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Doing Business

THE WORLD BANK IFC

Economy Profile:

Taiwan, China

DOING BUSINESS 2013

Smarter Regulations for Small and Medium-Size Enterprises

COMPARING BUSINESS REGULATIONS FOR DOMESTIC FIRMS IN 185 ECONOMIES

10TH EDITION

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INTRODUCTION

Doing Business sheds light on how easy or difficult it is for a local entrepreneur to open and run a small to medium-size business when complying with relevant regulations. It measures and tracks changes in regulations affecting 11 areas in the life cycle of a business: starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting investors, paying taxes, trading across borders, enforcing contracts, resolving insolvency and employing workers.

In a series of annual reports *Doing Business* presents quantitative indicators on business regulations and the protection of property rights that can be compared across 185 economies, from Afghanistan to Zimbabwe, over time. The data set covers 46 economies in Sub-Saharan Africa, 33 in Latin America and the Caribbean, 24 in East Asia and the Pacific, 24 in Eastern Europe and Central Asia, 19 in the Middle East and North Africa and 8 in South Asia, as well as 31 OECD high-income economies. The indicators are used to analyze economic outcomes and identify what reforms have worked, where and why.

This economy profile presents the *Doing Business* indicators for Taiwan, China. To allow useful comparison, it also provides data for other selected economies (comparator economies) for each indicator. The data in this report are current as of June 1, 2012 (except for the paying taxes indicators, which cover the period January–December 2011).

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

More information is available in the full report. *Doing Business 2013* presents the indicators, analyzes their relationship with economic outcomes and presents business regulatory reforms. The data, along with information on ordering *Doing Business 2013*, are available on the *Doing Business* website at http://www.doingbusiness.org.

THE BUSINESS ENVIRONMENT

For policy makers trying to improve their economy's regulatory environment for business, a good place to start is to find out how it compares with the regulatory environment in other economies. *Doing Business* provides an aggregate ranking on the ease of doing business based on indicator sets that measure and benchmark regulations applying to domestic small to medium-size businesses through their life cycle. Economies are ranked from 1 to 185 by the ease of doing business index. For each economy the index is calculated as the ranking on the simple average of its percentile rankings on each of the 10 topics included in the index in *Doing Business 2013*: starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting investors, paying taxes, trading across borders, enforcing contracts and resolving insolvency. The ranking on each topic is the simple average of the percentile rankings on its component indicators (see the data notes for more details). The employing workers indicators are not included in this year's aggregate ease of doing business ranking, but the data are presented in this year's economy profile.

The aggregate ranking on the ease of doing business benchmarks each economy's performance on the indicators against that of all other economies in the *Doing Business* sample (figure 1.1). While this ranking tells much about the business environment in an economy, it does not tell the whole story. The ranking on the ease of doing business, and the underlying indicators, do not measure all aspects of the business environment that matter to firms and investors or that affect the competitiveness of the economy. Still, a high ranking does mean that the government has created a regulatory environment conducive to operating a business.

ECONOMY OVERVIEW

Region: East Asia & Pacific

Income category: High income

Population: 23,180,000

GNI per capita (US$): 20,200

DB2013 rank: 16

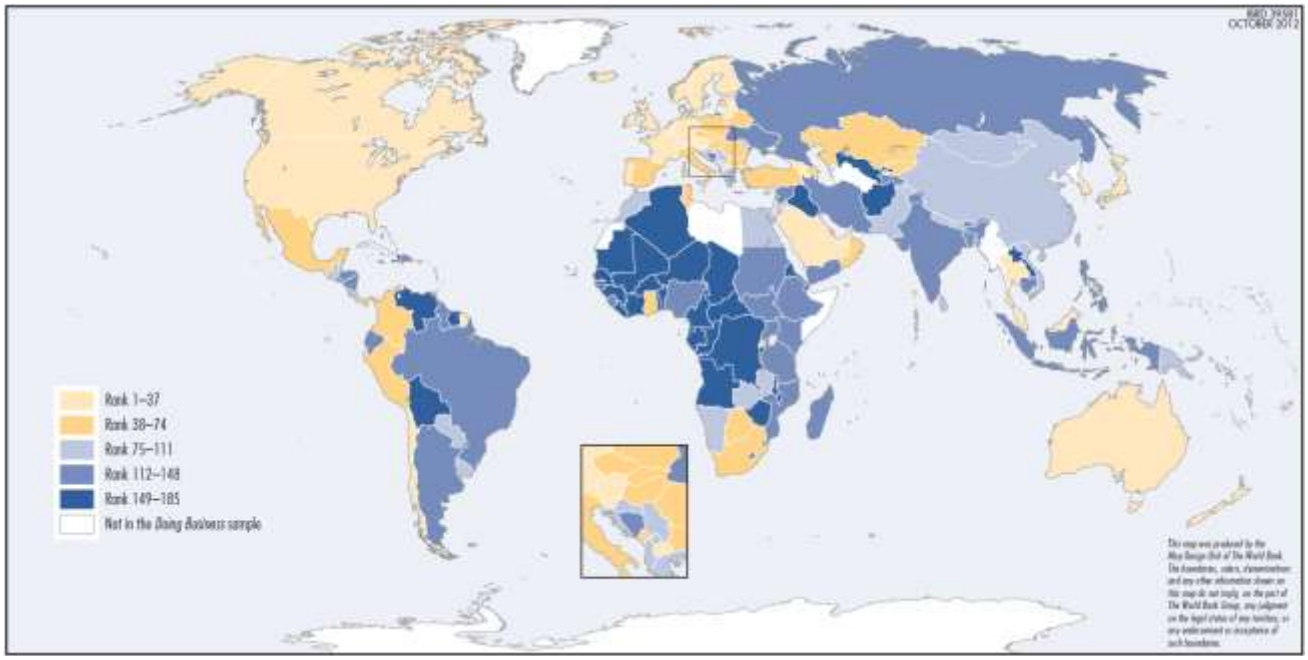
DB2012 rank: 25*

Change in rank: 9

* DB2012 ranking shown is not last year's published ranking but a comparable ranking for DB2012 that captures the effects of such factors as data corrections and the addition of 2 economies (Barbados and Malta) to the sample this year. See the data notes for sources and definitions.

THE BUSINESS ENVIRONMENT

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

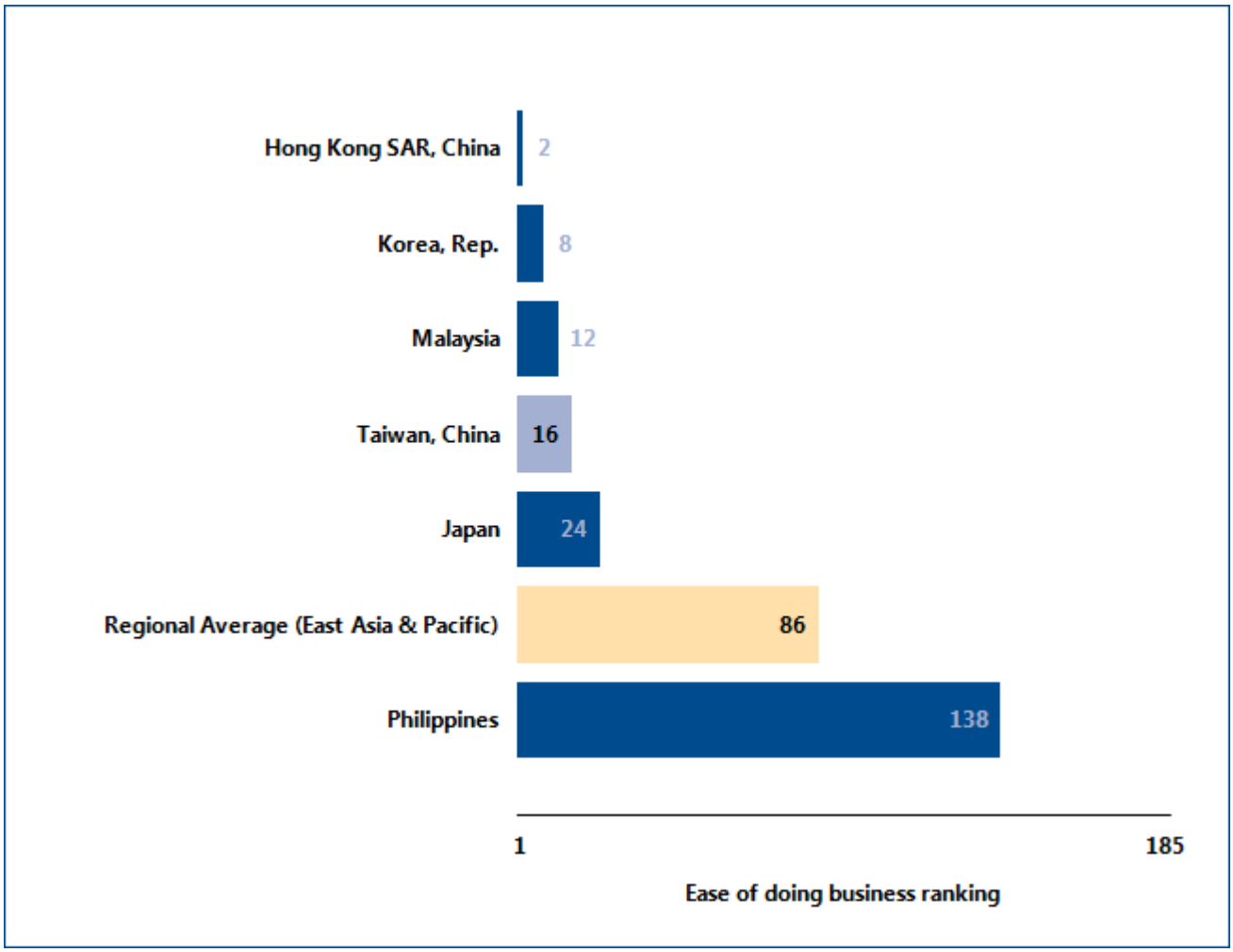


Source: Doing Business database.

THE BUSINESS ENVIRONMENT

For policy makers, knowing where their economy stands in the aggregate ranking on the ease of doing business is useful. Also useful is to know how it ranks relative to comparator economies and relative to the regional average (figure 1.2). The economy's rankings on the topics included in the ease of doing business index provide another perspective (figure 1.3).

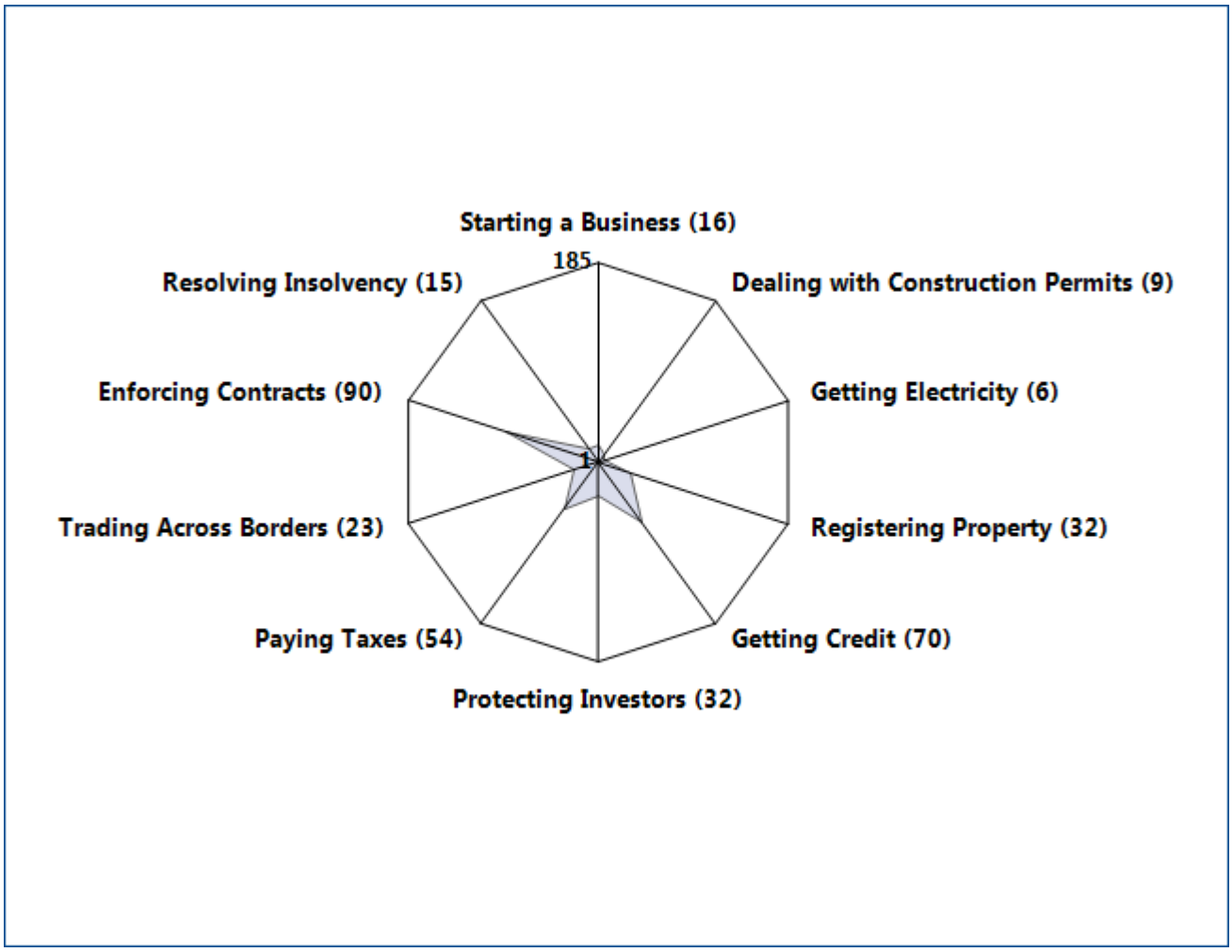
Figure 1.2 How Taiwan, China and comparator economies rank on the ease of doing business



Source: Doing Business database.

