage connection

Agency: Johannesburg Water

Time: 1 day Cost: ZAR 15,019

Procedure 12. Receive inspection from the municipal water and sanitation authority

Agency: Johannesburg Water

Time: 1 day Cost: No cost

Procedure 13. Receive final water connection from the municipal water and sanitation authority

Agency: Johannesburg Water

Time: 10 days Cost: No cost

Procedure 14. Receive inspection of compliance with construction regulations

Agency: Department of Labour

Time: 1 day
Cost: No cost

Procedure 15. Receive inspection of all foundation trenches from the municipal authority

Agency: Building Development Management of City of Johannesburg Metropolitan Municipality

Time: 1 day Cost: No cost

Source: Doing Business database.

^{*}Simultaneous with previous procedure

Procedure 16. Receive inspection of wastewater drainage systems

Agency: Building Development Management of City of Johannesburg Metropolitan Municipality

Time: 1 day
Cost: No cost

Procedure 17. Submit notification of completion of building work to the municipal authority

Agency: Building Development Management of City of Johannesburg Metropolitan Municipality

Time: 1 day Cost: No cost

Procedure 18. Receive final inspection from the municipal authority

Agency: Building Development Management of City of Johannesburg Metropolitan Municipality

Time: 1 day Cost: No cost

Procedure 19*. Receive inspection from the municipal fire authority

Agency: Fire Department of City of Johannesburg

Time: 1 day
Cost: No cost

Procedure 20. Obtain occupancy certificate from the municipal authority

Agency: Building Development Management of City of Johannesburg Metropolitan Municipality

Time: 7 days Cost: No cost

Note: For more details on each procedure, refer to http://doingbusiness.org/southafrica.

*Simultaneous with previous procedure

BUILDING QUALITY CONTROL INDEX	
	Score
Building quality control index (0–15)	12
Quality of building regulations index (0-2)	2
Quality control before construction index (0-1)	1
Quality control during construction index (0–3)	2
Quality control after construction index (0–3)	3
Liability and insurance regimes index (0–2)	0
Professional certifications index (0–4)	4

Note: For a list of all component questions and results on this index, refer to the "Details on quality indices" section.

	Relevant departments, agencies and other stakeholders		
Regulatory area	National level	Local level	
 Consider differentiating projects by risk and introducing risk-based inspections Increase efficiency by improving coordination, consolidating procedures and implementing electronic platforms Introduce stringent liability and insurance regimes for latent defects Involve private-sector professionals in the construction permitting process 	Department of Labour Department of Rural Development and Land Reform South African Bureau of Standards (SABS) National Regulator for Compulsory Specifications (NRCS)	Land use management/town planning department Building control department Building inspections department Roads and stormwater department Utility providers Fire department Health department Solid waste department	

Note: All recommendations are detailed in the "What can be improved?" section of the corresponding indicator chapter.

GETTING ELECTRICITY

LIST OF PROCEDURES

Name of Utility: City Power Data as of: May 1, 2018

Procedure 1. Submit an application for electricity connection to distribution utility and obtain budget quotation and service connection fee

Agency: City Power **Time:** 60 days

Cost: ZAR 124,635 (ZAR 118,600 for the standard service connection fee - ZAR 30,000 for the design fee + ZAR 6,035 for the present value of lost interest earnings on the security deposit of ZAR 15,400)

Procedure 2. Await and attend on-site kick off meeting with all stakeholders

Agency: City Power **Time:** 7 days **Cost:** No cost

Procedure 3*. Await utility's inspection of circuit breaker

Agency: City Power Time: 3 days Cost: No cost

Procedure 4*. Obtain certificate of compliance (COC) for the internal wiring and submit to distribution utility

Agency: Private electrical engineer / consultant /

contractor **Time:** 1 day **Cost:** No cost

Procedure 5. Await completion of external connection works by distribution utility and obtain final connection

Agency: City Power **Time:** 42 days

Cost: No cost (Included in procedure 1)

Note: For more details on each procedure, refer to http://doingbusiness.org/southafrica.

*Simultaneous with previous procedure

RELIABILITY OF SUPPLY AND TRANSPARENCY OF TARIFFS INDEX	
	Score
Reliability of supply and transparency of tariffs index (0-8)	4
Total duration and frequency of outages per customer a year (0–3)	0
Mechanisms for monitoring outages (0–1)	1
Mechanisms for restoring service (0–1)	1
Regulatory monitoring (0–1)	1
Financial deterrents aimed at limiting outages (0–1)	0
Communication of tariffs and tariff changes (0–1)	1

Note: For a list of all component questions and results on this index, refer to the "Details on quality indices" section.

	Relevant departments, agencies and other stakeholders		
Regulatory area	National level	Local level	
 Consider implementing an automated outage monitoring and restoration system Streamline the wayleave and excavation permit systems Identify bottlenecks in the internal process to reduce time Upgrade geographic information system to eliminate external site inspection Reduce the burden of the security deposit 	 National Energy Regulator of South Africa (NERSA) Eskom Department of Energy 	Municipal distribution utilities	

REGISTERING PROPERTY

LIST OF PROCEDURES

Property value: ZAR 3,768,738 (\$274,000) Data as of: May 1, 2018

Procedure 1. Obtain a rates clearance certificate

Agency: City of Johannesburg's Revenue Department

Time: 11 days Cost: ZAR 248

Procedure 2*. The conveyancer prepares and collects all the required documentation

Agency: Companies and Intellectual Property

Commission **Time:** 10 days

Cost: No cost (Included in procedure 6)

Procedure 3*. Obtain an electrical compliance certificate

Agency: Certified electrician

Time: 7 days Cost: ZAR 1,250

Procedure 4*. Obtain a transfer duty receipt

Agency: South African Revenue Service

Time: 2 days

Cost: ZAR 247,561 (ZAR 80,500 plus 11% on value above ZAR 2,250,000 for a property valued between ZAR 2,250,001 and ZAR 10,000,000)

Procedure 5*. The conveyancer conducts a title search and checks encumbrances on the property

Agency: Deeds Registry of Johannesburg **Time:** Less than one day (online procedure) **Cost:** No cost (Included in procedure 6)

Procedure 6. Parties sign all the documentation at the conveyancer's office

Agency: Conveyancer's Office

Time: 1 day

Cost: ZAR 36,581 (For properties valued above ZAR 1,000,000 and up to and including ZAR 5,000,000: ZAR 17,200 for the first ZAR 1,000,000 plus ZAR 700 per ZAR 100,000 or

part thereof above that)

Procedure 7. The conveyancer lodges the deed

Agency: Deeds Registry of Johannesburg

Time: 11 days

Cost: ZAR 1,275 (For properties valued above ZAR 2,000,000 and up to ZAR 4,000,000:

ZAR 1,275)

Note: For more details on each procedure, refer to http://doingbusiness.org/southafrica.

*Simultaneous with previous procedure

QUALITY OF LAND ADMINISTRATION INDEX	
	Score
Quality of land administration index (0–30)	15
Reliability of infrastructure index (0–8)	5
Transparency of information index (0–6)	3.5
Geographic coverage index (0–8)	2
Land dispute resolution index (0–8)	4.5
Equal access to property rights index (-2–0)	0

Note: For a list of all component questions and results on this index, refer to the "Details on quality indices" section.

POLICY RECOMMENDATIONS TO IMPROVE THE EASE OF REGISTERING PROPERTY

	Relevant departments, agencies and other stakeholders	
Regulatory area	National level	Local level
Further streamline issuance of rates clearance certificates	Office of the Chief Registrar of Deeds	Municipalities
 Improve coordination among stakeholders and consider implementing a one-stop shop for property registration 	Office of the Chief Surveyor-General	Local deeds offices Local surveyor-general's offices
Reinforce transparency in the land administration system	Department of Rural Development and Land Reform Department of Justice*	Local surveyor general 3 offices
Strengthen protections and resolution mechanisms for land- related issues and disputes		
Expand geographic coverage		

^{*} For the purpose of this study, the Department of Justice and Correctional Services is referred to as the Department of Justice. Note: All recommendations are detailed in the "What can be improved?" section of the corresponding indicator chapter.

ENFORCING CONTRACTS

INDICATOR DETA	ILS						
	Time	e (days)			Cost (% c	of claim value)	
Filing and service	Trial and judgment	Enforcement of judgement	Total time	Attorney fees	Court fees	Enforcement fees	Total cost
30	490	80	600	22.6%	7.6%	3.0%	33.2%

QUALITY OF JUDICIAL PROCESSES INDEX	
	Score
Quality of judicial processes index (0–18)	7
Court structure and proceedings (-1–5)	2
Case management (0–6)	2
Court automation (0–4)	0.5
Alternative dispute resolution (0–3)	2.5

Note: For a list of all component questions and results on this index, refer to the "Details on quality indices" section.

POLICY RECOMMENDATIONS TO IMPROVE THE EASE OF ENFORCING CONTRACTS

	Relevant departments, agencies and other stakeholders		
Regulatory area	National level	Local level	
Study magistrates' court caseloads to identify and eliminate causes of trial delay and consider limiting the frequency and causes of adjournments	Office of the Chief Justice Department of Justice*	Magistrates' courts	
 Assess judicial capacity and resources needed to enhance case management and make it effective, especially in lower courts 			
 Consider introducing specialized commercial courts or commercial sections in locations where needed 			

^{*} For the purpose of this study, the Department of Justice and Correctional Services is referred to as the Department of Justice. Note: All recommendations are detailed in the "What can be improved?" section of the corresponding indicator chapter.