THE BUSINESS ENVIRONMENT

Figure 1.3 How Taiwan, China ranks on *Doing Business* topics



Source: Doing Business database.

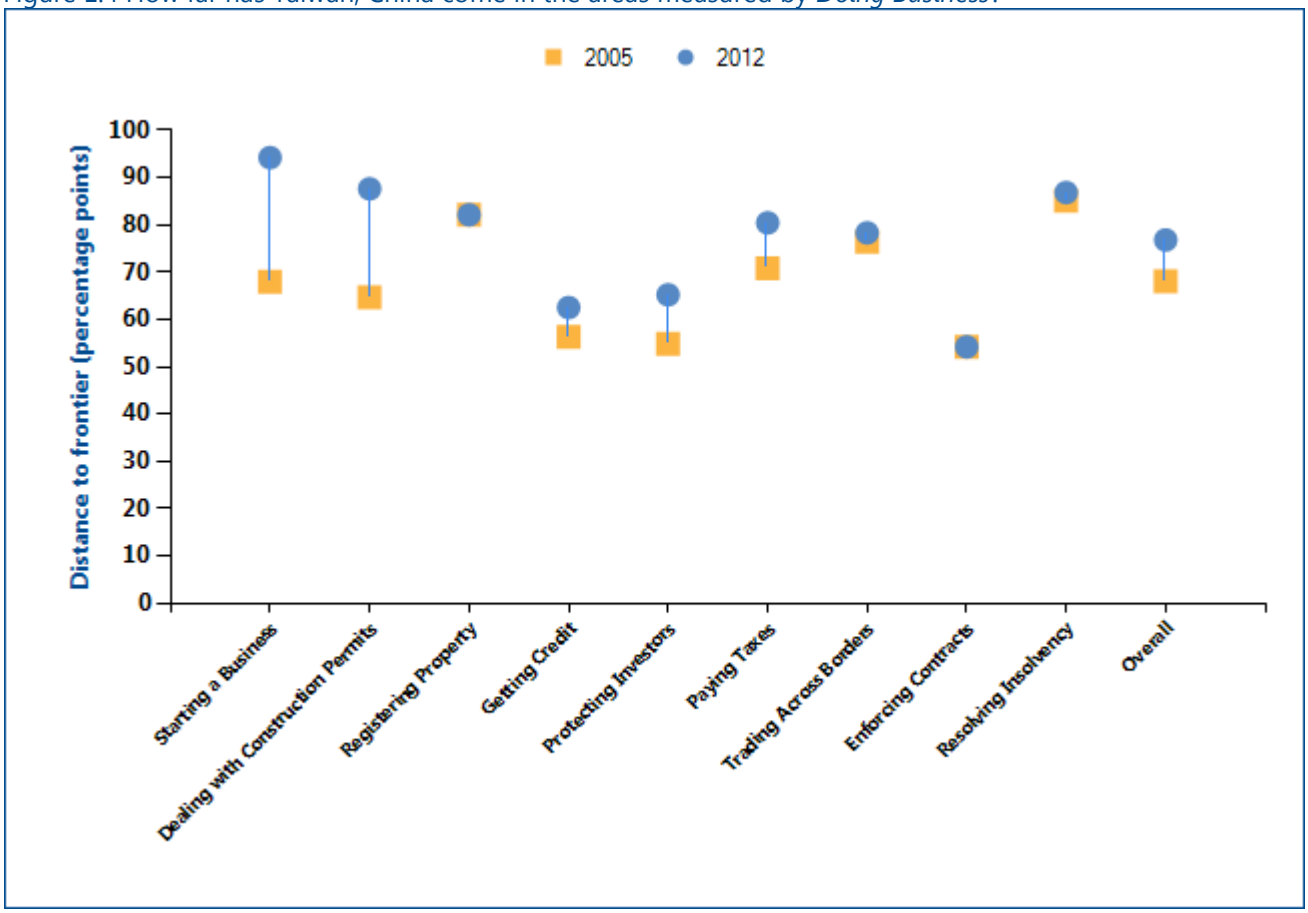
THE BUSINESS ENVIRONMENT

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

Moreover, year-to-year changes in the overall rankings do not reflect how the business regulatory environment in an economy has changed over time—or how it has changed in different areas. To aid in assessing such changes, last year *Doing Business* introduced the distance to frontier measure. This measure shows how far each economy is from the best performance achieved by any economy since 2005 on each indicator in 9 *Doing Business* indicator sets.

Comparing the measure for an economy at 2 points in time allows users to assess how much the economy's regulatory environment as measured by *Doing Business* has changed over time—how far it has moved toward (or away from) the most efficient practices and strongest regulations in areas covered by *Doing Business* (figure 1.4). The results may show that the pace of change varies widely across the areas measured. They also may show that an economy is relatively close to the frontier in some areas and relatively far from it in others.

Figure 1.4 How far has Taiwan, China come in the areas measured by *Doing Business*?



Note: The distance to frontier measure shows how far on average an economy is from the best performance achieved by any economy on each *Doing Business* indicator since 2005. The measure is normalized to range between 0 and 100, with 100 representing the best performance (the frontier). The overall distance to frontier is the average of the distance to frontier in the 9 indicator sets shown in the figure. See the data notes for more details on the distance to frontier measure.
Source: Doing Business database.

THE BUSINESS ENVIRONMENT

The absolute values of the indicators tell another part of the story (table 1.1). The indicators, on their own or in comparison with the indicators of a good practice economy or those of comparator economies in the region, may reveal bottlenecks reflected in large numbers of procedures, long delays or high costs. Or they may reveal unexpected strengths in an area of business regulation—such as a regulatory process that can be completed with a small number of procedures in a few days and at a low cost. Comparison of the economy's indicators today with those in the previous year may show where substantial bottlenecks persist—and where they are diminishing.

Table 1.1 Summary of *Doing Business* indicators for Taiwan, China

Indicator	Taiwan, China DB2013	Taiwan, China DB2012	Hong Kong SAR, China DB2013	Japan DB2013	Korea, Rep. DB2013	Malaysia DB2013	Philippines DB2013	Best performer globally DB2013
Starting a Business (rank)	16	15	6	114	24	54	161	New Zealand (1)
Procedures (number)	3	3	3	8	5	3	16	New Zealand (1)*
Time (days)	10	10	3	23	7	6	36	New Zealand (1)
Cost (% of income per capita)	2.4	2.4	1.9	7.5	14.6	15.1	18.1	Slovenia (0.0)
Paid-in Min. Capital (% of income per capita)	0.0	0.0	0.0	0.0	0.0	0.0	4.8	91 Economies (0.0)*
Dealing with Construction Permits (rank)	9	76	1	72	26	96	100	Hong Kong SAR, China (1)
Procedures (number)	11	25	6	14	11	37	29	Hong Kong SAR, China (6)*
Time (days)	94	125	67	193	29	140	84	Singapore (26)
Cost (% of income per capita)	16.3	18.2	16.3	28.5	127.2	17.5	103.0	Qatar (1.1)

Indicator	Taiwan, China DB2013	Taiwan, China DB2012	Hong Kong SAR, China DB2013	Japan DB2013	Korea, Rep. DB2013	Malaysia DB2013	Philippines DB2013	Best performer globally DB2013
Getting Electricity (rank)	6	5	4	27	3	28	57	Iceland (1)
Procedures (number)	4	4	4	3	4	5	5	Germany (3)*
Time (days)	24	24	41	105	28	46	50	Germany (17)
Cost (% of income per capita)	50.4	50.7	1.6	0.0	33.3	53.9	833.3	Japan (0.0)
Registering Property (rank)	32	31	60	64	75	33	122	Georgia (1)
Procedures (number)	3	3	5	6	7	5	8	Georgia (1)*
Time (days)	5	5	36	14	11	14	39	Portugal (1)
Cost (% of property value)	6.2	6.2	4.0	5.8	5.1	3.3	4.8	Belarus (0.0)*
Getting Credit (rank)	70	67	4	23	12	1	129	United Kingdom (1)*
Strength of legal rights index (0-10)	5	5	10	7	8	10	4	Malaysia (10)*
Depth of credit information index (0-6)	5	5	5	6	6	6	3	United Kingdom (6)*
Public registry coverage (% of adults)	0.0	0.0	0.0	0.0	0.0	56.1	0.0	Portugal (90.7)
Private bureau coverage (% of adults)	94.1	90.9	89.4	100.0	100.0	81.8	9.0	United Kingdom (100.0)*
Protecting Investors (rank)	32	79	3	19	49	4	128	New Zealand (1)
Extent of disclosure index (0-10)	9	7	10	7	7	10	2	Hong Kong SAR, China (10)*

Indicator	Taiwan, China DB2013	Taiwan, China DB2012	Hong Kong SAR, China DB2013	Japan DB2013	Korea, Rep. DB2013	Malaysia DB2013	Philippines DB2013	Best performer globally DB2013
Extent of director liability index (0-10)	5	4	8	6	4	9	3	Singapore (9)*
Ease of shareholder suits index (0-10)	5	5	9	8	7	7	8	New Zealand (10)*
Strength of investor protection index (0-10)	6.3	5.3	9.0	7.0	6.0	8.7	4.3	New Zealand (9.7)
Paying Taxes (rank)	54	64	4	127	30	15	143	United Arab Emirates (1)
Payments (number per year)	12	15	3	14	10	13	47	Hong Kong SAR, China (3)*
Time (hours per year)	221	245	78	330	207	133	193	United Arab Emirates (12)
Trading Across Borders (rank)	23	27	2	19	3	11	53	Singapore (1)
Documents to export (number)	6	6	4	3	3	5	7	France (2)
Time to export (days)	10	12	5	10	7	11	15	Singapore (5)*
Cost to export (US$ per container)	655	655	575	880	665	435	585	Malaysia (435)
Documents to import (number)	6	6	4	5	3	6	8	France (2)
Time to import (days)	10	12	5	11	7	8	14	Singapore (4)
Cost to import (US$ per container)	720	720	565	970	695	420	660	Malaysia (420)
Enforcing Contracts (rank)	90	89	10	35	2	33	111	Luxembourg (1)

Indicator	Taiwan, China DB2013	Taiwan, China DB2012	Hong Kong SAR, China DB2013	Japan DB2013	Korea, Rep. DB2013	Malaysia DB2013	Philippines DB2013	Best performer globally DB2013
Time (days)	510	510	360	360	230	425	842	Singapore (150)
Cost (% of claim)	17.7	17.7	21.2	32.2	10.3	27.5	26.0	Bhutan (0.1)
Procedures (number)	45	45	27	30	33	29	37	Ireland (21)*
Resolving Insolvency (rank)	15	14	17	1	14	49	165	Japan (1)
Time (years)	1.9	1.9	1.1	0.6	1.5	1.5	5.7	Ireland (0.4)
Cost (% of estate)	4	4	9	4	4	15	38	Singapore (1)*
Outcome (0 as piecemeal sale and 1 as going concern)	1		1	1	1	0	0	
Recovery rate (cents on the dollar)	81.8	82.1	81.2	92.8	81.8	44.7	4.9	Japan (92.8)

Note: DB2012 rankings shown are not last year's published rankings but comparable rankings for DB2012 that capture the effects of such factors as data corrections and the addition of 2 economies (Barbados and Malta) to the sample this year. The ranking methodology for the paying taxes indicators changed in *Doing Business 2013*; see the data notes for details. For more information on "no practice" marks, see the data notes. Data for the outcome of the resolving insolvency indicator are not available for DB2012.

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

Source: Doing Business database.

STARTING A BUSINESS

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

What do the indicators cover?

Doing Business measures the ease of starting a business in an economy by recording all procedures officially required or commonly done in practice by an entrepreneur to start up and formally operate an industrial or commercial business—as well as the time and cost required to complete these procedures. It also records the paid-in minimum capital that companies must deposit before registration (or within 3 months). The ranking on the ease of starting a business is the simple average of the percentile rankings on the 4 component indicators: procedures, time, cost and paid-in minimum capital requirement.

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

- Is a limited liability company, located in the largest business city.
- Has between 10 and 50 employees.
- Conducts general commercial or industrial activities.
- Has a start-up capital of 10 times income per capita.
- Has a turnover of at least 100 times income per capita.
- Does not qualify for any special benefits.
- Does not own real estate.
- Is 100% domestically owned.

WHAT THE STARTING A BUSINESS INDICATORS MEASURE

Procedures to legally start and operate a company (number)

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

Registration in the economy's largest business city

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

Time required to complete each procedure (calendar days)

Does not include time spent gathering information

Each procedure starts on a separate day

Procedure completed once final document is received

No prior contact with officials

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

Official costs only, no bribes

No professional fees unless services required by law

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

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

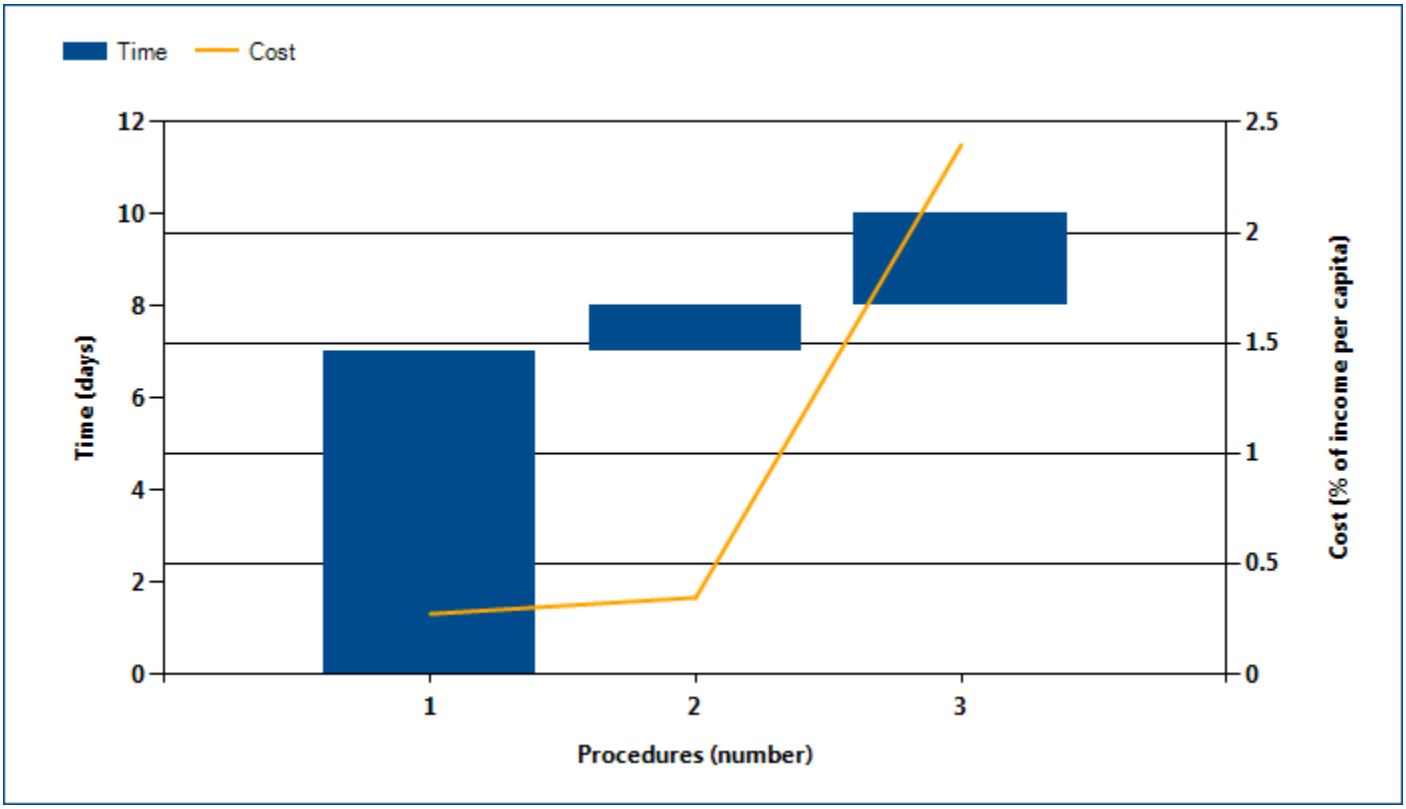
STARTING A BUSINESS

Where does the economy stand today?

What does it take to start a business in Taiwan, China? According to data collected by *Doing Business*, starting a business there requires 3 procedures, takes 10 days, costs 2.4% of income per capita and requires paid-in minimum capital of 0.0% of income per capita (figure 2.1).

Figure 2.1 What it takes to start a business in Taiwan, China

Paid-in minimum capital (% of income per capita): 0.0

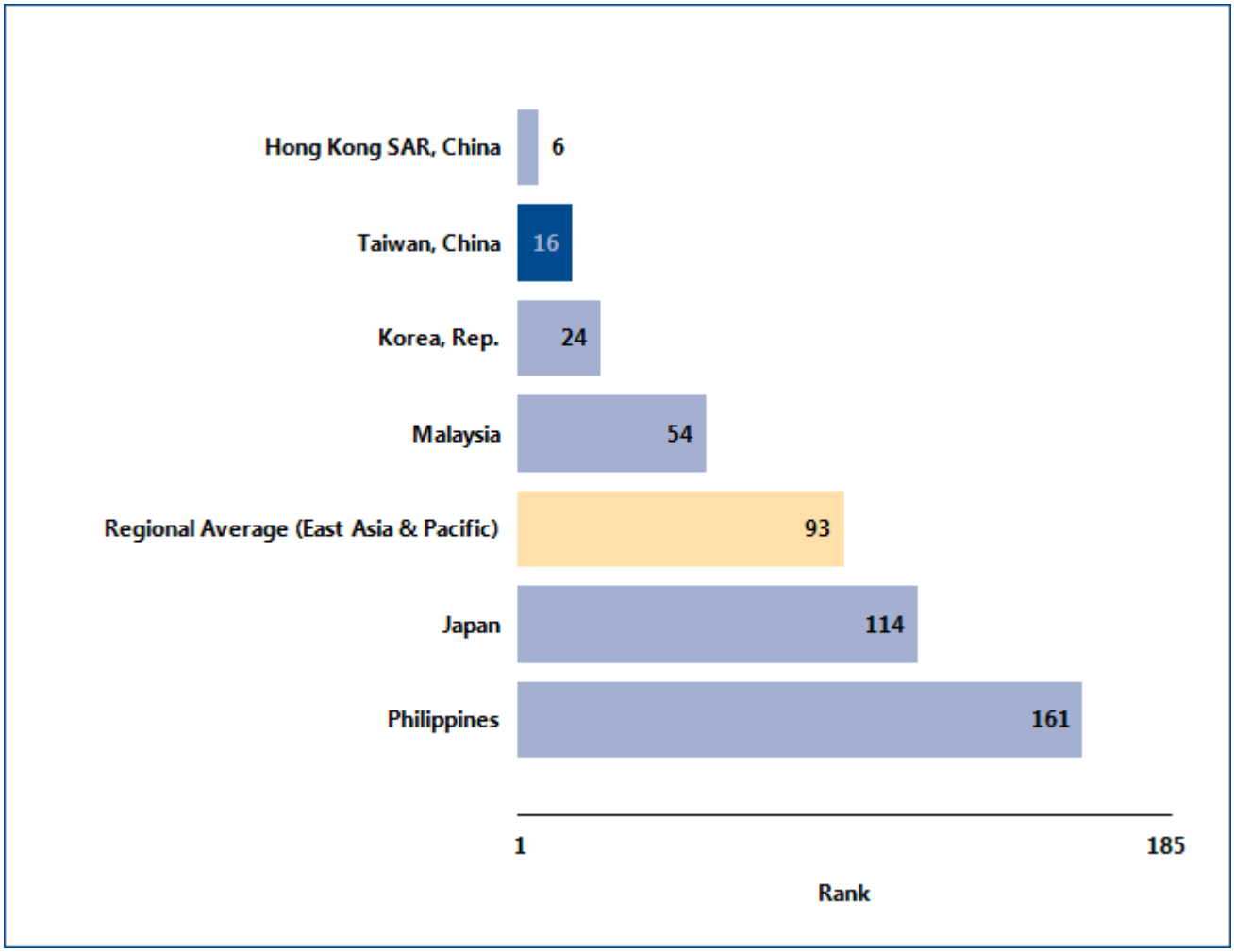


Note: Time shown in the figure above may not reflect simultaneity of procedures. For more information on the methodology of the starting a business indicators, see the *Doing Business* website (http://www.doingbusiness.org). For details on the procedures reflected here, see the summary at the end of this chapter.
Source: Doing Business database.

STARTING A BUSINESS

Globally, Taiwan, China stands at 16 in the ranking of 185 economies on the ease of starting a business (figure 2.2). The rankings for comparator economies and the regional average ranking provide other useful information for assessing how easy it is for an entrepreneur in Taiwan, China to start a business.

Figure 2.2 How Taiwan, China and comparator economies rank on the ease of starting a business



Source: Doing Business database.

STARTING A BUSINESS

What are the changes over time?

While the most recent *Doing Business* data reflect how easy (or difficult) it is to start a business in Taiwan, China today, data over time show which aspects of the process have changed—and which have not (table 2.1). That can help identify where the potential for improvement is greatest.

Table 2.1 The ease of starting a business in Taiwan, China over time
By *Doing Business* report year

Indicator	DB2004	DB2005	DB2006	DB2007	DB2008	DB2009	DB2010	DB2011	DB2012	DB2013
Rank	..	..	..	..	..	..	..	..	15	16
Procedures (number)	8	8	8	8	8	8	6	6	3	3
Time (days)	48	48	48	48	48	42	23	15	10	10
Cost (% of income per capita)	5.9	5.7	4.4	4.3	4.2	4.0	3.9	4.0	2.4	2.4
Paid-in Min. Capital (% of income per capita)	210.8	204.6	192.9	188.9	181.8	173.1	0.0	0.0	0.0	0.0

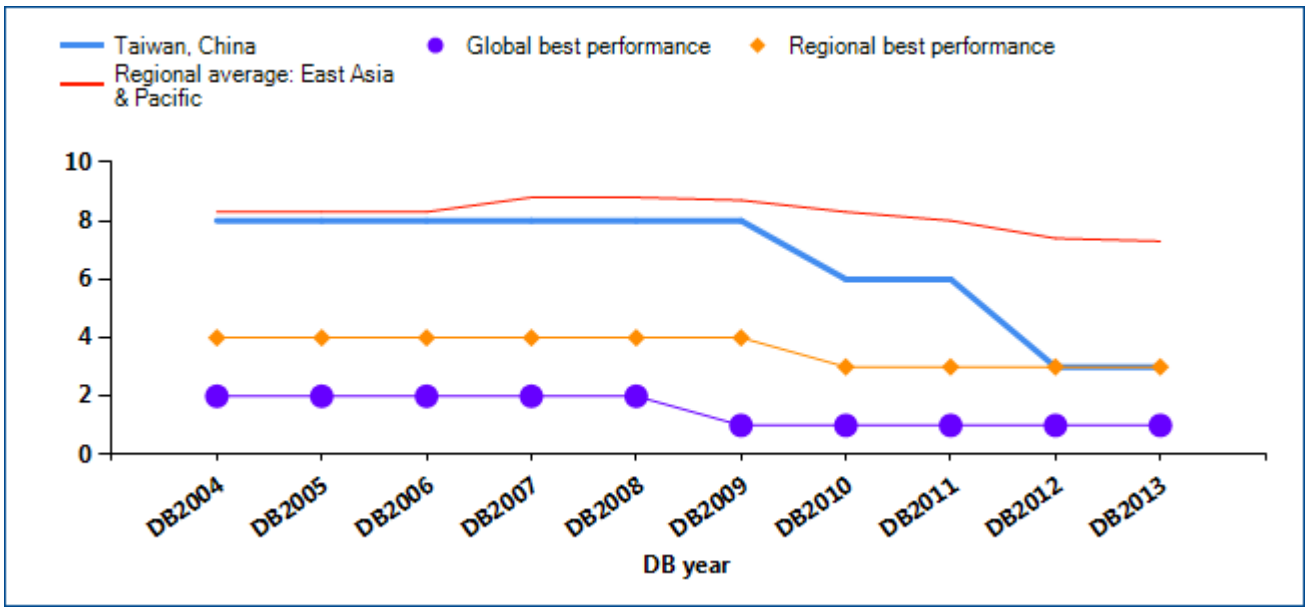
Note: n.a. = not applicable (the economy was not included in *Doing Business* for that year). DB2012 rankings shown are not last year's published rankings but comparable rankings for DB2012 that capture the effects of such factors as data corrections and the addition of 2 economies (Barbados and Malta) to the sample this year.
Source: Doing Business database.

STARTING A BUSINESS

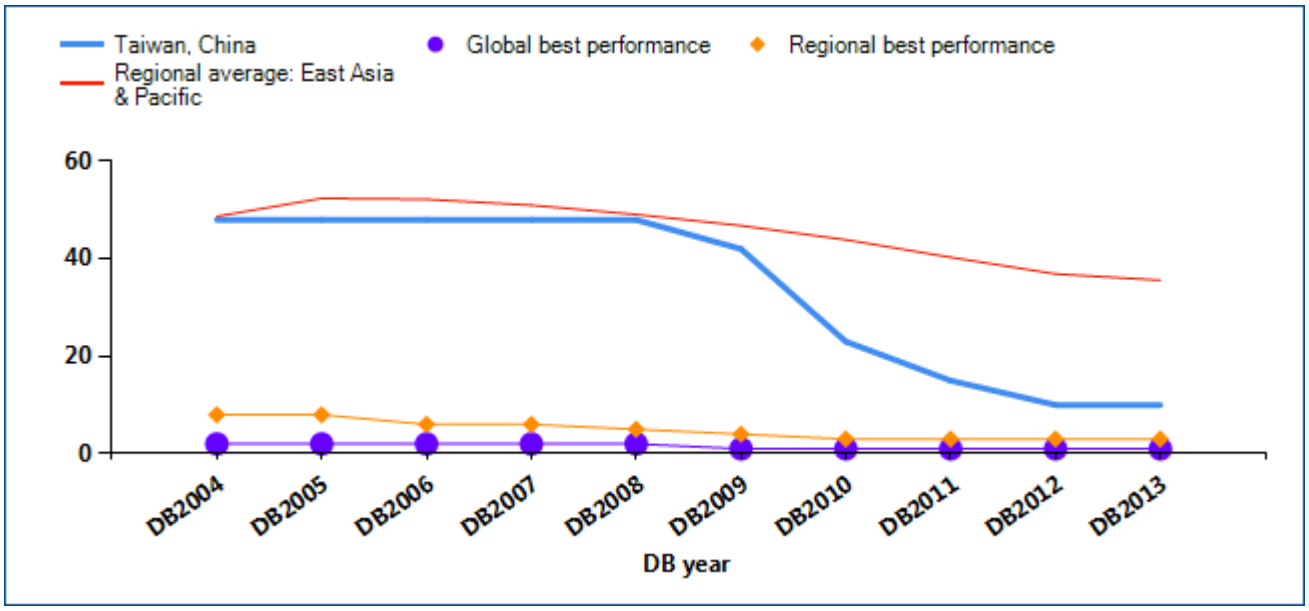
Equally helpful may be the benchmarks provided by the economies that over time have had the best performance regionally or globally on the procedures, time, cost or paid-in minimum capital required to start a business (figure 2.3). These benchmarks help show what is possible in making it easier to start a business. And changes in regional averages can show where Taiwan, China is keeping up—and where it is falling behind.

Figure 2.3 Has starting a business become easier over time?