MANGAUNG (Bloemfontein)

	2015	2018
Dealing with construction permits (rank)	7	7
Distance to frontier score (0–100)	71.06	71.25
Procedures (number)	20	20
Time (days)	114	110
Cost (% of warehouse value)	2.1	2.2
Building quality control index (0–15)	12	12
Getting electricity (rank)	1	4
Distance to frontier score (0–100)	62.59	59.82
Procedures (number)	4	4
Time (days)	80	106
Cost (% of income per capita)	485.9	468.2
Reliability of supply and transparency of tariffs index (0–8) $$	0	0

2015	2018
9	1
55.89	59.73
8	7
52	22.5
6.3	7.6
14.5	15
1	1
59.01	59.01
473	473
29.4	29.4
7	7
	9 55.89 8 52 6.3 14.5 1 59.01 473 29.4

✓ Reform making it easier to do business

★ Change making it more difficult to do business

DEALING WITH CONSTRUCTION PERMITS

LIST OF PROCEDURES

Warehouse value: ZAR 3,768,738 (\$274,000) Data as of: May 1, 2018

Procedure 1. Obtain geotechnical survey of the land plot

Agency: Private firm Time: 14 days Cost: ZAR 22,695

Procedure 2*. Obtain topographical survey of the land plot

Agency: Private firm Time: 14 days Cost: ZAR 15,000

Procedure 3*. Obtain stamp on the plans from the Fire Department

Agency: Fire Department of Mangaung Metropolitan Municipality

Time: 5 days Cost: No cost

Procedure 4*. Obtain stamp on the plans from the Solid Waste Department

Agency: Solid Waste Management of Mangaung Metropolitan Municipality

Time: 2 days Cost: No cost

Procedure 5*. Obtain stamp on the plans from the Health Department

Agency: Health Department of Mangaung

Metropolitan Municipality

Time: 2 days Cost: No cost

Procedure 6*. Obtain stamp on the plans from the Energy Department

Agency: Centlec Time: 2 days Cost: No cost

Procedure 7. Obtain approval of the building plans from the municipal authority

Agency: Building and Zoning Control of Mangaung Metropolitan Municipality

Time: 60 days

Cost: ZAR 16,908 (ZAR 13 per square meter)

Procedure 8. Submit notification of commencement of building work to the provincial authority

Agency: Department of Labour

Time: 1 day Cost: No cost

Procedure 9*. Submit notification of commencement of building work to the municipal authority

Agency: Building and Zoning Control of Mangaung

Metropolitan Municipality

Time: 1 day Cost: No cost

Procedure 10*. Apply for water and sewage connection

Agency: Water and Sanitation Office Mangaung Metropolitan Municipality

ivietropolitari iviuriicipa

Time: 1 day

Cost: ZAR 21,235 (ZAR 11,035 for water connection + ZAR 10,200 for sewerage connection)

Procedure 11. Receive inspection from the municipal water and sanitation authority

Agency: Water and Sanitation Office Mangaung Metropolitan Municipality

Time: 1 day
Cost: No cost

Procedure 12. Receive final water connection from the municipal water and sanitation authority

Agency: Water and Sanitation Office Mangaung

Metropolitan Municipality

Time: 5 days Cost: No cost

Procedure 13*. Receive inspection of compliance with construction regulations

Agency: Department of Labour

Time: 1 day Cost: No cost

Source: Doing Business database.

Procedure 14. Receive inspection of all foundation trenches from the municipal authority

Agency: Building Inspectorate of Mangaung Metropolitan Municipality

Time: 1 day Cost: No cost

Procedure 15. Receive inspection of underground wastewater drainage systems from the municipal authority

Agency: Building Inspectorate of Mangaung Metropolitan Municipality

Time: 1 day
Cost: No cost

Procedure 16. Receive inspection of aboveground wastewater drainage systems from the municipal authority

Agency: Building Inspectorate of Mangaung

Metropolitan Municipality

Time: 1 day Cost: No cost

Procedure 17. Submit notification of completion of building work to the municipal authority

Agency: Building and Zoning Control of Mangaung Metropolitan Municipality

Time: 1 day Cost: No cost

Procedure 18. Receive final inspection from the municipal authority

Agency: Building and Zoning Control of Mangaung

Metropolitan Municipality

Time: 1 day Cost: No cost

Procedure 19*. Receive inspection from the municipal fire authority

Agency: Fire Department of Mangaung Metropolitan Municipality

Time: 1 day
Cost: No cost

Procedure 20. Obtain Occupancy Certificate from the municipal authority

Agency: Building and Zoning Control of Mangaung

Metropolitan Municipality

Time: 20 days Cost: ZAR 5,500

Note: For more details on each procedure, refer to http://doingbusiness.org/southafrica.
*Simultaneous with previous procedure

BUILDING QUALITY CONTROL INDEX	
BOILDING QUALITY CONTINUE INDEX	
	Score
Building quality control index (0-15)	12
Quality of building regulations index (0-2)	2
Quality control before construction index (0–1)	1
Quality control during construction index (0–3)	2
Quality control after construction index (0–3)	3
Liability and insurance regimes index (0–2)	0
Professional certifications index (0–4)	4

Note: For a list of all component questions and results on this index, refer to the "Details on quality indices" section.

Relevant departments, agencies and other stakeholders		
National level	Local level	
Department of Labour Department of Rural Development and Land Reform South African Bureau of Standards (SABS) National Regulator for Compulsory Specifications (NRCS)	Land use management/town planning department Building control department Building inspections department Roads and stormwater departmen Utility providers Fire department Health department	
	National level Department of Labour Department of Rural Development and Land Reform South African Bureau of Standards (SABS) National Regulator for Compulsory	

Note: All recommendations are detailed in the "What can be improved?" section of the corresponding indicator chapter.

GETTING ELECTRICITY

LIST OF PROCEDURES

Name of Utility: CENTLEC Data as of: May 1, 2018

Procedure 1. Submit an application for electricity connection to distribution utility and obtain connection fee estimate

Agency: CENTLEC **Time:** 50 days

Cost: ZAR 343,312 (ZAR 275,125 for the network contribution [including ZAR 123,959 for the primary contribution MV + ZAR 106,757 for the secondary contribution LV + ZAR 44,409 for the low-tension cost] + ZAR 68,187 for connection material cost and labor)

Procedure 2*. Open customer account, sign supply contract and submit proof of payment of security deposit to distribution utility

Agency: CENTLEC Time: 1 day

Cost: ZAR 9,581 (Equal to the present value of lost interest earnings on the security deposit of ZAR 126,900, considering that a bank guarantee is accepted)

Procedure 3. Await completion of external connection works by distribution utility

Agency: CENTLEC Time: 45 days

Cost: No cost (Included in procedure 1)

Procedure 4. Obtain certificate of compliance (COC) for the internal wiring and submit to distribution utility to obtain final connection

Agency: Private electrical engineer / consultant / contractor

Time: 11 days Cost: No cost

Note: For more details on each procedure, refer to http://doingbusiness.org/southafrica.

*Simultaneous with previous procedure

RELIABILITY OF SUPPLY AND TRANSPARENCY OF TARIFFS INDEX

	Score
Reliability of supply and transparency of tariffs index (0-8)	0
Total duration and frequency of outages per customer a year (0–3)	_
Mechanisms for monitoring outages (0–1)	1
Mechanisms for restoring service (0–1)	1
Regulatory monitoring (0–1)	1
Financial deterrents aimed at limiting outages (0–1)	0
Communication of tariffs and tariff changes (0–1)	1

Note: Locations that do not use the SAIDI and SAIFI benchmarks to calculate outages are ineligible to score on the reliability of supply and transparency of tariffs index and thus receive 0 points on this indicator component. For more information please refer to the data notes. For a list of all component questions and results on this index, refer to the "Details on quality indices" section.

POLICY RECOMMENDATIONS TO IMPROVE THE EASE OF GETTING ELECTRICITY

	Relevant departments, agencies and other stakeholders			
Regulatory area	National level	Local level		
Start monitoring the reliability of supply using the SAIDI and SAIFI methodology Streamline the wayleave and excavation permit systems Identify bottlenecks in the internal process to reduce time Make the cost and process of getting electricity more transparent to the customer	National Energy Regulator of South Africa (NERSA) Eskom Department of Energy	Municipal distribution utilities		
Upgrade geographic information system to eliminate external site inspection				
Reduce the burden of the security deposit				

REGISTERING PROPERTY

LIST OF PROCEDURES

Property value: ZAR 3,768,738 (\$274,000) Data as of: May 1, 2018

Procedure 1. The conveyancer conducts a title search and checks encumbrances on the property

Agency: Deeds Registry of Bloemfontein **Time:** Less than one day (online procedure) **Cost:** No cost (Included in procedure 6)

Procedure 2. Obtain a rates clearance certificate

Agency: Mangaung Municipality's Rates Clearance Department

Time: 12 days Cost: ZAR 363

Procedure 3*. The conveyancer prepares and collects all the required documentation

Agency: Companies and Intellectual Property

Commission **Time:** 10 days

Cost: No cost (Included in procedure 6)

Procedure 4*. Obtain an electrical compliance certificate

Agency: Certified electrician

Time: 7 days Cost: ZAR 1,250

Procedure 5*. Obtain a transfer duty receipt

Agency: South African Revenue Service

Time: 2 days

Cost: ZAR 247,561 (ZAR 80,500 plus 11% on value above ZAR 2,250,000 for a property valued between ZAR 2,250,001 and ZAR 10,000,000)

Procedure 6. Parties sign all the documentation at the conveyancer's office

Agency: Conveyancer's Office

Time: 1 day

Cost: ZAR 36,581 (For properties valued above ZAR 1,000,000 and up to and including ZAR 5,000,000: ZAR 17,200 for the first ZAR 1,000,000 plus ZAR 700 per ZAR 100,000 or part thereof above that)

Procedure 7. The conveyancer lodges the deed

Agency: Deeds Registry of Bloemfontein

Time: 9 days

Cost: ZAR 1,275 (For properties valued above ZAR 2,000,000 and up to ZAR 4,000,000: ZAR 1,275)

Note: For more details on each procedure, refer to http://doingbusiness.org/southafrica.

*Simultaneous with previous procedure

QUALITY OF LAND ADMINISTRATION INDEX	
	Score
Quality of land administration index (0–30)	15
Reliability of infrastructure index (0–8)	5
Transparency of information index (0–6)	3.5
Geographic coverage index (0–8)	2
Land dispute resolution index (0-8)	4.5
Equal access to property rights index (-2–0)	0

Note: For a list of all component questions and results on this index, refer to the "Details on quality indices" section.

POLICY RECOMMENDATIONS TO IMPROVE THE EASE OF REGISTERING PROPERTY

	Relevant departments, agencies and other stakeholders		
Regulatory area	National level	Local level	
Further streamline issuance of rates clearance certificates	Office of the Chief Registrar of Deeds	Municipalities	
 Improve coordination among stakeholders and consider implementing a one-stop shop for property registration 	Office of the Chief Surveyor-General	Local deeds offices Local surveyor-general's offices	
Reinforce transparency in the land administration system	Department of Rural Development and Land Reform	Edeal surveyor general 3 offices	
Strengthen protections and resolution mechanisms for land- related issues and disputes	Department of Justice*		
Expand geographic coverage			

^{*} For the purpose of this study, the Department of Justice and Correctional Services is referred to as the Department of Justice. Note: All recommendations are detailed in the "What can be improved?" section of the corresponding indicator chapter.

ENFORCING CONTRACTS

INDICATOR DETAILS								
	Time	e (days)				Cost (% o	f claim value)	
Filing and service	Trial and judgment	Enforcement of judgement	Total time		Attorney fees	Court fees	Enforcement fees	Total cost
30	360	83	473		18.8%	7.6%	3.0%	29.4%

QUALITY OF JUDICIAL PROCESSES INDEX	
	Score
Quality of judicial processes index (0–18)	7
Court structure and proceedings (-1–5)	2
Case management (0–6)	2
Court automation (0–4)	0.5
Alternative dispute resolution (0–3)	2.5

Note: For a list of all component questions and results on this index, refer to the "Details on quality indices" section.