Procedures (number)

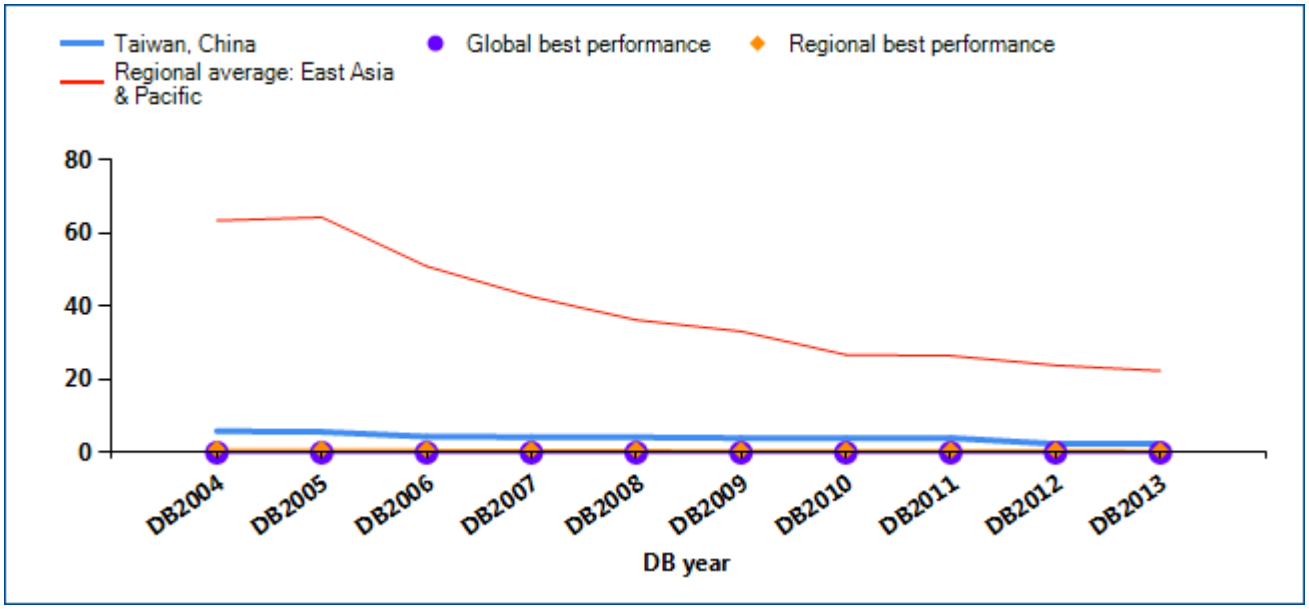


Time (days)

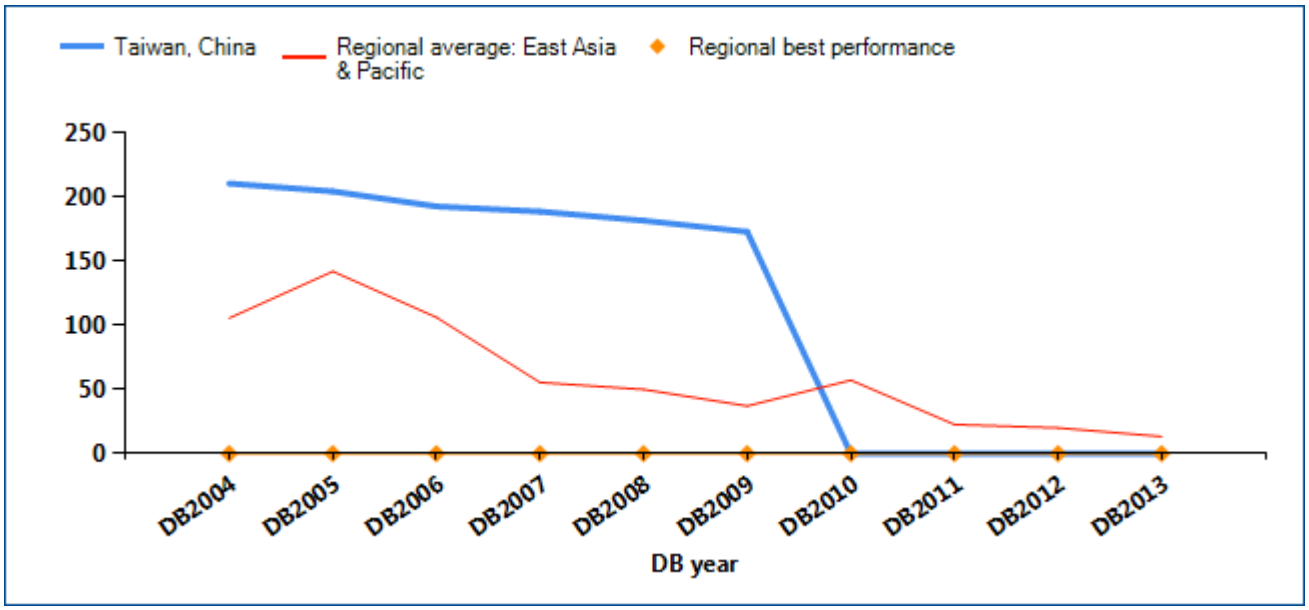


STARTING A BUSINESS

Cost (% of income per capita)



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



Note: Ninety-one economies globally have no paid-in minimum capital requirement.
Source: Doing Business database.

STARTING A BUSINESS

Economies around the world have taken steps making it easier to start a business—streamlining procedures by setting up a one-stop shop, making procedures simpler or faster by introducing technology and reducing or eliminating minimum capital requirements. Many have undertaken business registration reforms in stages—and they often are part of a larger regulatory reform program. Among the benefits have been greater firm satisfaction and savings and more registered businesses, financial resources and job opportunities.

What business registration reforms has *Doing Business* recorded in Taiwan, China (table 2.2)?

Table 2.2 How has Taiwan, China made starting a business easier—or not?
By *Doing Business* report year

DB year	Reform
DB2008	No reform as measured by Doing Business.
DB2009	No reform as measured by Doing Business.
DB2010	Taiwan (China) eased business start up process by abolishing the minimum capital requirement and introducing time limits.
DB2011	Taiwan (China) eased business start-up by reducing the time required to check company names, register retirement plans and apply for health, pension and labor insurance.
DB2012	Taiwan (China) made starting a business easier by implementing an online one-stop shop for business registration.
DB2013	No reform as measured by Doing Business.

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

STARTING A BUSINESS

What are the details?

Underlying the indicators shown in this chapter for Taiwan, China is a set of specific procedures—the bureaucratic and legal steps that an entrepreneur must complete to incorporate and register a new firm. These are identified by *Doing Business* through collaboration with relevant local professionals and the study of laws, regulations and publicly available information on business entry in that economy. Following is a detailed summary of those procedures, along with the associated time and cost. These procedures are those that apply to a company matching the standard assumptions (the "standardized company") used by *Doing Business* in collecting the data (see the section in this chapter on what the indicators measure).

STANDARDIZED COMPANY

City: **Taipei**

Legal Form: **Private Company Limited By Shares**

Paid in Minimum Capital Requirement: **None**

Start-up Capital: **10 times GNI per capita**

Summary of procedures for starting a business in Taiwan, China—and the time and cost

No.	Procedure	Time to complete	Cost to complete
1	**Use the online application (http://onestop.nat.gov.tw) to search the name, apply for incorporation and tax registration, apply for Labor Insurance, National Health Insurance and Pension Plan Report with the Bureau of Labor Insurance and register for work** The review period has been shortened to 2 days. therefore the procedure now takes one day for search, reservation and application. Then the government officials are required to review the application on the second day. At the end of the second day, (if approved) the approval is ready, and the applicant can pick it up from the Ministry of Economic Affairs (MOEA). Otherwise, it is mailed to the applicant, in which case it takes up to four days to receive the confirmation. The company can search the availability of the company name and check the legality of planned business online. The articles of incorporation for a private limited company must include the company name, business purpose, shareholders' contributions, profit-allocation ratio, location of offices, number and names of directors, manner of issuing public announcements, and the date the articles of incorporation were adopted. The application for a taxpayer's identification number is done at the same time. The Labor Insurance Bureau now adopts a three-in-one consolidation application (i.e., the labour insurance application, national health insurance application and the pension plan appropriation application), so the Labor Insurance Bureau and National Health Insurance Bureau can now review and process the application at the same time, if all in	7 days	NTD 150 (online search) or NTD 300 (governement fee) + 0.025% of capital (in case the registration fee payable is less than NTD 1,000, the registration fee shall be NTD 1,000)

No.	Procedure	Time to complete	Cost to complete
	order, the Bureau can grant the application in 5 - 7 business days. All firms may apply for national health insurance (NHI) regardless of the number of employees, but only companies with five or more employees may apply for labor insurance (LI). National health insurance, labor insurance, and the pension plan report can be filed with one consolidated form. Forms can be downloaded from the Bureau of Labor Insurance Web site.		
2	**Make a company seal** Company registration documents and deeds must be sealed (chopped). A set of company seals should be prepared for registration, including the name of the company, and name of the chairperson of the board of directors. These seals are required to be used for future company updates.	1 day	NTD 450 (depending on the number/ material used, each range from NTD 450 to NTD 1000)
3	**submit a CPA audit report showing that the amount of capital invested is sufficient to cover company establishment cost** Although the minimum capital requirement was removed, according to the Ministry of Economic Affairs, in place of the minimum capital requirement , now there is a requirement to submitt a CPA audit report showing the invested capital will cover the costs of establishing a company to the Ministry of Economic Affairs.	2 days	NTD 5,000 - 20,000, fee varies across firms

* Takes place simultaneously with another procedure.
Source: Doing Business database.

DEALING WITH CONSTRUCTION PERMITS

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

What do the indicators cover?

Doing Business records the procedures, time and cost for a business to obtain all the necessary approvals to build a simple commercial warehouse in the economy's largest business city, connect it to basic utilities and register the property so that it can be used as collateral or transferred to another entity.

The ranking on the ease of dealing with construction permits is the simple average of the percentile rankings on its component indicators: procedures, time and cost.

To make the data comparable across economies, *Doing Business* uses several assumptions about the business and the warehouse, including the utility connections.

The business:

- Is a limited liability company operating in the construction business and located in the largest business city.
- Is domestically owned and operated.
- Has 60 builders and other employees.

The warehouse:

- Is a new construction (there was no previous construction on the land).
- Has complete architectural and technical plans prepared by a licensed architect.

WHAT THE DEALING WITH CONSTRUCTION PERMITS INDICATORS MEASURE

Procedures to legally build a warehouse (number)

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

Completing all required notifications and receiving all necessary inspections

Obtaining utility connections for water, sewerage and a fixed telephone line

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

Procedure completed once final document is received

No prior contact with officials

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

Official costs only, no bribes

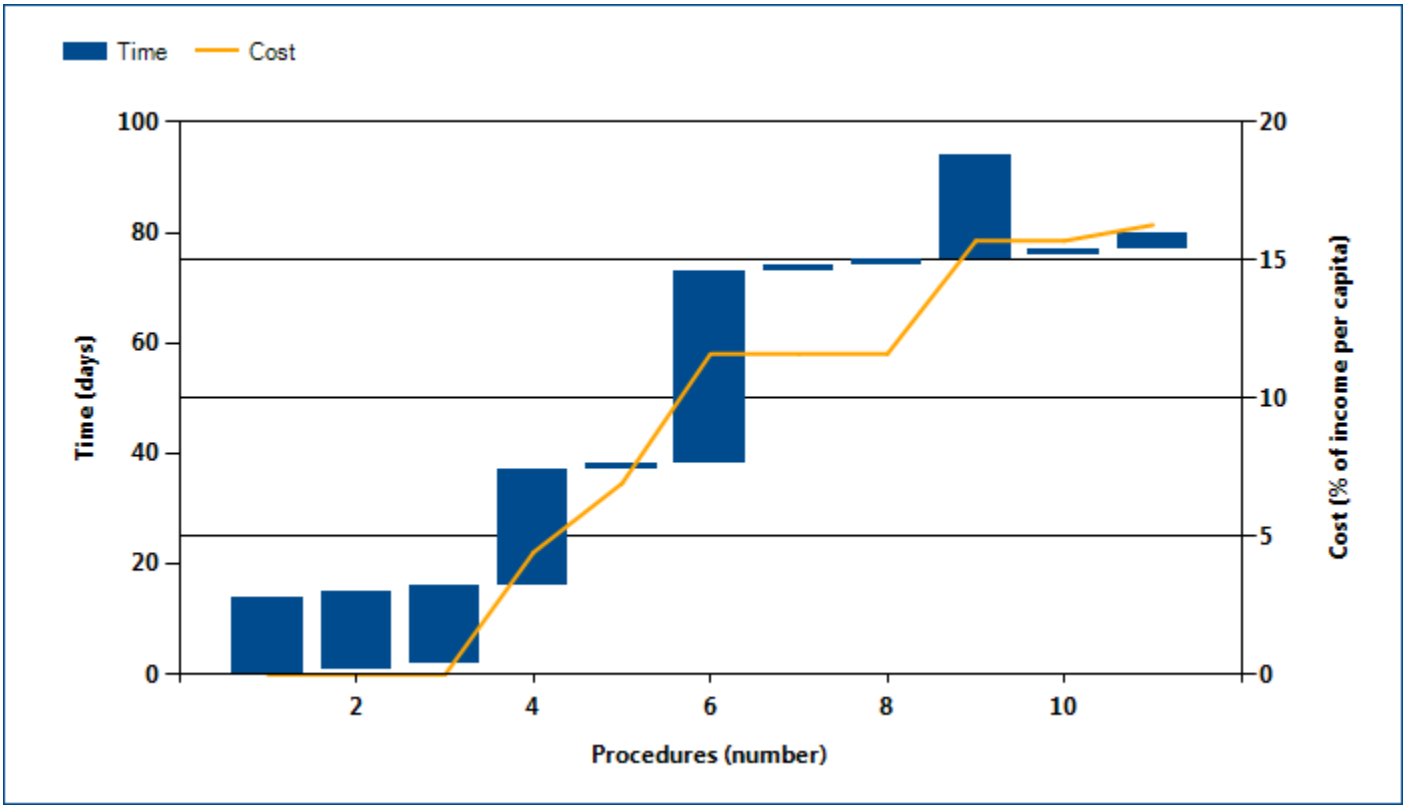
- Will be connected to water, sewerage (sewage system, septic tank or their equivalent) and a fixed telephone line. The connection to each utility network will be 10 meters (32 feet, 10 inches) long.
- Will be used for general storage, such as of books or stationery (not for goods requiring special conditions).
- Will take 30 weeks to construct (excluding all delays due to administrative and regulatory requirements).