Regulatory area Study magistrates' court caseloads to identify and eliminate causes of trial delay and consider limiting the frequency and causes of adjournments Assess judicial capacity and resources needed to enhance case management and make it effective, especially in lower courts Consider introducing specialized commercial courts or

commercial sections in locations where needed

^{*} For the purpose of this study, the Department of Justice and Correctional Services is referred to as the Department of Justice. *Note:* All recommendations are detailed in the "What can be improved?" section of the corresponding indicator chapter.

MSUNDUZI (Pietermaritzburg)

	2015	2018
Dealing with construction permits (rank)	3	3
Distance to frontier score (0–100)	73.07	73.17
Procedures (number)	17	17
Time (days)	129	129
Cost (% of warehouse value)	2.0	1.9
Building quality control index (0–15)	12	12
Getting electricity (rank)	7	8
Distance to frontier score (0–100)	47.54	47.59
Procedures (number)	6	6
Time (days)	143	143
Cost (% of income per capita)	446.0	428.5
Reliability of supply and transparency of tariffs index (0–8)	0	0

		2015	2018
x	Registering property (rank)	7	9
	Distance to frontier score (0–100)	56.70	52.78
	Procedures (number)	8	8
	Time (days)	45	63
	Cost (% of property value)	6.3	7.6
	Quality of land administration index (0–30)	14.5	15
	Enforcing contracts (rank)	2	2
	Distance to frontier score (0–100)	58.78	58.78
	Time (days)	469	469
	Cost (% of claim value)	30.3	30.3
	Quality of judicial processes index (0–18)	7	7

[✓] Reform making it easier to do business

Change making it more difficult to do business.

DEALING WITH CONSTRUCTION PERMITS

LIST OF PROCEDURES

Warehouse value: ZAR 3,768,738 (\$274,000) Data as of: May 1, 2018

Procedure 1. Obtain geotechnical survey of the land plot

Agency: Private firm Time: 14 days Cost: ZAR 22,695

Procedure 2*. Obtain topographical survey of the land plot

Agency: Private firm Time: 14 days Cost: ZAR 15,000

Procedure 3. Receive Pre-Scrutiny Inspection of building plans from the municipal authority

Agency: Land Survey and Town Planning Departments of Msunduzi Local Municipality

Time: 16 days

Cost: ZAR 3,700 (25% of the plan approval fee for scrutiny and comment)

Procedure 4. Obtain approval of the building plans from the municipal authority

Agency: Building Control of Msunduzi Local Municipality

Time: 60 days

meters + ZAR 112 for each additional 10 square meters: Plans approval fee)

Cost: ZAR 14,795 (ZAR 448 for the first 20 square

Procedure 5. Submit notification of commencement of building work to the provincial authority

Agency: Department of Labour

Time: 1 day Cost: No cost

Procedure 6*. Submit notification of commencement of building work to the municipal authority

Agency: Building Control of Msunduzi Local

Municipality Time: 1 day Cost: No cost

Procedure 7*. Apply for water and sewage connection

Agency: Water and Sanitation Unit of Msunduzi Local Municipality

Time: 1 day

Cost: ZAR 16,420 (ZAR 12,905 for water connection

+ ZAR 3,515 for sewerage connection)

Procedure 8. Receive inspection from the municipal water and sanitation authority

Agency: Water and Sanitation Unit of Msunduzi

Local Municipality Time: 1 day Cost: No cost

Procedure 9. Receive final water connection from the municipal water and sanitation authority

Agency: Water and Sanitation Unit of Msunduzi Local Municipality

Time: 18 days Cost: No cost

Procedure 10*. Receive inspection of compliance with construction regulations

Agency: Department of Labour

Time: 1 day Cost: No cost

Procedure 11. Receive inspection of all foundation trenches from the municipal authority

Agency: Building Control & Signage Unit of

Msunduzi Local Municipality

Time: 1 day Cost: No cost

Procedure 12. Receive inspection of first-floor slab from the municipal Building Inspectorate authority

Agency: Building Control & Signage Unit of

Msunduzi Local Municipality

Time: 1 day Cost: No cost

Procedure 13. Receive inspection of wastewater drainage systems

Agency: Building Control & Signage Unit of

Msunduzi Local Municipality

Time: 1 day Cost: No cost

Procedure 14. Submit notification of completion of building work to the municipal authority

Agency: Building Control & Signage Unit of Msunduzi Local Municipality

Time: 1 day Cost: No cost

Procedure 15. Receive final inspection from the municipal authority

Agency: Building Control & Signage Unit of

Msunduzi Local Municipality

Time: 1 day Cost: No cost

Procedure 16*. Receive inspection from the municipal fire authority

Agency: Fire Department of Msunduzi Local

Municipality Time: 1 day Cost: No cost

Procedure 17. Obtain Occupancy Certificate from the municipal authority

Agency: Building Control & Signage Unit of

Msunduzi Local Municipality

Time: 10 days Cost: No cost

Note: For more details on each procedure, refer to http://doingbusiness.org/southafrica.

*Simultaneous with previous procedure

BUILDING QUALITY CONTROL INDEX	
·	Score
Building quality control index (0–15)	12
Quality of building regulations index (0–2)	2
Quality control before construction index (0–1)	1
Quality control during construction index (0–3)	2
Quality control after construction index (0–3)	3
Liability and insurance regimes index (0–2)	0
Professional certifications index (0–4)	4

Note: For a list of all component questions and results on this index, refer to the "Details on quality indices" section.

	Relevant departments, agencies and other stakeholders		
Regulatory area	National level	Local level	
Consider differentiating projects by risk and introducing risk-based inspections Increase efficiency by consolidating procedures and expanding the scope of online services in construction permitting Introduce stringent liability and insurance regimes for latent defects Involve private-sector professionals in the construction permitting process	Department of Labour Department of Rural Development and Land Reform South African Bureau of Standards (SABS) National Regulator for Compulsory Specifications (NRCS)	Land use management/town planning department Building control department Building inspections department Roads and stormwater department Utility providers Fire department Health department Solid waste department	

GETTING ELECTRICITY

LIST OF PROCEDURES

Name of Utility: Electricity Department of Msunduzi Metropolitan Municipality Data as of: May 1, 2018

Procedure 1. Submit an application for electricity connection to distribution utility and obtain connection fee estimate

Agency: Electricity Department of Msunduzi Metropolitan Municipality

Time: 30 days

Cost: ZAR 302,421 (ZAR 34,188 for the basic charge + ZAR 268,233 for the Connection Fee (ZAR 217,838 for the pro-rata fee for mini-substation + ZAR 7,324 for metering instrumentation + ZAR 33,800 for labor + 7,224 for transport + 2,047 for reinstatement)

Procedure 2*. Await external site inspection by distribution utility

Agency: Electricity Department of Msunduzi

Metropolitan Municipality

Time: 1 day Cost: No cost

Procedure 3. Await utility's inspection of meter

box

Agency: Electricity Department of Msunduzi

Metropolitan Municipality

Time: 7 days Cost: No cost

Procedure 4*. Obtain certificate of compliance (COC) for the internal wiring and submit to distribution utility

Agency: Private electrical engineer / consultant / contractor

Time: 1 day
Cost: No cost

Procedure 5. Open customer account, sign supply contract and submit proof of payment of security deposit to distribution utility

Agency: Electricity Department of Msunduzi Metropolitan Municipality

Time: 1 day

Cost: ZAR 20,567 (Equal to the present value of lost interest earnings on the security deposit of

ZAR 52,480)

Procedure 6. Await completion of external connection works by distribution utility and obtain final connection

Agency: Electricity Department of Msunduzi

Metropolitan Municipality

Time: 105 days

Cost: No cost (Included in procedure 1)

Note: For more details on each procedure, refer to http://doingbusiness.org/southafrica.
*Simultaneous with previous procedure

RELIABILITY OF SUPPLY AND TRANSPARENCY OF TARIFFS INDEX

	Score
Reliability of supply and transparency of tariffs index (0-8)	0
Total duration and frequency of outages per customer a year (0–3)	-
Mechanisms for monitoring outages (0–1)	1
Mechanisms for restoring service (0–1)	1
Regulatory monitoring (0–1)	1
Financial deterrents aimed at limiting outages (0–1)	0
Communication of tariffs and tariff changes (0–1)	1

Note: Locations that do not use the SAIDI and SAIFI benchmarks to calculate outages are ineligible to score on the reliability of supply and transparency of tariffs index and thus receive 0 points on this indicator component. For more information please refer to the data notes. For a list of all component questions and results on this index, refer to the "Details on quality indices" section.

POLICY RECOMMENDATIONS TO IMPROVE THE EASE OF GETTING ELECTRICITY

	Relevant departments, agencies and other stakeholders			
Regulatory area	National level	Local level		
Start monitoring the reliability of supply using the SAIDI and SAIFI methodology Streamline the wayleave and excavation permit systems Identify bottlenecks in the internal process to reduce time Make the cost and process of getting electricity more transparent to the customer	National Energy Regulator of South Africa (NERSA) Eskom Department of Energy	Municipal distribution utilities		
 Upgrade geographic information system to eliminate external site inspection 				
Reduce the burden of the security deposit				

Note: All recommendations are detailed in the "What can be improved?" section of the corresponding indicator chapter.

REGISTERING PROPERTY

LIST OF PROCEDURES

Property value: ZAR 3,768,738 (\$274,000) Data as of: May 1, 2018

Procedure 1. Obtain a rates clearance certificate

Agency: Msunduzi Municipality's Rates Department

Time: 48 days Cost: ZAR 315

Procedure 2*. The conveyancer prepares and collects all the required documentation

Agency: Companies and Intellectual Property

Commission
Time: 10 days

Cost: No cost (Included in procedure 7)

Procedure 3*. Obtain an electrical compliance certificate

certificate

Agency: Certified electrician

Time: 7 days Cost: ZAR 1,250

Procedure 4*. Obtain an entomologist's certificate

Agency: Certified entomologist

Time: 7 days Cost: ZAR 600

Procedure 5*. Obtain a transfer duty receipt

Agency: South African Revenue Service

Time: 2 days

Cost: ZAR 247,561 (ZAR 80,500 plus 11% on value above ZAR 2,250,000 for a property valued between ZAR 2,250,001 and ZAR 10,000,000)

Procedure 6*. The conveyancer conducts a

title search and checks encumbrances on the property

Agency: Deeds Registry of Pietermaritzburg **Time:** Less than one day (online procedure) **Cost:** No cost (Included in procedure 7)

Procedure 7. Parties sign all the documentation at the conveyancer's office

Agency: Conveyancer's Office

Time: 1 day

Cost: ZAR 36,581 (For properties valued above ZAR 1,000,000 and up to and including ZAR 5,000,000: ZAR 17,200 for the first ZAR 1,000,000 plus ZAR 700 per ZAR 100,000 or

part thereof above that)

Procedure 8. The conveyancer lodges the deed

Agency: Deeds Registry of Pietermaritzburg

Time: 14 days

Cost: ZAR 1,275 (For properties valued above ZAR 2,000,000 and up to ZAR 4,000,000:

ZAR 1,275)

Note: For more details on each procedure, refer to http://doingbusiness.org/southafrica.

*Simultaneous with previous procedure

QUALITY OF LAND ADMINISTRATION INDEX	
	Score
Quality of land administration index (0-30)	15
Reliability of infrastructure index (0–8)	5
Transparency of information index (0–6)	3.5
Geographic coverage index (0–8)	2
Land dispute resolution index (0–8)	4.5
Equal access to property rights index (-2–0)	0

For a list of all component questions and results on this index, refer to the "Details on quality indices" section.

POLICY RECOMMENDATIONS TO IMPROVE THE EASE OF REGISTERING PROPERTY Relevant departments, agencies and other stakeholders Local level Regulatory area **National level** · Office of the Chief Registrar of Deeds Municipalities Streamline issuance of rates clearance certificates Improve coordination among stakeholders and consider Local deeds offices · Office of the Chief Surveyor-General implementing a one-stop shop for property registration · Local surveyor-general's offices · Department of Rural Development and · Reinforce transparency in the land administration system Land Reform Strengthen protections and resolution mechanisms for landrelated issues and disputes Department of Justice* · Expand geographic coverage

^{*} For the purpose of this study, the Department of Justice and Correctional Services is referred to as the Department of Justice. *Note:* All recommendations are detailed in the "What can be improved?" section of the corresponding indicator chapter.

ENFORCING CONTRACTS

INDICATOR DETAILS							
Time (days)			Cost (% of claim value)				
Filing and service	Trial and judgment	Enforcement of judgement	Total time	Attorney fees	Court fees	Enforcement fees	Total cost
33	353	83	469	19.7%	7.6%	3.0%	30.3%

QUALITY OF JUDICIAL PROCESSES INDEX	·
	Score
Quality of judicial processes index (0–18)	7
Court structure and proceedings (-1–5)	2
Case management (0–6)	2
Court automation (0–4)	0.5
Alternative dispute resolution (0–3)	2.5

Note: For a list of all component questions and results on this index, refer to the "Details on quality indices" section.

POLICY RECOMMENDATIONS TO IMPROVE THE EASE OF ENFORCING CONTRACTS						
Relevant departments, agencies and other stakeholders						
Regulatory area	National level	Local level				
 Study magistrates' court caseloads to identify and eliminate causes of trial delay and consider limiting the frequency and causes of adjournments 	Office of the Chief Justice Department of Justice*	Magistrates' courts				
 Assess judicial capacity and resources needed to enhance case management and make it effective, especially in lower courts 						
Consider introducing specialized commercial courts or commercial sections in locations where needed						

^{*} For the purpose of this study, the Department of Justice and Correctional Services is referred to as the Department of Justice. Note: All recommendations are detailed in the "What can be improved?" section of the corresponding indicator chapter.

NELSON MANDELA BAY (Port Elizabeth)

	2015	2018
Dealing with construction permits (rank)	6	5
Distance to frontier score (0–100)	71.10	71.70
Procedures (number)	20	20
Time (days)	101	96
Cost (% of warehouse value)	2.8	2.6
Building quality control index (0–15)	12	12
Getting electricity (rank)	9	9
Distance to frontier score (0–100)	35.69	42.19
Procedures (number)	6	6
Time (days)	347	190
Cost (% of income per capita)	587.7	523.8
Reliability of supply and transparency of tariffs index (0–8)	0	0

	2015	2018
Registering property (rank)	5	5
Distance to frontier score (0–100)	59.10	57.93
Procedures (number)	8	8
Time (days)	25	20
Cost (% of property value)	6.3	7.6
Quality of land administration index (0–30)	14.5	15
Enforcing contracts (rank)	6	6
Distance to frontier score (0–100)	54.85	54.85
Time (days)	611	611
Cost (% of claim value)	30.4	30.4
Quality of judicial processes index (0–18)	7	7

✓ Reform making it easier to do business

Change making it more difficult to do business.

DEALING WITH CONSTRUCTION PERMITS

LIST OF PROCEDURES

Warehouse value: ZAR 3,768,738 (\$274,000) Data as of: May 1, 2018

Procedure 1. Obtain geotechnical survey of the land plot

Agency: Private firm Time: 14 days Cost: ZAR 22,695

Procedure 2*. Obtain topographical survey of the land plot

Agency: Private firm Time: 14 days Cost: ZAR 15,000

Procedure 3*. Obtain stamp on the plans from the Roads and Stormwater Department

Agency: Roads, Stormwater and Transportation

Department **Time:** 2 days **Cost:** No cost

Procedure 4*. Obtain stamp on the plans from the Fire Department

Agency: Fire Department of Nelson Mandela Bay

Metropolitan Municipality

Time: 2 days Cost: No cost

Procedure 5*. Obtain stamp on the plans from the Water and Sanitation Department

Agency: Water and Sanitation Department of Nelson Mandela Bay Metropolitan Municipality

Time: 2 days Cost: No cost

Procedure 6*. Obtain stamp on the plans from the Energy Department

Agency: Electricity and Energy Directorate of Nelson Mandela Metropolitan Municipality

Time: 2 days Cost: No cost

Procedure 7. Obtain Site Development Plan (SDP) approval

Agency: Land Use Management Division of Nelson Mandela Bay Metropolitan Municipality

Time: 35 days Cost: No cost

Procedure 8. Obtain approval of the building plans from the municipal authority

Agency: Building Control of Nelson Mandela Bay

Metropolitan Municipality

Time: 14 days

Cost: ZAR 44,960 (ZAR 3,841 per square meter

multiplied by 0.9%)

Procedure 9. Submit notification of commencement of building work to the provincial authority

Agency: Department of Labour

Time: 1 day
Cost: No cost

Procedure 10*. Submit notification of commencement of building work to the municipal authority

Agency: Building Control of Nelson Mandela Bay Metropolitan Municipality

Time: 1 day Cost: No cost

Procedure 11*. Apply for water and sewage connection

Agency: Water and Sanitation Department of Nelson Mandela Bay Metropolitan Municipality

Time: 1 day

Cost: ZAR 15,650 (ZAR 5,175 for water connection + ZAR 10,475 for sewerage connection)

Procedure 12. Receive inspection from the municipal water and sanitation authority

Agency: Water and Sanitation Department of Nelson Mandela Bay Metropolitan Municipality

Time: 1 day
Cost: No cost

Procedure 13. Receive final water connection from the municipal water and sanitation authority

Agency: Water and Sanitation Department of Nelson

Mandela Bay Metropolitan Municipality

Time: 18 days Cost: No cost

^{*}Simultaneous with previous procedure

Procedure 14*. Receive inspection of compliance with construction regulations

Agency: Department of Labour

Time: 1 day Cost: No cost

Procedure 15. Receive inspection of all foundation trenches from the municipal authority

Agency: Building Control of Nelson Mandela Bay Metropolitan Municipality

Time: 1 day

Cost: No cost

Procedure 16. Receive inspection of wastewater drainage systems

Agency: Building Control of Nelson Mandela Bay

Metropolitan Municipality

Time: 1 day Cost: No cost

Procedure 17. Submit notification of completion of building work to the municipal authority

Agency: Building Control of Nelson Mandela Bay Metropolitan Municipality

Time: 1 day Cost: No cost

Procedure 18. Receive final inspection from the municipal authority

Agency: Building Control of Nelson Mandela Bay

Metropolitan Municipality

Time: 1 day Cost: No cost

Procedure 19*. Receive inspection from the municipal fire authority

Agency: Fire Department of Nelson Mandela Bay

Metropolitan Municipality

Time: 1 day
Cost: No cost

Procedure 20. Obtain Occupancy Certificate from the municipal authority

Agency: Building Control of Nelson Mandela Bay

Metropolitan Municipality

Time: 5 days Cost: No cost

Note: For more details on each procedure, refer to http://doingbusiness.org/southafrica.

*Simultaneous with previous procedure

BUILDING QUALITY CONTROL INDEX	
	Score
Building quality control index (0–15)	12
Quality of building regulations index (0–2)	2
Quality control before construction index (0-1)	1
Quality control during construction index (0-3)	2
Quality control after construction index (0–3)	3
Liability and insurance regimes index (0–2)	0
Professional certifications index (0–4)	4

Note: For a list of all component questions and results on this index, refer to the "Details on quality indices" section.

POLICY RECOMMENDATIONS TO IMPROVE THE EASE OF DEALING WITH CONSTRUCTION PERMITS						
Relevant departments, agencies and other stakeholders						
Regulatory area	National level	Local level				
 Consider differentiating projects by risk and introducing risk-based inspections Increase efficiency by improving coordination, consolidating procedures and implementing electronic platforms Introduce stringent liability and insurance regimes for latent defects Involve private-sector professionals in the construction permitting process 	Department of Labour Department of Rural Development and Land Reform South African Bureau of Standards (SABS) National Regulator for Compulsory Specifications (NRCS)	Land use management/town planning department Building control department Building inspections department Roads and stormwater department Utility providers Fire department Health department Solid waste department				

GETTING ELECTRICITY

LIST OF PROCEDURES

Name of Utility: Electricity & Energy Directorate of Nelson Mandela Bay Municipality Data as of: May 1, 2018

Procedure 1. Submit an application for electricity connection to the distribution utility and obtain a connection fee estimate

Agency: Electricity & Energy Directorate of Nelson Mandela Bay Municipality

Time: 68 days

Cost: ZAR 388,095 (ZAR 68,678 for the connection fee, including material and labor cost + ZAR 9,821 for metering + ZAR 309,596 for the capital distribution charge, calculated as ZAR 2,521 per kVA)

Procedure 2*. Await external site inspection by distribution utility

Agency: Electricity & Energy Directorate of Nelson

Mandela Bay Municipality

Time: 1 day Cost: No cost

Procedure 3. Await utility's inspection of meter

box

Agency: Electricity & Energy Directorate of Nelson

Mandela Bay Municipality

Time: 8 days Cost: No cost

Procedure 4. Await completion of external connection works by distribution utility

Agency: Electricity & Energy Directorate of Nelson

Mandela Bay Municipality

Time: 105 days

Cost: No cost (Included in procedure 1)

Procedure 5. Open customer account, sign supply contract with distribution utility and await meter installation

Agency: Electricity & Energy Directorate of Nelson

Mandela Bay Municipality

Time: 9 days

Cost: ZAR 6,740 (Equal to the present value of lost interest earnings on the security deposit of

ZAR 17,200)

Procedure 6*. Obtain certificate of compliance (COC) for the internal wiring and submit to distribution utility to obtain final connection

Agency: Private electrical engineer / consultant / contractor

Time: 2 days Cost: No cost

Note: For more details on each procedure, refer to http://doingbusiness.org/southafrica.