DEALING WITH CONSTRUCTION PERMITS

Where does the economy stand today?

What does it take to comply with the formalities to build a warehouse in Taiwan, China? According to data collected by *Doing Business*, dealing with construction permits there requires 11 procedures, takes 94 days and costs 16.3% of income per capita (figure 3.1).

Figure 3.1 What it takes to comply with formalities to build a warehouse in Taiwan, China

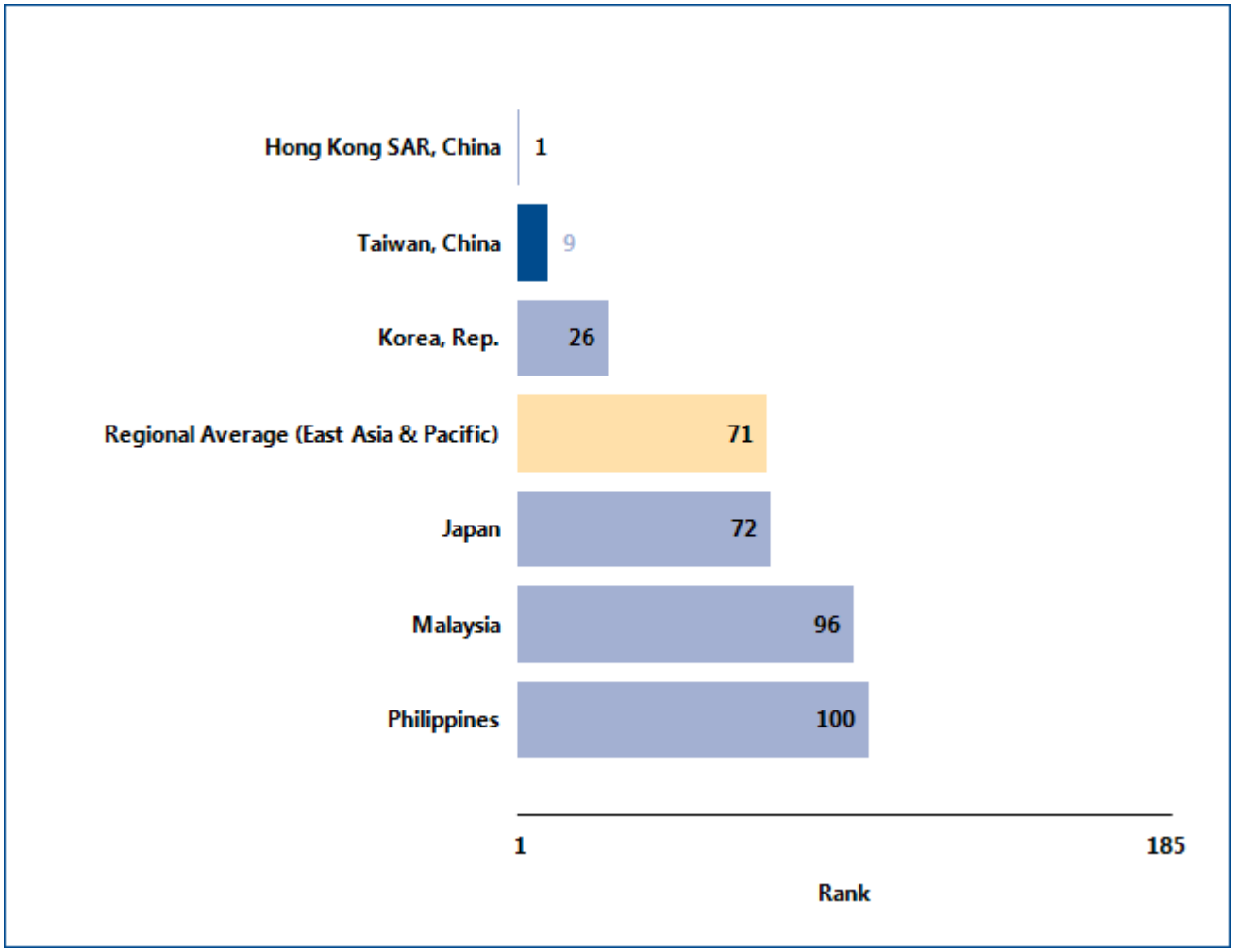


Note: Time shown in the figure above may not reflect simultaneity of procedures. For more information on the methodology of the dealing with construction permits indicators, see the *Doing Business* website (http://www.doingbusiness.org). For details on the procedures reflected here, see the summary at the end of this chapter.
Source: Doing Business database.

DEALING WITH CONSTRUCTION PERMITS

Globally, Taiwan, China stands at 9 in the ranking of 185 economies on the ease of dealing with construction permits (figure 3.2). The rankings for comparator economies and the regional average ranking provide other useful information for assessing how easy it is for an entrepreneur in Taiwan, China to legally build a warehouse.

Figure 3.2 How Taiwan, China and comparator economies rank on the ease of dealing with construction permits



Source: Doing Business database.

DEALING WITH CONSTRUCTION PERMITS

What are the changes over time?

While the most recent *Doing Business* data reflect how easy (or difficult) it is to deal with construction permits in Taiwan, China today, data over time show which aspects of the process have changed—and which have not (table 3.1). That can help identify where the potential for improvement is greatest.

Table 3.1 The ease of dealing with construction permits in Taiwan, China over time
By *Doing Business* report year

Indicator	DB2006	DB2007	DB2008	DB2009	DB2010	DB2011	DB2012	DB2013
Rank	..	..	..	..	..	..	76	9
Procedures (number)	25	25	25	25	25	25	25	11
Time (days)	139	139	139	139	139	139	125	94
Cost (% of income per capita)	21.4	21.0	20.2	19.2	19.7	19.8	18.2	16.3

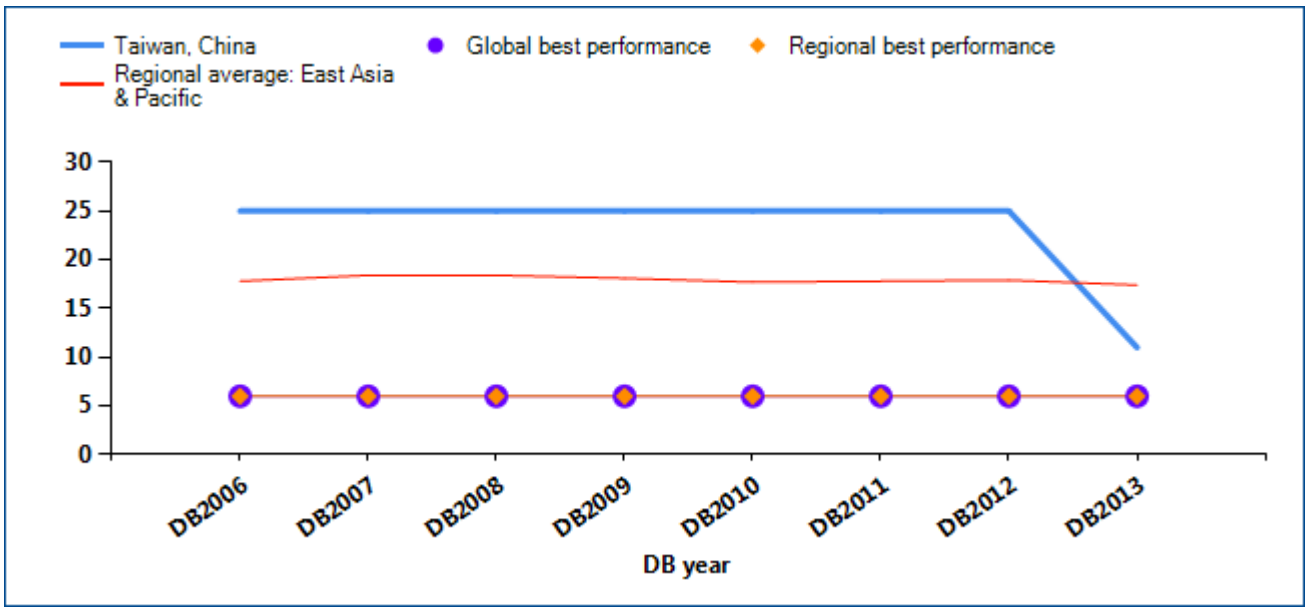
Note: n.a. = not applicable (the economy was not included in *Doing Business* for that year). DB2012 rankings shown are not last year's published rankings but comparable rankings for DB2012 that capture the effects of such factors as data corrections and the addition of 2 economies (Barbados and Malta) to the sample this year. For more information on "no practice" marks, see the data notes.
Source: Doing Business database.

DEALING WITH CONSTRUCTION PERMITS

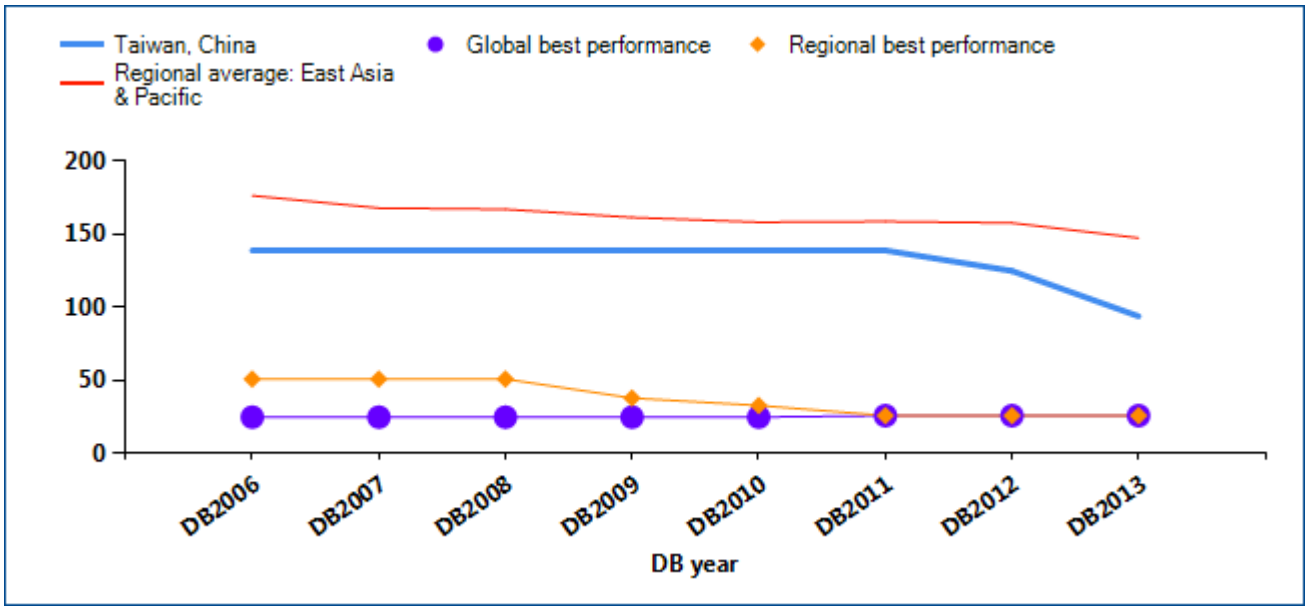
Equally helpful may be the benchmarks provided by the economies that over time have had the best performance regionally or globally on the procedures, time or cost required to deal with construction permits (figure 3.3). These benchmarks help show what is possible in making it easier to deal with construction permits. And changes in regional averages can show where Taiwan, China is keeping up—and where it is falling behind.

Figure 3.3 Has dealing with construction permits become easier over time?

Procedures (number)

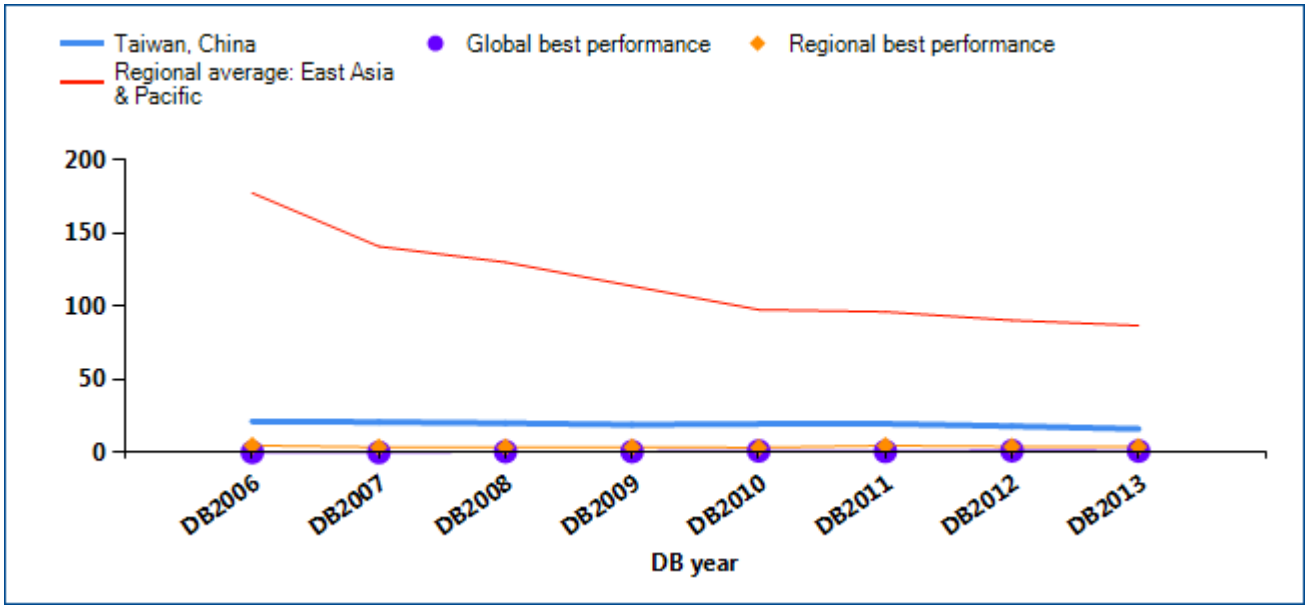


Time (days)



DEALING WITH CONSTRUCTION PERMITS

Cost (% of income per capita)



Source: Doing Business database.