*Simultaneous with previous procedure

RELIABILITY OF SUPPLY AND TRANSPARENCY OF TARIFFS INDEX

	Score
Reliability of supply and transparency of tariffs index (0-8)	0
Total duration and frequency of outages per customer a year (0–3)	_
Mechanisms for monitoring outages (0–1)	1
Mechanisms for restoring service (0–1)	1
Regulatory monitoring (0–1)	1
Financial deterrents aimed at limiting outages (0–1)	0
Communication of tariffs and tariff changes (0–1)	1

Note: Locations that do not use the SAIDI and SAIFI benchmarks to calculate outages are ineligible to score on the reliability of supply and transparency of tariffs index and thus receive 0 points on this indicator component. For more information please refer to the data notes. For a list of all component questions and results on this index, refer to the "Details on quality indices" section.

POLICY RECOMMENDATIONS TO IMPROVE THE EASE OF GETTING ELECTRICITY

	Relevant departments, agencies and other stakeholders				
Regulatory area	National level	Local level			
Start monitoring the reliability of supply using the SAIDI and SAIFI methodology Streamline the wayleave and excavation permit systems	National Energy Regulator of South Africa (NERSA)	Municipal distribution utilities			
Identify bottlenecks in the internal process to reduce time Make the cost and process of getting electricity more transparent to the customer	Eskom Department of Energy				
Upgrade geographic information system to eliminate external site inspection					
 Reduce the burden of the security deposit 					

Note: All recommendations are detailed in the "What can be improved?" section of the corresponding indicator chapter.

REGISTERING PROPERTY

LIST OF PROCEDURES

Property value: ZAR 3,768,738 (\$274,000) Data as of: May 1, 2018

Procedure 1. The conveyancer prepares and collects all the required documentation

Agency: Companies and Intellectual Property Commission

Time: 10 days

Cost: No cost (Included in procedure 7)

Procedure 2*. Obtain a rates clearance certificate

Agency: Nelson Mandela Bay Municipality's Property Valuation Department

Time: 7 days

Cost: ZAR 132 (ZAR 88 for certificate and ZAR 44

for valuation)

Procedure 3*. Obtain an electrical compliance certificate

Agency: Certified electrician

Time: 7 days Cost: ZAR 1,250

Procedure 4*. Obtain an entomologist's certificate

Agency: Certified entomologist

Time: 7 days Cost: ZAR 600

Procedure 5*. Obtain a transfer duty receipt

Agency: South African Revenue Service

Time: 2 days

Cost: ZAR 247,561 (ZAR 80,500 plus 11% on value above ZAR 2,250,000 for a property valued between ZAR 2,250,001 and ZAR 10,000,000)

Procedure 6*. The conveyancer conducts a

Procedure 6*. The conveyancer conducts a title search and checks encumbrances on the property

Agency: Deeds Registry of King William's Town Time: Less than one day (online procedure) Cost: No cost (Included in procedure 7)

Procedure 7. Parties sign all the documentation at the conveyancer's office

Agency: Conveyancer's Office

Time: 1 day

Cost: ZAR 36,581 (For properties valued above ZAR 1,000,000 and up to and including ZAR 5,000,000: ZAR 17,200 for the first ZAR 1,000,000 plus ZAR 700 per ZAR 100,000 or

part thereof above that)

Procedure 8. The conveyancer lodges the deed

Agency: Deeds Registry of King William's Town

Time: 9 days

Cost: ZAR 1,275 (For properties valued above ZAR 2,000,000 and up to ZAR 4,000,000: ZAR 1,275)

Note: For more details on each procedure, refer to http://doingbusiness.org/southafrica.

 ${}^\star Simultaneous$ with previous procedure

QUALITY OF LAND ADMINISTRATION INDEX	
	Score
Quality of land administration index (0-30)	15
Reliability of infrastructure index (0–8)	5
Transparency of information index (0–6)	3.5
Geographic coverage index (0–8)	2
Land dispute resolution index (0–8)	4.5
Equal access to property rights index (-2–0)	0

Note: For a list of all component questions and results on this index, refer to the "Details on quality indices" section.

POLICY RECOMMENDATIONS TO IMPROVE THE EASE OF REGISTERING PROPERTY Relevant departments, agencies and other stakeholders Regulatory area **National level** Local level • Streamline issuance of rates clearance certificates • Office of the Chief Registrar of Deeds Municipalities Improve coordination among stakeholders and consider · Local deeds offices Office of the Chief Surveyor-General implementing a one-stop shop for property registration · Local surveyor-general's offices · Department of Rural Development and Reinforce transparency in the land administration system Land Reform • Strengthen protections and resolution mechanisms for landrelated issues and disputes · Department of Justice* Expand geographic coverage

^{*} For the purpose of this study, the Department of Justice and Correctional Services is referred to as the Department of Justice. *Note:* All recommendations are detailed in the "What can be improved?" section of the corresponding indicator chapter.

ENFORCING CONTRACTS

INDICATOR DETAILS								
	Time	e (days)				Cost (% o	of claim value)	
Filing and service	Trial and judgment	Enforcement of judgement	Total time		Attorney fees	Court fees	Enforcement fees	Total cost
35	496	80	611		19.8%	7.6%	3.0%	30.4%

QUALITY OF JUDICIAL PROCESSES INDEX	
	Score
Quality of judicial processes index (0–18)	7
Court structure and proceedings (-1–5)	2
Case management (0–6)	2
Court automation (0–4)	0.5
Alternative dispute resolution (0–3)	2.5

Note: For a list of all component questions and results on this index, refer to the "Details on quality indices" section.

POLICY RECOMMENDATIONS TO IMPROVE THE EASE OF ENFORCING CONTRACTS

	Relevant departments, agencies and other stakeholders		
Regulatory area	National level	Local level	
Study magistrates' court caseloads to identify and eliminate causes of trial delay and consider limiting the frequency and causes of adjournments	Office of the Chief Justice Department of Justice*	Magistrates' courts	
 Assess judicial capacity and resources needed to enhance case management and make it effective, especially in lower courts 			
 Consider introducing specialized commercial courts or commercial sections in locations where needed 			

^{*} For the purpose of this study, the Department of Justice and Correctional Services is referred to as the Department of Justice. Note: All recommendations are detailed in the "What can be improved?" section of the corresponding indicator chapter.

TSHWANE (Pretoria)

	2015	2018
Dealing with construction permits (rank)	9	9
Distance to frontier score (0–100)	66.04	66.25
Procedures (number)	20	20
Time (days)	181	179
Cost (% of warehouse value)	2.2	2.2
Building quality control index (0–15)	12	12
Catting alastuicity (world)	_	7
Getting electricity (rank)	6	/
Distance to frontier score (0–100)	51.24	51.24
Procedures (number)	6	6
Time (days)	110	110
Cost (% of income per capita)	408.2	407.0
Reliability of supply and transparency of tariffs index (0–8)	0	0

	2015	2018
Registering property (rank)	2	3
Distance to frontier score (0–100)	60.56	59.39
Procedures (number)	7	7
Time (days)	30.5	25.5
Cost (% of property value)	6.3	7.6
Quality of land administration index (0–30)	14.5	15
Enforcing contracts (rank)	3	3
Distance to frontier score (0–100)	56.14	56.14
Time (days)	527	527
Cost (% of claim value)	33.1	33.1
Quality of judicial processes index (0–18)	7	7

[✓] Reform making it easier to do business

Change making it more difficult to do business.

DEALING WITH CONSTRUCTION PERMITS

LIST OF PROCEDURES

Warehouse value: ZAR 3,768,738 (\$274,000) Data as of: May 1, 2018

Procedure 1. Obtain geotechnical survey of the land plot

Agency: Private firm Time: 14 days Cost: ZAR 22,695

Procedure 2*. Obtain topographical survey of the land plot

Agency: Private firm Time: 14 days Cost: ZAR 15,000

Procedure 3*. Obtain stamp on the plans from the Roads and Stormwater Department

Agency: Roads and Stormwater Division of City of Tshwane Metropolitan Municipality

Time: 2 days Cost: No cost

Procedure 4*. Obtain stamp on the plans from the Fire Department

Agency: Fire Safety Section of City of Tshwane

Metropolitan Municipality

Time: 2 days Cost: No cost

Procedure 5*. Obtain stamp on the plans from the Water and Sanitation Department

Agency: Water and Sanitation Department of City of Tshwane Metropolitan Municipality

Time: 2 days Cost: No cost

Procedure 6*. Obtain stamp on the plans from the Energy Department

Agency: Energy and Electricity of City of Tshwane Metropolitan Municipality

Time: 2 days Cost: No cost

Procedure 7. Obtain Site Development Plan (SDP) approval

Agency: Land Use Management Department of City of Tshwane Metropolitan Municipality

Time: 60 days

Cost: ZAR 9,494 (ZAR 7.3 per square meter)

Procedure 8. Obtain approval of the building plans from the municipal authority

Agency: Building Control Section of City of Tshwane Metropolitan Municipality

Time: 60 days

Cost: ZAR 19,769 (ZAR 15.2 per square meter)

Procedure 9. Submit notification of commencement of building work to the provincial authority

Agency: Department of Labour

Time: 1 day Cost: No cost

Procedure 10*. Submit notification of commencement of building work to the municipal authority

Agency: Building Control Section of City of Tshwane Metropolitan Municipality

Time: 1 day Cost: No cost

Procedure 11*. Apply for water and sewage

Agency: Water and Sanitation Department of City of Tshwane Metropolitan Municipality

Cost: ZAR 15,300 (ZAR 10,800 for water connection + ZAR 4,500 for sewerage connection)

Procedure 12. Receive inspection from the municipal water and sanitation authority

Agency: Water and Sanitation Department of City of

Tshwane Metropolitan Municipality

Time: 1 day Cost: No cost

Procedure 13. Receive final water connection from the municipal water and sanitation authority

Agency: Water and Sanitation Department of City of Tshwane Metropolitan Municipality

*Simultaneous with previous procedure

Time: 30 days Cost: No cost

Procedure 14*. Receive inspection of compliance with construction regulations

Agency: Department of Labour

Time: 1 day Cost: No cost

Procedure 15. Receive inspection of all foundation trenches from the municipal authority

Agency: Building Inspectorate of City of Tshwane

Metropolitan Municipality

Time: 1 day Cost: No cost

Procedure 16. Receive inspection of wastewater drainage systems

Agency: Building Inspectorate of City of Tshwane

Metropolitan Municipality

Time: 1 day Cost: No cost

Procedure 17. Submit notification of completion of building work to the municipal authority

Agency: Building Control Section of City of Tshwane Metropolitan Municipality

Time: 1 day Cost: No cost

Procedure 18. Receive final inspection from the municipal authority

Agency: Building Control Section of City of Tshwane

Metropolitan Municipality

Time: 1 day Cost: No cost

Procedure 19*. Receive inspection from the municipal fire authority

Agency: Fire Brigade of City of Tshwane Metropolitan

Municipality
Time: 1 day
Cost: No cost

Procedure 20. Obtain Occupancy Certificate from the municipal authority

Agency: Building Control Section of City of Tshwane

Metropolitan Municipality

Time: 5 days Cost: No cost

Note: For more details on each procedure, refer to http://doingbusiness.org/southafrica.

*Simultaneous with previous procedure

BUILDING QUALITY CONTROL INDEX	
	Score
Building quality control index (0–15)	12
Quality of building regulations index (0–2)	2
Quality control before construction index (0–1)	1
Quality control during construction index (0–3)	2
Quality control after construction index (0–3)	3
Liability and insurance regimes index (0–2)	0
Professional certifications index (0–4)	4

Note: For a list of all component questions and results on this index, refer to the "Details on quality indices" section.

	Relevant departments, agencies and other stakeholders		
Regulatory area	National level	Local level	
 Consider differentiating projects by risk and introducing risk-based inspections Increase efficiency by improving coordination, consolidating procedures and implementing electronic platforms Introduce stringent liability and insurance regimes for latent defects Involve private-sector professionals in the construction permitting process 	 Department of Labour Department of Rural Development and Land Reform South African Bureau of Standards (SABS) National Regulator for Compulsory Specifications (NRCS) 	 Land use management/town planning department Building control department Building inspections department Roads and stormwater department Utility providers Fire department Health department Solid waste department 	

GETTING ELECTRICITY

LIST OF PROCEDURES

Name of Utility: Energy and Electricity Division of City of Tshwane Metropolitan Municipality Data as of: May 1, 2018

Procedure 1. Submit an application for electricity connection to the distribution utility and obtain a connection fee estimate

Agency: Energy and Electricity Division of City of Tshwane Metropolitan Municipality

Time: 30 days

Cost: No cost (Included in procedure 4)

Procedure 2*. Await external site inspection by distribution utility

Agency: Energy and Electricity Division of City of

Tshwane Metropolitan Municipality

Time: 1 day Cost: No cost

Procedure 3. Await utility's inspection of meter

Agency: Energy and Electricity Division of City of Tshwane Metropolitan Municipality

Time: 9 days Cost: No cost

Procedure 4. Await completion of external connection works by distribution utility

Agency: Energy and Electricity Division of City of Tshwane Metropolitan Municipality

Time: 68 days

Cost: ZAR 299.007 (ZAR 189.529 for the connection fee, including material and labor + ZAR 109,478 for the quota charge, calculated as ZAR 3,155 per kVA and considering that the stand has some credits)

Procedure 5. Open customer account, sign supply contract and submit proof of payment of security deposit to distribution utility

Agency: Energy and Electricity Division of City of Tshwane Metropolitan Municipality

Time: 1 day

Cost: ZAR 7,759 (Equal to the present value of lost interest earnings on the security deposit of ZAR 102,767, considering that a bank guarantee is accepted)

Procedure 6. Await final inspection and submit certificate of compliance (COC) for the internal wiring to distribution utility to obtain final

Agency: Private electrical engineer / consultant / contractor

Time: 2 days Cost: No cost

Score

Note: For more details on each procedure, refer to http://doingbusiness.org/southafrica.

*Simultaneous with previous procedure

RELIABILITY OF SUPPLY AND TRANSPARENCY OF TARIFFS INDEX

Reliability of supply and transparency of tariffs index (0-8)	0
Total duration and frequency of outages per customer a year (0–3)	_
Mechanisms for monitoring outages (0–1)	1
Mechanisms for restoring service (0–1)	1
Regulatory monitoring (0–1)	1
Financial deterrents aimed at limiting outages (0–1)	0
Communication of tariffs and tariff changes (0–1)	1

Note: Locations that do not use the SAIDI and SAIFI benchmarks to calculate outages are ineligible to score on the reliability of supply and transparency of tariffs index and thus receive 0 points on this indicator component. For more information please refer to the data notes. For a list of all component questions and results on this index, refer to the "Details on quality indices" section.

POLICY RECOMMENDATIONS TO IMPROVE THE EASE OF GETTING ELECTRICITY

	Relevant departments, agencies and other stakeholders		
Regulatory area	National level	Local level	
Start monitoring the reliability of supply using the SAIDI and SAIFI methodology Identify bottlenecks in the internal process to reduce time Make the cost and process of getting electricity more transparent to the customer	National Energy Regulator of South Africa (NERSA) Eskom Department of Energy	Municipal distribution utilities	
 Upgrade geographic information system to eliminate external site inspection 			
 Reduce the burden of the security deposit 			

Note: All recommendations are detailed in the "What can be improved?" section of the corresponding indicator chapter.

REGISTERING PROPERTY

LIST OF PROCEDURES

Property value: ZAR 3,768,738 (\$274,000) Data as of: May 1, 2018

Procedure 1. The conveyancer conducts a title search and checks encumbrances on the property

Agency: Deeds Registry of Pretoria **Time:** Less than one day (online procedure) **Cost:** No cost (Included in procedure 6)

Procedure 2. Obtain a rates clearance certificate

Agency: City of Tshwane Municipality's Financial Services Department

Time: 15 days Cost: ZAR 59

Procedure 3*. The conveyancer prepares and collects all the required documentation

Agency: Companies and Intellectual Property

Commission **Time:** 10 days

Cost: No cost (Included in procedure 6)

Procedure 4*. Obtain an electrical compliance certificate

Agency: Certified electrician

Time: 7 days Cost: ZAR 1,250

Procedure 5*. Obtain a transfer duty receipt

Agency: South African Revenue Service

Time: 2 days

Cost: ZAR 247,561 (ZAR 80,500 plus 11% on value above ZAR 2,250,000 for a property valued between ZAR 2,250,001 and ZAR 10,000,000)

Procedure 6. Parties sign all the documentation at the conveyancer's office

Agency: Conveyancer's Office

Time: 1 day

Cost: ZAR 36,581 (For properties valued above ZAR 1,000,000 and up to and including ZAR 5,000,000: ZAR 17,200 for the first ZAR 1,000,000 plus ZAR 700 per ZAR 100,000 or

part thereof above that)

Procedure 7. The conveyancer lodges the deed

Agency: Deeds Registry of Pretoria

Time: 9 days

Cost: ZAR 1,275 (For properties valued above ZAR 2,000,000 and up to ZAR 4,000,000:

ZAR 1,275)

Note: For more details on each procedure, refer to http://doingbusiness.org/southafrica.

*Simultaneous with previous procedure

QUALITY OF LAND ADMINISTRATION INDEX	
	Score
Quality of land administration index (0–30)	15
Reliability of infrastructure index (0–8)	5
Transparency of information index (0–6)	3.5
Geographic coverage index (0–8)	2
Land dispute resolution index (0–8)	4.5
Equal access to property rights index (-2–0)	0

Note: For a list of all component questions and results on this index, refer to the "Details on quality indices" section.

POLICY RECOMMENDATIONS TO IMPROVE THE EASE OF REGISTERING PROPERTY

	Relevant departments, agencies and other stakeholders		
Regulatory area	National level	Local level	
Further streamline issuance of rates clearance certificates	Office of the Chief Registrar of Deeds	Municipalities	
 Improve coordination among stakeholders and consider implementing a one-stop shop for property registration Reinforce transparency in the land administration system Strengthen protections and resolution mechanisms for land-related issues and disputes 	Office of the Chief Surveyor-General Department of Rural Development and Land Reform Department of Justice*	Local deeds officesLocal surveyor-general's offices	
Expand geographic coverage			

^{*} For the purpose of this study, the Department of Justice and Correctional Services is referred to as the Department of Justice. *Note*: All recommendations are detailed in the "What can be improved?" section of the corresponding indicator chapter.

ENFORCING CONTRACTS

INDICATOR DETAILS							
	Time	e (days)			Cost (% c	of claim value)	
Filing and service	Trial and judgment	Enforcement of judgement	Total time	Attorney fees	Court fees	Enforcement fees	Total cost
30	414	83	527	22.5%	7.6%	3.0%	33.1%

QUALITY OF JUDICIAL PROCESSES INDEX	
	Score
Quality of judicial processes index (0–18)	7
Court structure and proceedings (-1–5)	2
Case management (0–6)	2
Court automation (0–4)	0.5
Alternative dispute resolution (0–3)	2.5

Note: For a list of all component questions and results on this index, refer to the "Details on quality indices" section.

POLICY RECOMMENDATIONS TO IMPROVE THE EASE OF ENFORCING CONTRACTS				
	Relevant departments, agencies and other stakeholders			
Regulatory area	National level	Local level		
Study magistrates' court caseloads to identify and eliminate causes of trial delay and consider limiting the frequency and causes of adjournments	Office of the Chief Justice Department of Justice*	Magistrates' courts		
 Assess judicial capacity and resources needed to enhance case management and make it effective, especially in lower courts 				
Consider introducing specialized commercial courts or commercial sections in locations where needed				

^{*} For the purpose of this study, the Department of Justice and Correctional Services is referred to as the Department of Justice. Note: All recommendations are detailed in the "What can be improved?" section of the corresponding indicator chapter.