DEALING WITH CONSTRUCTION PERMITS

Smart regulation ensures that standards are met while making compliance easy and accessible to all. Coherent and transparent rules, efficient processes and adequate allocation of resources are especially important in sectors where safety is at stake. Construction is one of them. In an effort to ensure building safety while keeping compliance costs reasonable, governments around the world have worked on consolidating permitting requirements. What construction permitting reforms has *Doing Business* recorded in Taiwan, China (table 3.2)?

Table 3.2 How has Taiwan, China made dealing with construction permits easier—or not?
By *Doing Business* report year

DB year	Reform
DB2008	No reform as measured by Doing Business.
DB2009	No reform as measured by Doing Business.
DB2010	No reform as measured by Doing Business.
DB2011	No reform as measured by Doing Business.
DB2012	Taiwan (China) made dealing with construction permits easier by creating a one-stop center.
DB2013	Taiwan, China, made dealing with construction permits easier by introducing a risk-based and self-regulatory inspection system and improving operational features of the one-stop shop for building permits.

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

DEALING WITH CONSTRUCTION PERMITS

What are the details?

The indicators reported here for Taiwan, China are based on a set of specific procedures—the steps that a company must complete to legally build a warehouse—identified by *Doing Business* through information collected from experts in construction licensing, including architects, construction lawyers, construction firms, utility service providers and public officials who deal with building regulations. These procedures are those that apply to a company and structure matching the standard assumptions used by *Doing Business* in collecting the data (see the section in this chapter on what the indicators cover).

BUILDING A WAREHOUSE

City :	**Taipei**
Estimated Warehouse Value :	**TWD 14,307,000**

The procedures, along with the associated time and cost, are summarized below.

Summary of procedures for dealing with construction permits in Taiwan, China —and the time and cost

No.	Procedure	Time to complete	Cost to complete
1	**Obtain information about infrastructure from the water company**	14 days	no charge
2	*** Obtain information about electricity infrastructure from electricity provider**	14 days	no charge
3	*** Obtain information about telecommunications infrastructure from telecom company**	14 days	no charge
4	**Request and obtain for building permit from the city government at the One Stop Shop** With the One-Stop Shop introduced in March 2011, becoming fully operational in early 2012, builders now can obtain several approvals in one place. The building cost is assumed here to be TWD 15,200.00 per sq. m. for steel structures. Hence the building cost of the warehouse in this case is TWD 19,769,120.00. The cost of obtaining a building permit is 0.1% of the building cost estimated by the city government.	21 days	TWD 27,019
5	**Report the start date and present construction plan to the city government and pay the city government air pollution protection fee before starting construction**	1 day	TWD 15,217
6	**Request and obtain post-contruction approvals and registrations at the One Stop Shop** The Department of Land in City Government issues a building/land ownership certificate on the basis of the building surface area calculation prepared by the architect and approved by the Department	35 days	TWD 28,614

No.	Procedure	Time to complete	Cost to complete
	of Building Administration.		
7	**Apply for water supply from a local water company**	1 day	no charge
8	**Receive inspection from water company**	1 day	no charge
9	**Obtain connection to water** The whole process (from application to connection) may take 14 -- 28 days.	19 days	TWD 25,000
10	*** Request telephone line**	1 day	no charge
11	*** Obtain telephone line**	3 days	TWD 3,500

* Takes place simultaneously with another procedure.
Source: Doing Business database.

GETTING ELECTRICITY

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

What do the indicators cover?

Doing Business records all procedures required for a local business to obtain a permanent electricity connection and supply for a standardized warehouse, as well as the time and cost to complete them. These procedures include applications and contracts with electricity utilities, clearances from other agencies and the external and final connection works. The ranking on the ease of getting electricity is the simple average of the percentile rankings on its component indicators: procedures, time and cost. To make the data comparable across economies, several assumptions are used.

The warehouse:

- Is located in the economy's largest business city, in an area where other warehouses are located.
- Is not in a special economic zone where the connection would be eligible for subsidization or faster service.
- Has road access. The connection works involve the crossing of a road or roads but are carried out on public land.
- Is a new construction being connected to electricity for the first time.
- Has 2 stories, both above ground, with a total surface of about 1,300.6 square meters (14,000 square feet), and is built on a plot of 929 square meters (10,000 square feet).

The electricity connection:

- Is a 3-phase, 4-wire Y, 140-kilovolt-ampere (kVA) (subscribed capacity) connection.
- Is 150 meters long.
- Is to either the low-voltage or the medium-voltage distribution network and either overhead or underground, whichever is more common in the economy and in the area where the warehouse is located. The length of any connection in the customer's private domain is negligible.
- Involves installing one electricity meter. The monthly electricity consumption will be 0.07 gigawatt-hour (GWh). The internal electrical wiring has been completed.

WHAT THE GETTING ELECTRICITY INDICATORS MEASURE

Procedures to obtain an electricity connection (number)

Submitting all relevant documents and obtaining all necessary clearances and permits

Completing all required notifications and receiving all necessary inspections

Obtaining external installation works and possibly purchasing material for these works

Concluding any necessary supply contract and obtaining final supply

Time required to complete each procedure (calendar days)

Is at least 1 calendar day

Each procedure starts on a separate day

Does not include time spent gathering information

Reflects the time spent in practice, with little follow-up and no prior contact with officials

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

Official costs only, no bribes

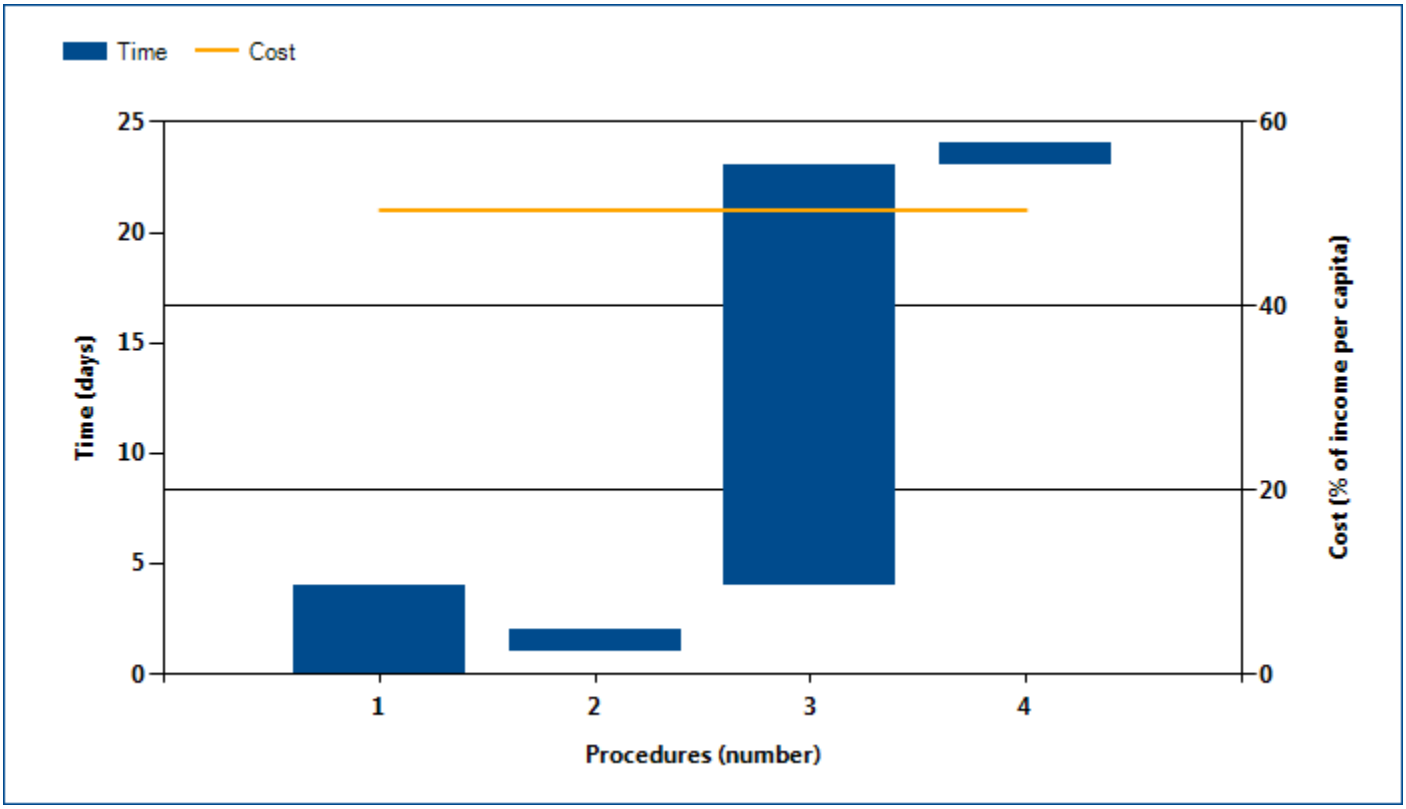
Excludes value added tax

GETTING ELECTRICITY

Where does the economy stand today?

What does it take to obtain a new electricity connection in Taiwan, China? According to data collected by *Doing Business,* getting electricity there requires 4 procedures, takes 24 days and costs 50.4% of income per capita (figure 4.1).

Figure 4.1 What it takes to obtain an electricity connection in Taiwan, China

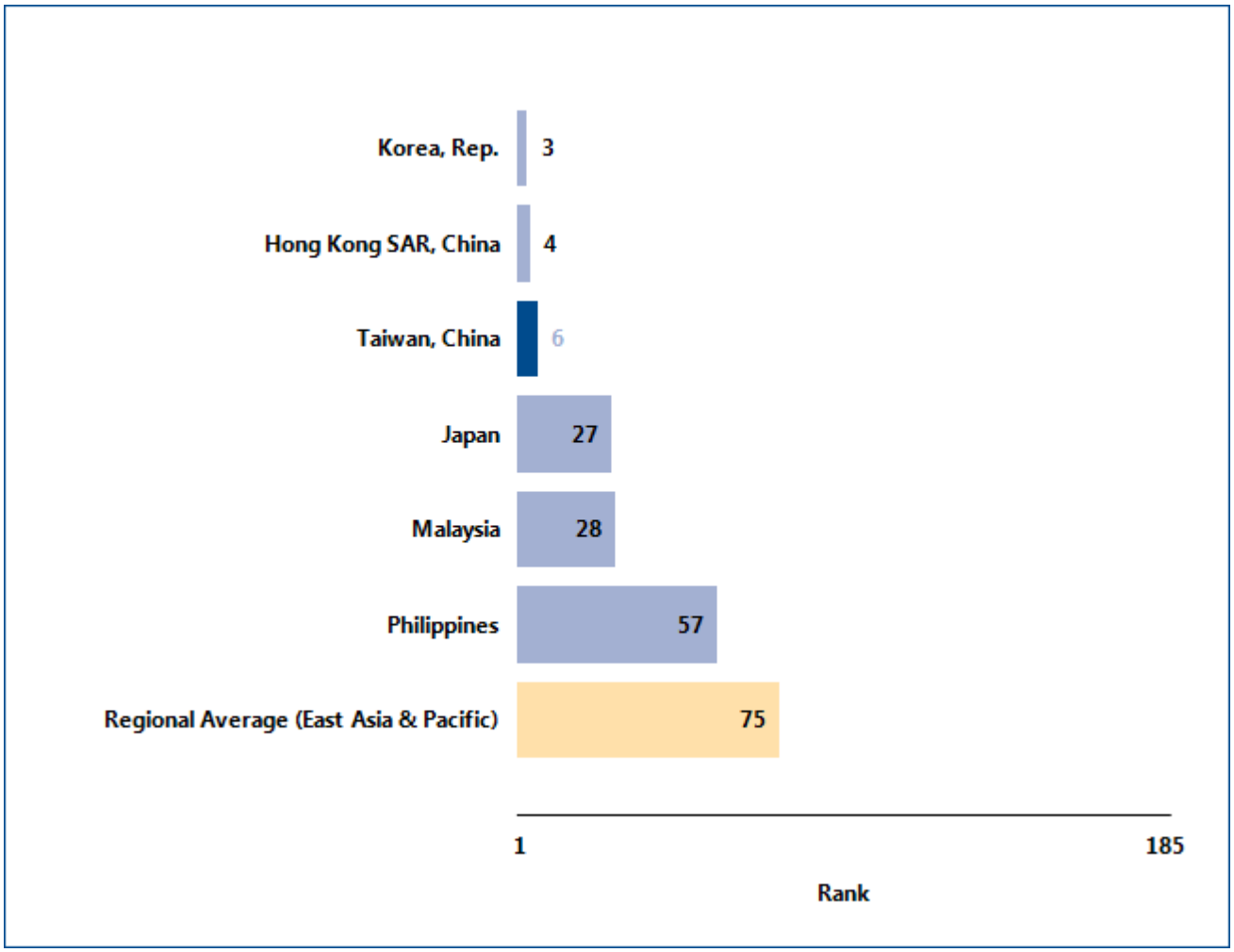


Note: Time shown in the figure above may not reflect simultaneity of procedures. For more information on the methodology of the getting electricity indicators, see the *Doing Business* website (http://www.doingbusiness.org). For details on the procedures reflected here, see the summary at the end of this chapter.
Source: Doing Business database.

GETTING ELECTRICITY

Globally, Taiwan, China stands at 6 in the ranking of 185 economies on the ease of getting electricity (figure 4.2). The rankings for comparator economies and the regional average ranking provide another perspective in assessing how easy it is for an entrepreneur in Taiwan, China to connect a warehouse to electricity.

Figure 4.2 How Taiwan, China and comparator economies rank on the ease of getting electricity



Source: Doing Business database.