PORT OF CAPE TOWN

TRADING ACROSS BORDERS

INDICATOR SNAPSHOT	
Distance to frontier score (0–100)	62.47
Time to export	
Documentary compliance (hours)	96
Border compliance (hours)	118
Cost to export	
Documentary compliance (US\$)	73
Border compliance (US\$)	503
Time to import	
Documentary compliance (hours)	36
Border compliance (hours)	66
Cost to import	
Documentary compliance (US\$)	73
Border compliance (US\$)	676

PORT DETAILS		
Characteristics	Export	Import
Product	HS 08: Edible fruit and nuts; peel of citrus fruit or melons	HS 8708: Parts and accessories of motor vehicles
Trade partner	Netherlands	Germany
Border	Port of Cape Town	Port of Cape Town
Distance (km)	1,398	1,398
Domestic transport time (hours)	60	60
Domestic transport cost (US\$)	1,882	1,882

COMPONENTS OF BORDER COMPLIANCE		
Export	Time to complete (hours)	Associated costs (US\$)
Clearance and inspections required by customs authorities	4	141
Clearance and inspections required by agencies other than customs	30	52
Port or border handling	84	310
Import	Time to complete (hours)	Associated costs (US\$)
Clearance and inspections required by customs authorities	6	258
Clearance and inspections required by agencies other than customs	0	0
Port or border handling	60	418

TRADE DOCUMENTS

Export

- Bill of ladingCargo Dues Order
- EUR 1 Certificate of origin
- Commercial invoice
 Customs Export Declaration (SAD 500)
 Export certificate
- Phytosanitary certificatePacking listSOLAS certificate

Import

- Bill of ladingCargo Dues OrderEUR 1 Certificate of origin
- Commercial invoice
 Customs Import Declaration (SAD 500)
- Packing list
- SOLAS certificate

POLICY RECOMMENDATIONS TO IMPROVE THE EASE OF TRADING ACROSS BORDERS		
	Relevant departments, agencies and other stakeholders	
Regulatory area	National level	Local level
Further reduce and streamline documentary requirements and increase the use of electronic transaction systems	Department of Trade and Industry	Chamber of commerce and industry
 Increase coordination of different agencies with a view to 	South African Revenue Service (SARS)	industry
streamlining procedures	Transnet National Ports Authority (TNPA)	
 Introduce an electronic single window for trade 	Transnet Port Terminals (TPT)	
 Promote regional integration through the effective implementation of border cooperation agreements 	International Trade Administration Commission of South Africa (ITAC)	
Upgrade trade logistics infrastructure	Ports Regulator of South Africa (PRSA)	
	Perishable Products Export Control Board (PPECB)	
	Department of Agriculture, Forestry and Fisheries (DAFF)	
	South African Police Service (SAPS)	
	National Regulator for Compulsory Specifications (NRCS)	

PORT OF DURBAN

TRADING ACROSS BORDERS

INDICATOR SNAPSHOT	
Distance to frontier score (0–100)	59.64
Time to export	
Documentary compliance (hours)	68
Border compliance (hours)	92
Cost to export	
Documentary compliance (US\$)	55
Border compliance (US\$)	1,257
Time to import	
Documentary compliance (hours)	36
Border compliance (hours)	87
Cost to import	
Documentary compliance (US\$)	73
Border compliance (US\$)	676

PORT DETAILS		
Characteristics	Export	Import
Product	HS 87: Vehicles other than railway or tramway rolling-stock, and parts and accessories thereof	HS 8708: Parts and accessories of motor vehicles
Trade partner	United States	Germany
Border	Port of Durban	Port of Durban
Distance (km)	570	570
Domestic transport time (hours)	16	16
Domestic transport cost (US\$)	1,100	1,100

COMPONENTS OF BORDER COMPLIANCE			
Export	Time to complete (hours)	Associated costs (US\$)	
Clearance and inspections required by customs authorities	4	200	
Clearance and inspections required by agencies other than customs	0	0	
Port or border handling	88	1,057	
Import	Time to complete (hours)	Associated costs (US\$)	
Clearance and inspections required by customs authorities	6	258	
Clearance and inspections required by agencies other than customs	0	0	
Port or border handling	81	418	

TRADE DOCUMENTS

Export

- Bill of ladingCargo Dues OrderAGOA Certificate of origin
- Commercial invoice
 Customs Export Declaration (SAD 500)
- · Landing order
- Packing listSOLAS certificate

Import

- Bill of ladingCargo Dues OrderEUR 1 Certificate of origin
- Commercial invoice
 Customs Import Declaration (SAD 500)
- Packing list
- SOLAS certificate

POLICY RECOMMENDATIONS TO IMPROVE THE EASE OF TRADING ACROSS BORDERS		
	Relevant departments, agencies and other stakeholders	
Regulatory area	National level	Local level
Further reduce and streamline documentary requirements	Department of Trade and Industry	Chamber of commerce and
and increase the use of electronic transaction systems Increase coordination of different agencies with a view to	South African Revenue Service (SARS)	industry
streamlining procedures	Transnet National Ports Authority (TNPA)	
 Introduce an electronic single window for trade Promote regional integration through the effective implementation of border cooperation agreements Upgrade trade logistics infrastructure 	Transnet Port Terminals (TPT)	
	International Trade Administration Commission of South Africa (ITAC)	
	Ports Regulator of South Africa (PRSA)	
	Perishable Products Export Control Board (PPECB)	
	Department of Agriculture, Forestry and Fisheries (DAFF)	
	South African Police Service (SAPS)	
	National Regulator for Compulsory Specifications (NRCS)	

PORT OF PORT ELIZABETH

TRADING ACROSS BORDERS

INDICATOR SNAPSHOT	
Distance to frontier score (0–100)	69.25
Time to export	
Documentary compliance (hours)	68
Border compliance (hours)	80
Cost to export	
Documentary compliance (US\$)	55
Border compliance (US\$)	451
Time to import	
Documentary compliance (hours)	36
Border compliance (hours)	54
Cost to import	
Documentary compliance (US\$)	73
Border compliance (US\$)	676

PORT DETAILS		
Characteristics	Export	Import
Product	HS 84: Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof	HS 8708: Parts and accessories of motor vehicles
Trade partner	Germany	Germany
Border	Port of Port Elizabeth	Port of Port Elizabeth
Distance (km)	1,061	1,061
Domestic transport time (hours)	24	24
Domestic transport cost (US\$)	1,350	1,350

COMPONENTS OF BORDER COMPLIANCE			
Export	Time to complete (hours)	Associated costs (US\$)	
Clearance and inspections required by customs authorities	4	200	
Clearance and inspections required by agencies other than customs	0	0	
Port or border handling	76	251	
Import	Time to complete (hours)	Associated costs (US\$)	
Clearance and inspections required by customs authorities	6	258	
Clearance and inspections required by agencies other than customs	0	0	
Port or border handling	48	418	

TRADE DOCUMENTS

Export

- Bill of lading
- Cargo Dues Order
- EUR 1 Certificate of origin
- Commercial invoice
- Customs Export Declaration (SAD 500)

• Upgrade trade logistics infrastructure

- Packing list
- SOLAS certificate

Import

POLICY RECOMMENDATIONS TO IMPROVE THE EASE OF TRADING ACROSS BORDERS

- Bill of lading
- Cargo Dues Order
- EUR 1 Certificate of origin
- Commercial invoice
- Customs Import Declaration (SAD 500)
- Packing list
- SOLAS certificate

	Relevant departments, agencies and other stakeholders	
Regulatory area	National level	Local level
Further reduce and streamline documentary requirements	Department of Trade and Industry	Chamber of commerce and
and increase the use of electronic transaction systems	South African Revenue Service (SARS)	industry
 Increase coordination of different agencies with a view to streamlining procedures 	Transnet National Ports Authority (TNPA)	
 Introduce an electronic single window for trade 	Transnet Port Terminals (TPT)	
 Promote regional integration through the effective implementation of border cooperation agreements 	International Trade Administration Commission of South Africa (ITAC)	

• Ports Regulator of South Africa (PRSA)

• South African Police Service (SAPS)

Perishable Products Export Control Board (PPECB)
 Department of Agriculture, Forestry and Fisheries (DAFF)

South Africa (ITAC)

National Regulator for Compulsory Specifications (NRCS)

Note: All recommendations are detailed in the "What can be improved?" section of the corresponding indicator chapter.

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PORT OF NGQURA

TRADING ACROSS BORDERS

INDICATOR SNAPSHOT	
Distance to frontier score (0–100)	68.93
Time to export	
Documentary compliance (hours)	68
Border compliance (hours)	84
Cost to export	
Documentary compliance (US\$)	55
Border compliance (US\$)	451
Time to import	
Documentary compliance (hours)	36
Border compliance (hours)	54
Cost to import	
Documentary compliance (US\$)	73
Border compliance (US\$)	676

PORT DETAILS			
Characteristics	Export	Import	
Product	HS 84: Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof	HS 8708: Parts and accessories of motor vehicles	
Trade partner	United States	Germany	
Border	Port of Ngqura	Port of Ngqura	
Distance (km)	1,043	1,043	
Domestic transport time (hours)	24	24	
Domestic transport cost (US\$)	1,350	1,350	

COMPONENTS OF BORDER COMPLIANCE			
Export	Time to complete (hours)	Associated costs (US\$)	
Clearance and inspections required by customs authorities	4	200	
Clearance and inspections required by agencies other than customs	0	0	
Port or border handling	80	251	
Import	Time to complete (hours)	Associated costs (US\$)	
Clearance and inspections required by customs authorities	6	258	
Clearance and inspections required by agencies other than customs	0	0	
Port or border handling	48	418	

TRADE DOCUMENTS				
Export	Import			
 Bill of lading Cargo Dues Order Certificate of origin Commercial invoice Customs Export Declaration (SAD 500) Packing list SOLAS certificate 	 Bill of lading Cargo Dues Order EUR 1 - Certificate of origin Commercial invoice Customs Import Declaration (SAD 500) Packing list SOLAS certificate 			

POLICY RECOMMENDATIONS TO IMPROVE THE EASE OF TRADING ACROSS BORDERS			
	Relevant departments, agencies and other stakeholders		
Regulatory area	National level	Local level	
Further reduce and streamline documentary requirements	Department of Trade and Industry	Chamber of commerce and	
and increase the use of electronic transaction systems Increase coordination of different agencies with a view to	South African Revenue Service (SARS)	industry	
Introduce an electronic single window for trade Promote regional integration through the effective implementation of border cooperation agreements Upgrade trade logistics infrastructure	Transnet National Ports Authority (TNPA)		
	Transnet Port Terminals (TPT)		
	International Trade Administration Commission of South Africa (ITAC)		
	Ports Regulator of South Africa (PRSA)		
	Perishable Products Export Control Board (PPECB)		
	Department of Agriculture, Forestry and Fisheries (DAFF)		
	South African Police Service (SAPS)		
	National Regulator for Compulsory Specifications (NRCS)		

DETAILS ON THE QUALITY INDICES

DEALING WITH CONSTRUCTION PERMITS-	BUILDING QUALITY CONTROL IN	IDEX		
	Buffalo City		8 locations in South Africa	
Question	Answer	Score	Answer	Score
Building quality control index (0-15)		11		12
Quality of building regulations index (0-2)		2		2
In what way are the building regulations (including the building code) or any regulations dealing with construction permits made available? (0–1)	Available online; To be purchased.	1	Available online; To be purchased.	1
Which requirements for obtaining a building permit are clearly specified by the building regulations or by any accessible website, brochure or pamphlet? (0–1)	List of required documents; Fees to be paid; Required pre-approvals.	1	List of required documents; Fees to be paid; Required pre-approvals.	1
Quality control before construction index (0–1)		1		1
Who is part of the committee or team that reviews and approves building permit applications in the relevant permit-issuing agency? (0–1)	Licensed engineer.	1	Licensed engineer.	1
Quality control during construction index (0–3)		1		2
What types of inspections (if any) are required by law to be carried out during construction? (0–2)	Inspections by government agency and in-house engineer; Phased inspections.	1	Inspections by government agency and in-house engineer; Phased inspections.	1
Do legally mandated inspections occur in practice during construction? (0–1)	Mandatory inspections do not always occur in practice.	0	Mandatory inspections are always done in practice.	1
Quality control after construction index (0–3)		3		3
Is there a final inspection required by law to verify that the building was built in accordance with the approved plans and regulations? (0–2)	Yes, final inspection is done by government agency and in-house supervising engineer submits a final report.	2	Yes, final inspection is done by government agency and in-house supervising engineer submits a final report.	2
Do legally mandated final inspections occur in practice? (0–1)	Final inspection always occurs in practice.	1	Final inspection always occurs in practice.	1
Liability and insurance regimes index (0-2)		0		0
Which parties (if any) are held liable by law for structural flaws or problems in the building once it is in use? (0–1)	No party is held liable under the law.	0	No party is held liable under the law.	0
Which parties (if any) are required by law to obtain an insurance policy to cover possible structural flaws or problems in the building once it is in use? (0–1)	No party is required by law to obtain insurance.	0	No party is required by law to obtain insurance.	0
Professional certifications index (0-4)		4		4
What are the qualification requirements for the professional responsible for verifying that the architectural plans or drawings are in compliance with existing building regulations? (0–2)	Minimum number of years of experience; University degree in architecture or engineering; Being a registered architect or engineer; Passing a certification exam.	2	Minimum number of years of experience; University degree in architecture or engineering; Being a registered architect or engineer; Passing a certification exam.	2
What are the qualification requirements for the professional who supervises the construction on the ground? (0–2)	Minimum number of years of experience; University degree in engineering, construction or construction management; Being a registered architect or engineer; Passing a certification exam.	2	Minimum number of years of experience; University degree in engineering, construction or construction management; Being a registered architect or engineer; Passing a certification exam.	2

	Cape Town	eThekwini	Johannesburg	6 locations in South Africa
Reliability of supply and transparency of tariffs index (0–8)	6	4	4	0
Total duration and frequency of outages per customer a year (0–3)	2	0	0	_
System average interruption duration index (SAIDI)	3.5	37.9	44.0	_
System average interruption frequency index (SAIFI)	0.9	2.5	6.5	_
What is the minimum outage time (in minutes) that the utility considers for the calculation of SAIDI/SAIFI	5.0	5.0	5.0	_
Mechanisms for monitoring outages (0–1)	1	1	1	1
Does the distribution utility use automated tools to monitor outages?	Yes	Yes	Yes	Yes
Mechanisms for restoring service (0–1)	1	1	1	1
Does the distribution utility use automated tools to restore service?	Yes	Yes	Yes	Yes
Regulatory monitoring (0–1)	1	1	1	1
Does a regulator—that is, an entity separate from the utility—monitor the utility's performance on reliability of supply?	Yes	Yes	Yes	Yes
Financial deterrents aimed at limiting outages (0–1)	0	0	0	0
Does the utility either pay compensation to customers or face fines by the regulator (or both) if outages exceed a certain cap?	No	No	No	No
Communication of tariffs and tariff changes (0–1)	1	1	1	1
Are effective tariffs available online?	Yes	Yes	Yes	Yes
Are customers notified of a change in tariff ahead of the billing cycle?	Yes	Yes	Yes	Yes

Source: Doing Business database.

Note: Locations that do not use the SAIDI and SAIFI benchmarks to calculate outages are ineligible to score on the reliability of supply and transparency of tariffs index and thus receive 0 points on this indicator component.

	9 locations in South Afri	ca
Question	Answer	Score
Quality of the land administration index (0–30)		15
Reliability of infrastructure index (0–8)		5
In what format are the majority of title or deed records kept—in a paper format or in a computerized format (scanned or fully digital)? (0–2)	Computer/scanned	1
Is there an electronic database for checking for encumbrances (liens, mortgages, restrictions and the like)? (0–1)	Yes	1
In what format are the majority of maps of land plots kept—in a paper format or in a computerized format (scanned or fully digital)? (0–2)	Computer/scanned	1
Is there an electronic database for recording boundaries, checking plans and providing cadastral information (geographic information system)? (0–1)	Yes	1
Is the information recorded by the immovable property registration agency and the cadastral or mapping agency kept in a single database, in different but linked databases or in separate databases? $(0-1)$	Separate databases	0
Do the immovable property registration agency and cadastral or mapping agency use the same identification number for properties? (0–1)	Yes	1
Transparency of information index (0–6)		3.5
Who is able to obtain information on land ownership at the agency in charge of immovable property registration? $(0-1)$	Anyone who pays the official fee	1
Is the list of documents that are required to complete any type of property transaction made publicly available—and if so, how? (0–0.5)	No	0
Is the applicable fee schedule for any property transaction at the agency in charge of immovable property registration made publicly available—and if so, how? (0–0.5)	Yes, online	0.5
Does the agency in charge of immovable property registration commit to delivering a legally binding document that proves property ownership within a specific time frame—and if so, how does it communicate the service standard? (0–0.5)?	Yes, on public boards	0.5
s there a specific and separate mechanism for filing complaints about a problem that occurred at the agency in charge of immovable property registration? (0–1)	No	C
Are there publicly available official statistics tracking the number of transactions at the immovable property registration agency? (0–0.5)	No	С
Nho is able to consult maps of land plots? (0–0.5)	Freely accessible by anyone	0.5
s the applicable fee schedule for accessing maps of land plots made publicly available—and if so, how? (0–0.5)	Yes, online	0.5
Ooes the cadastral or mapping agency commit to delivering an updated map within a specific time frame—and if so, now does it communicate the service standard? (0–0.5)	Yes, online	0.5
s there a specific and separate mechanism for filing complaints about a problem that occurred at the cadastral or napping agency? (0–0.5)	No	C
Geographic coverage index (0–8)		2
Are all privately held land plots in the economy formally registered at the immovable property registry? (0–2)	No	0
Are all privately held land plots in the city formally registered at the immovable property registry? (0–2)	No	0
Are all privately held land plots in the economy mapped? (0–2)	No	C
Are all privately held land plots in the city mapped? (0–2)	Yes	2
and dispute resolution index (0–8)		4.5
Does the law require that all property sale transactions be registered at the immovable property registry to make them apposable to third parties? (0–1.5)	Yes	1.5
s the system of immovable property registration subject to a state or private guarantee? (0–0.5)	No	C
s there a specific compensation mechanism to cover for losses incurred by parties who engaged in good faith in a property transaction based on erroneous information certified by the immovable property registry? (0–0.5)	No	(
Ones the legal system require a control of legality of the documents necessary for a property transaction (e.g., checking the compliance of contracts with requirements of the law)? (0–0.5)	Yes (Conveyancer and Registrar)	0.5
Ooes the legal system require verification of the identity of the parties to a property transaction? (0–0.5)	Yes (Conveyancer and Registrar)	0.5
s there a national database to verify the accuracy of identity documents? (0–1)	Yes	1
How long does it take on average to obtain a decision from the first-instance court for a standard land dispute between wo local businesses over tenure rights of a property worth NGN 26,969,050 (without appeal)? (0–3)	Between 2 and 3 years	1
Are there any statistics on the number of land disputes in the first instance? (0–0.5)	No	C
qual access to property rights index (-2–0)		(
Do unmarried men and unmarried women have equal ownership rights to property?	Yes	C
Do married men and married women have equal ownership rights to property?	Yes	(

	9 locations in South	Africa
Question	Answer	Scor
Quality of judicial processes index (0–18)		7
Court structure and proceedings (-1–5)		2
Is there a court or division of a court dedicated solely to hearing commercial cases? (0-1.5)	No	C
Small claims court (0–1.5)		1.5
a. Is there a small claims court or a fast-track procedure for small claims?	Yes	
b. If yes, is self-representation allowed?	Yes	
Is pretrial attachment available? (0–1)	No	(
Are new cases assigned randomly to judges? (0–1)	Yes, manually	0.5
Does a woman's testimony carry the same evidentiary weight in court as a man's? (-1–0)	Yes	(
Case management (0–6)		
Time standards (0–1)		
a. Are there laws setting overall time standards for key court events in a civil case?	Yes	
b. If yes, are the time standards set for at least three court events?	Yes	
c. Are these time standards respected in more than 50% of cases?	Yes	
Adjournments (0–1)		
a. Does the law regulate the maximum number of adjournments that can be granted?	No	
b. Are adjournments limited to unforeseen and exceptional circumstances?	No	
c. If rules on adjournments exist, are they respected in more than 50% of cases?	No	
Can two of the following four reports be generated about the competent court: (i) time to disposition report; (ii) clearance rate report; (iii) age of pending cases report; and (iv) single case progress report? (0–1)	No	
Is a pretrial conference among the case management techniques used before the competent court? (0–1)	Yes	
Are there any electronic case management tools in place within the competent court for use by judges? (0–1)	No	
Are there any electronic case management tools in place within the competent court for use by Jawyers? (0–1)	No	
Court automation (0–4)		0.
Can the initial complaint be filed electronically through a dedicated platform within the competent court? (0–1)	No	0
Is it possible to carry out service of process electronically for claims filed before the competent court? (0–1)	No	
Can court fees be paid electronically within the competent court? (0–1)	No	
Publication of judgments (0–1)	140	0.
a. Are judgments rendered in commercial cases at all levels made available to the general public through publication in official gazettes, in newspapers or on the internet or court website?	No	0
b. Are judgments rendered in commercial cases at the appellate and supreme court level made available to the general public through publication in official gazettes, in newspapers or on the internet or court website?	Yes	
Alternative dispute resolution (0–3)		2.!
Arbitration (0–1.5)		1.
a. Is domestic commercial arbitration governed by a consolidated law or consolidated chapter or section of the applicable code of civil procedure encompassing substantially all its aspects?	Yes	0.
b. Are there any commercial disputes—aside from those that deal with public order or public policy—that cannot be submitted to arbitration?	No	0.
c. Are valid arbitration clauses or agreements usually enforced by the courts?	Yes	0.
Mediation/Conciliation (0–1.5)		
a. Is voluntary mediation or conciliation available?	Yes	0.
b. Are mediation, conciliation or both governed by a consolidated law or consolidated chapter or section of the applicable code of civil procedure encompassing substantially all their aspects?	Yes	0.
c. Are there financial incentives for parties to attempt mediation or conciliation (i.e., if mediation or conciliation is successful, a refund of court filing fees, income tax credits or the like)?	No	

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