GETTING ELECTRICITY

Even more helpful than rankings on the ease of getting electricity may be the indicators underlying those rankings (table 4.1). And regional and global best performers on these indicators may provide useful benchmarks.

Table 4.1 The ease of getting electricity in Taiwan, China

Indicator	Taiwan, China DB2013	Taiwan, China DB2012	Best performer in East Asia & Pacific DB2013	Best performer globally DB2013
Rank	6	5	Hong Kong SAR, China (4)	Iceland (1)
Procedures (number)	4	4	Timor-Leste (3)	Germany (3)*
Time (days)	24	24	Taiwan, China (24)	Germany (17)
Cost (% of income per capita)	50.4	50.7	Hong Kong SAR, China (1.6)	Japan (0.0)

Note: DB2012 rankings shown are not last year's published rankings but comparable rankings for DB2012 that capture the effects of such factors as data corrections and the addition of 2 economies (Barbados and Malta) to the sample this year.
* Two or more economies share the top ranking on this indicator. For a list of these economies, see the *Doing Business* website (http://www.doingbusiness.org).
Source: Doing Business database.

GETTING ELECTRICITY

Obtaining an electricity connection is essential to enable a business to conduct its most basic operations. In many economies the connection process is complicated by the multiple laws and regulations involved—covering service quality, general safety, technical standards, procurement practices and internal wiring installations. In an effort to ensure safety in the connection process while keeping connection costs reasonable, governments around the world have worked to consolidate requirements for obtaining an electricity connection. What reforms in getting electricity has *Doing Business* recorded in Taiwan, China (table 4.2)?

Table 4.2 How has Taiwan, China made getting electricity easier—or not?
By *Doing Business* report year

DB year	Reform
DB2012	No reform as measured by Doing Business.
DB2013	No reform as measured by Doing Business.

Source: Doing Business database.

GETTING ELECTRICITY

What are the details?

The indicators reported here for Taiwan, China are based on a set of specific procedures—the steps that an entrepreneur must complete to get a warehouse connected to electricity by the local distribution utility—identified by *Doing Business*. Data are collected from the distribution utility, then completed and verified by electricity regulatory agencies and independent professionals such as electrical engineers, electrical contractors and construction companies. The electricity distribution utility surveyed is the one serving the area (or areas) in which warehouses are located. If there is a choice of distribution utilities, the one serving the largest number of customers is selected.

OBTAINING AN ELECTRICITY CONNECTION

City:	**Taipei**
Name of Utility:	**Taiwan Power Company**

The procedures are those that apply to a warehouse and electricity connection matching the standard assumptions used by *Doing Business* in collecting the data (see the section in this chapter on what the indicators cover). The procedures, along with the associated time and cost, are summarized below.

Summary of procedures for getting electricity in Taiwan, China—and the time and cost

No.	Procedure	Time to complete	Cost to complete
1	**Submit an application for electricity connection and await completion of the design.** Customer fills out an application form and sends it or takes to TPC's branch and pays the fee for connection. The following documents are required: Application form, an indoors wires diagram, and the usage license or certificate approved by authorities of building. Then TPC will design the external line. Before the external connection works can start the utility has to finish the design for the works. Taipower charges Customer's Contribution in Aid of Construction Costs. It includes power line design, construction, meter installation and check of the internal wiring, labor costs. Customer's Contribution in Aid of Construction Costs = Minimum charge for installation + charges for extension Lines. In this case, when the customer submits an application at a TPC branch, TPC will estimate the Customer's Contribution in Aid of Construction Costs. Customer can pay the fee when they apply.	4 calendar days	TWD 307,860.0
2	*** Await external inspection by TPC required for the preparation of the estimate** The external inspection for the preparation of an estimate is required. Once the engineer has received the case, he will inspect and design the external line. He may contact the applicant to schedule the inspection if needed.	1 calendar day	no charge

No.	Procedure	Time to complete	Cost to complete
3	**Await completion of the external connection works by TPC's subcontractor** The contractor hired by the utility will complete the external connection work. All material is available in more than 50% of the cases. The customer doesn't have to buy any material for the external connection works. The excavation permit is obtained by the utility. It is obtained from the agency of the government that is in charge of the roads.	19 calendar days	no charge
4	**Await installation of the meter, internal wiring inspection by TPC and electricity starts flowing** The electrician who did the internal wiring submits a signed notification to the utility upon completion in which they guarantee it has been carried out according to the regulations. Then TPC will inspect the internal wiring after the external connection works are over. According to Article 43 of "The Electricity Act", " The installation of user electricity devices by electricity enterprises shall comply with relevant regulations provided by the central competent authority and electricity supply may only be connected after said devices have passed inspection. For electricity equipment already installed by the user, inspection shall be carried out with the result thereof recorded at least once every three years. In the event that non-conformity is found, a time period shall be specified for the user to make rectification." Taipower inspects the internal wiring and installs the meter after the external connection works are over. If the internal wiring check is passed, the meter will be installed and the electricity will start flowing.	1 calendar day	no charge

* Takes place simultaneously with another procedure.

Source: Doing Business database.

REGISTERING PROPERTY

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

What do the indicators cover?

Doing Business records the full sequence of procedures necessary for a business to purchase property from another business and transfer the property title to the buyer's name. The transaction is considered complete when it is opposable to third parties and when the buyer can use the property, use it as collateral for a bank loan or resell it. The ranking on the ease of registering property is the simple average of the percentile rankings on its component indicators: procedures, time and cost.

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

The parties (buyer and seller):

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

The property (fully owned by the seller):

- Has a value of 50 times income per capita. The sale price equals the value.
- 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.
- Has no mortgages attached and has been under the same ownership for the past 10 years.
- Consists of 557.4 square meters (6,000 square feet) of land and a 10-year-old, 2-story warehouse of 929 square meters (10,000 square feet). The warehouse is in good condition and complies with all safety standards, building codes and legal requirements. The property will be transferred in its entirety.

WHAT THE REGISTERING PROPERTY INDICATORS MEASURE

Procedures to legally transfer title on immovable property (number)

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

Registration in the economy's largest business city

Postregistration (for example, filing title with the municipality)

Time required to complete each procedure (calendar days)

Does not include time spent gathering information

Each procedure starts on a separate day

Procedure completed once final document is received

No prior contact with officials

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

Official costs only, no bribes

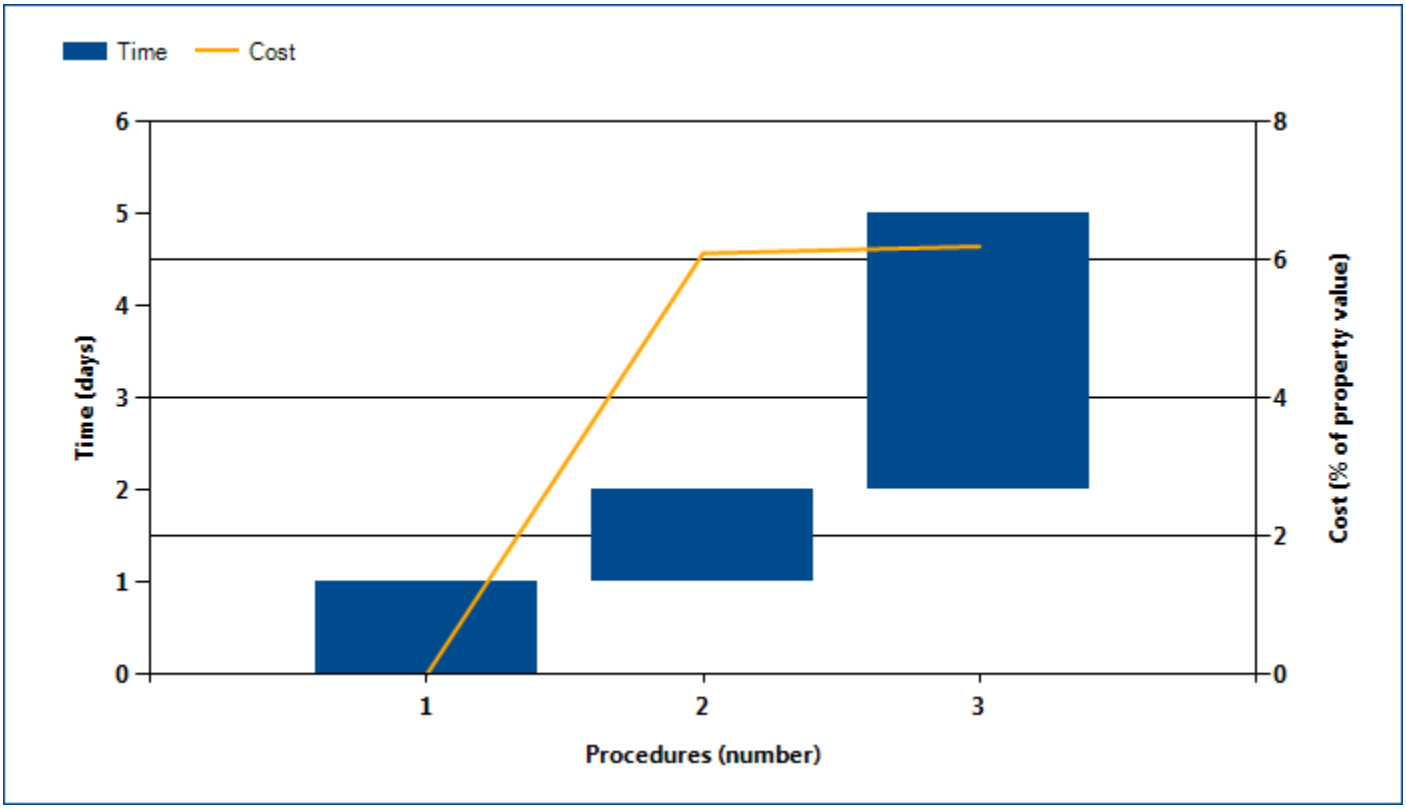
No value added or capital gains taxes included

REGISTERING PROPERTY

Where does the economy stand today?

What does it take to complete a property transfer in Taiwan, China? According to data collected by *Doing Business*, registering property there requires 3 procedures, takes 5 days and costs 6.2% of the property value (figure 5.1).

Figure 5.1 What it takes to register property in Taiwan, China

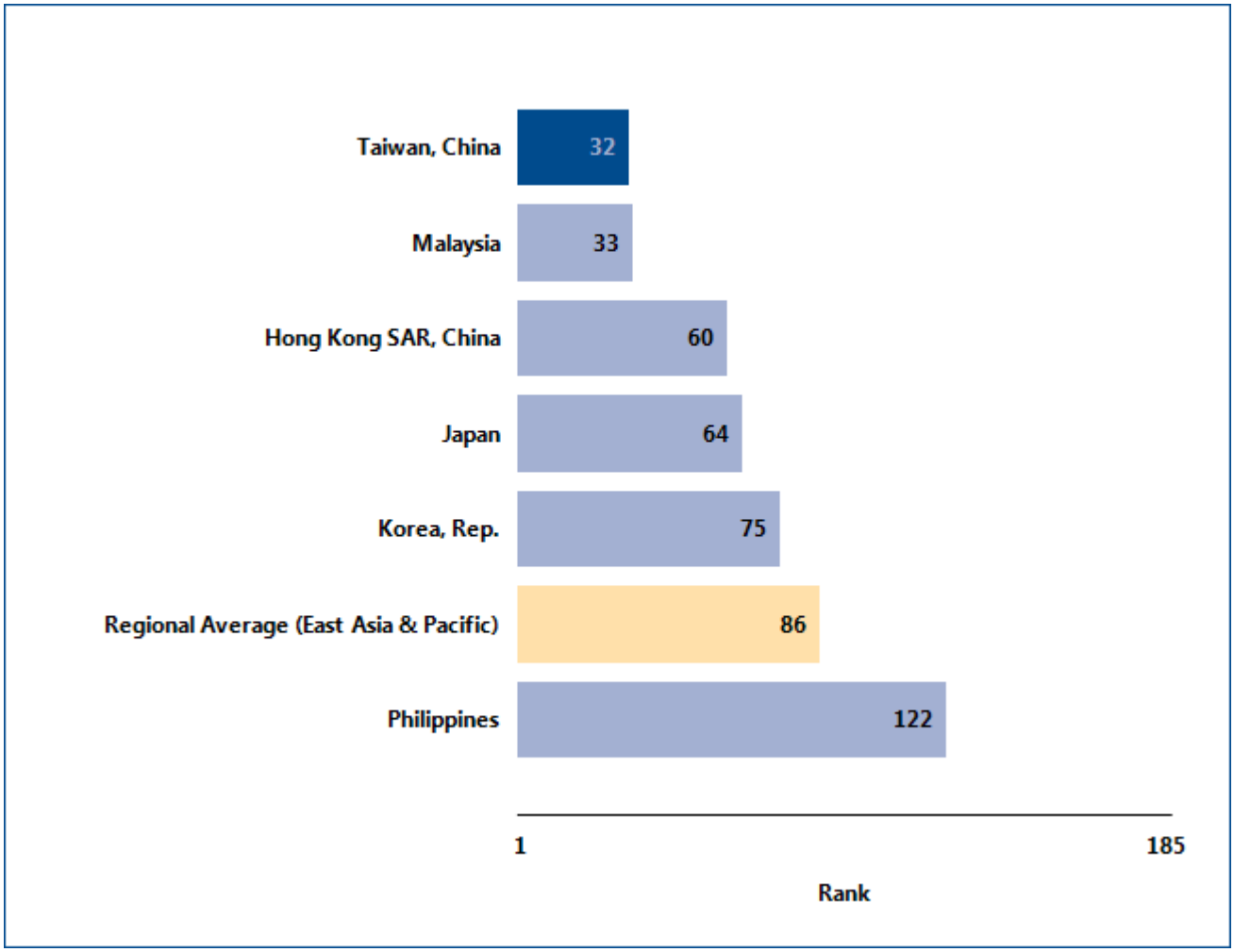


Note: Time shown in the figure above may not reflect simultaneity of procedures. For more information on the methodology of the registering property indicators, see the *Doing Business* website (http://www.doingbusiness.org). For details on the procedures reflected here, see the summary at the end of this chapter.
Source: Doing Business database.

REGISTERING PROPERTY

Globally, Taiwan, China stands at 32 in the ranking of 185 economies on the ease of registering property (figure 5.2). The rankings for comparator economies and the regional average ranking provide other useful information for assessing how easy it is for an entrepreneur in Taiwan, China to transfer property.

Figure 5.2 How Taiwan, China and comparator economies rank on the ease of registering property



Source: Doing Business database.

REGISTERING PROPERTY

What are the changes over time?

While the most recent *Doing Business* data reflect how easy (or difficult) it is to register property in Taiwan, China today, data over time show which aspects of the process have changed—and which have not (table 5.1). That can help identify where the potential for improvement is greatest.

Table 5.1 The ease of registering property in Taiwan, China over time
By *Doing Business* report year

Indicator	DB2005	DB2006	DB2007	DB2008	DB2009	DB2010	DB2011	DB2012	DB2013
Rank	..	..	..	..	..	..	..	31	32
Procedures (number)	3	3	3	3	3	3	3	3	3
Time (days)	5	5	5	5	5	5	5	5	5
Cost (% of property value)	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2

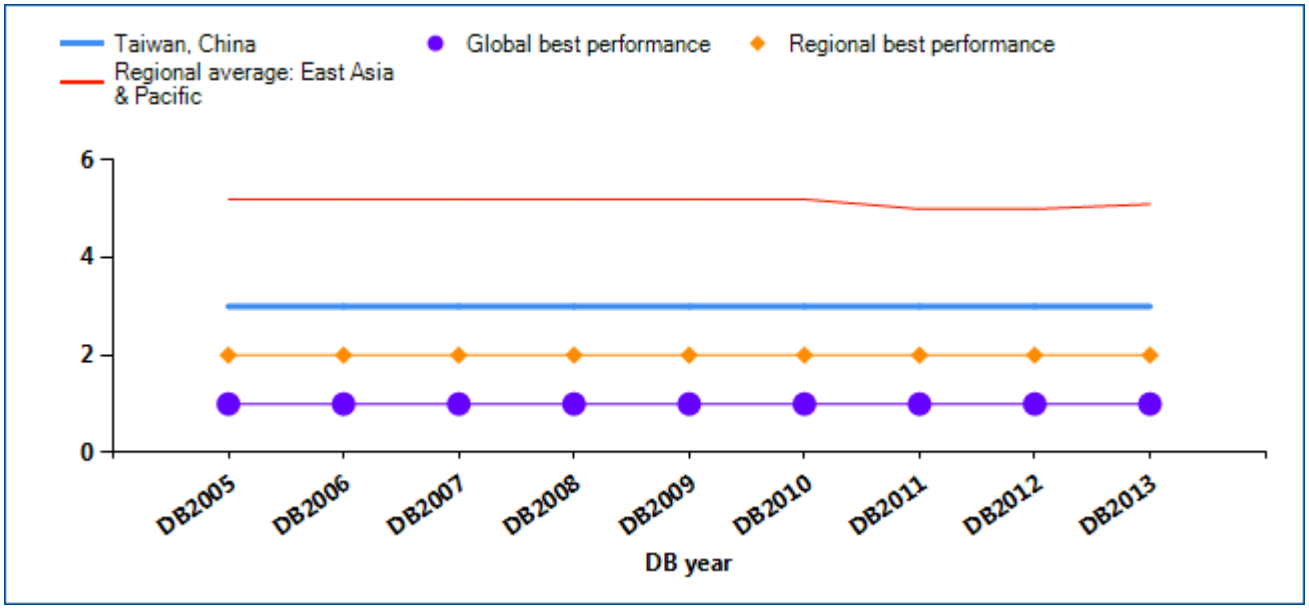
Note: n.a. = not applicable (the economy was not included in *Doing Business* for that year). DB2012 rankings shown are not last year's published rankings but comparable rankings for DB2012 that capture the effects of such factors as data corrections and the addition of 2 economies (Barbados and Malta) to the sample this year. For more information on "no practice" marks, see the data notes.
Source: Doing Business database.

REGISTERING PROPERTY

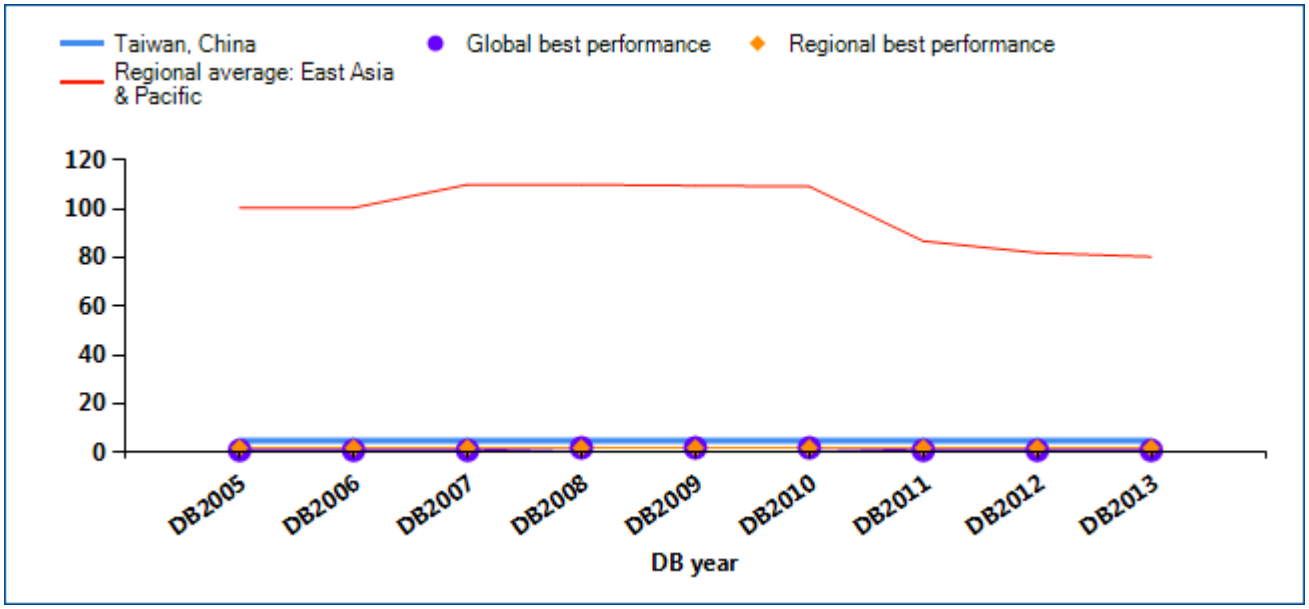
Equally helpful may be the benchmarks provided by the economies that over time have had the best performance regionally or globally on the procedures, time or cost required to complete a property transfer (figure 5.3). These benchmarks help show what is possible in making it easier to register property. And changes in regional averages can show where Taiwan, China is keeping up—and where it is falling behind.

Figure 5.3 Has registering property become easier over time?

Procedures (number)

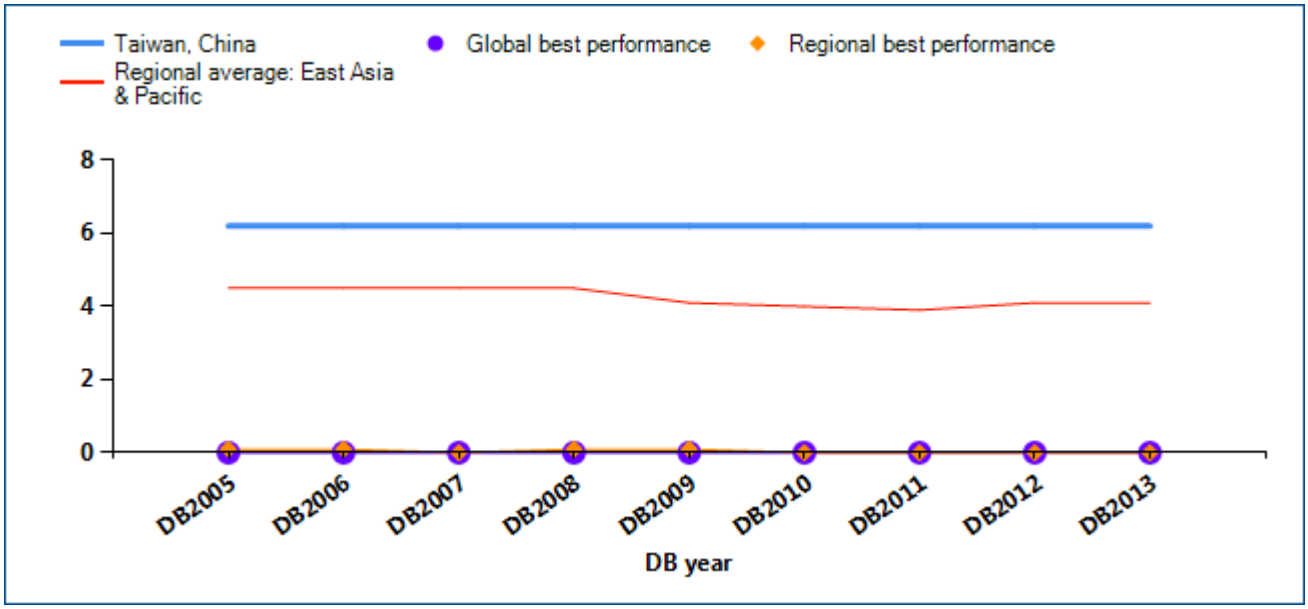


Time (days)



REGISTERING PROPERTY

Cost (% of property value)



Source: Doing Business database.

REGISTERING PROPERTY

Economies worldwide have been making it easier for entrepreneurs to register and transfer property—such as by computerizing land registries, introducing time limits for procedures and setting low fixed fees. Many have cut the time required substantially—enabling buyers to use or mortgage their property earlier. What property registration reforms has *Doing Business* recorded in Taiwan, China (table 5.2)?

Table 5.2 How has Taiwan, China made registering property easier—or not?
By *Doing Business* report year

DB year	Reform
DB2008	No reform as measured by Doing Business.
DB2009	No reform as measured by Doing Business.
DB2010	No reform as measured by Doing Business.
DB2011	No reform as measured by Doing Business.
DB2012	No reform as measured by Doing Business.
DB2013	No reform as measured by Doing Business.

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

REGISTERING PROPERTY

What are the details?

The indicators reported here are based on a set of specific procedures—the steps that a buyer and seller must complete to transfer the property to the buyer's name—identified by *Doing Business* through information collected from local property lawyers, notaries and property registries. These procedures are those that apply to a transaction matching the standard assumptions used by *Doing Business* in collecting the data (see the section in this chapter on what the indicators cover).

STANDARD PROPERTY TRANSFER

City:	**Taipei**
Property Value:	**TWD 30,517,945**

The procedures, along with the associated time and cost, are summarized below.

Summary of procedures for registering property in Taiwan, China—and the time and cost

No.	Procedure	Time to complete	Cost to complete
1	**Buyer researches the property rights and encumbrances registered against the property at the registry of titles** The buyer obtains copies of the land and building's registration from the electronic registration database. Each page costs TWD 20.	1 day (a few hours in person at the registry or 3 days by mail)	TWD 20 per page
2	**Buyer pays the Deed tax at the Municipality** The Deed tax is 6% of the standard property value, and buyer pays it at the Municipality. Seller pays the Land value increase tax. As a result, Taiwan government (Real-estate Valuation Committee) issues so-called "standard" valuation information of property every year for tax authorities' and tax payers' reference. After years, such government announcement of valuation becomes the reported tax base by taxpayers and acceptable by tax authorities. The real "contract price" might be ignored when filing deed tax in practice now. The standard value is always lower than market price. As of January 30 2005, the Land value increase tax (capital gains tax) is levied according to the following rates: • Where the net increase of the value of any land is no more than 100 percent of the original value of such land, the rate shall be 20 percent of the net increase. • Where the net increase of the value of any land is no more than 200 percent of the original value of such land, the rate shall be 30 percent of that part of the net increase which exceeds the original value by more than 100 percent in addition to the rate prescribed in the preceding section. • Where the net increase of the value of any land is no more than 300 percent of the original value of such land, the rate shall be 40 per?ent of	1 day	6% of standard property value (Deed Tax) + 0.1% Stamp Duty

No.	Procedure	Time to complete	Cost to complete
	that part of the net increase which exceeds the original value by more than 200 percent in addition to the rates prescribed in the preceding section. As of October 2009, the Ministry of Finance completed the development of the Local Tax Online Filing Portal, provided for use by the public nationwide. Taiwan government spent two years planning this system, which enables the public to carry out the filing for these local taxes online at home, and speeds up the Procedure for property registration. (The Local Tax Online Filing Portal website can be visited here.		
3	**Registration of transfer of title at the Land Registry** The transfer of title is registered at the Land Registry. The original ownership certificate must be returned and a new one is issued.	3 days	0.1% of property value (registration fee) + TWD 80 for new ownership certificate

* Takes place simultaneously with another procedure.
Source: Doing Business database.

GETTING CREDIT

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

What do the indicators cover?

Doing Business assesses the sharing of credit information and the legal rights of borrowers and lenders with respect to secured transactions through 2 sets of indicators. The depth of credit information index measures rules and practices affecting the coverage, scope and accessibility of credit information available through a public credit registry or a private credit bureau. The strength of legal rights index measures whether certain features that facilitate lending exist within the applicable collateral and bankruptcy laws. *Doing Business* uses case scenarios to determine the scope of the secured transactions system, involving a secured borrower and a secured lender and examining legal restrictions on the use of movable collateral. These scenarios assume that the borrower:

- Is a private, limited liability company.
- Has its headquarters and only base of operations in the largest business city.
- Has 100 employees.
- Is 100% domestically owned, as is the lender.

The ranking on the ease of getting credit is based on the percentile rankings on the sum of its component indicators: the depth of credit information index and the strength of legal rights index.

WHAT THE GETTING CREDIT INDICATORS MEASURE

Strength of legal rights index (0–10)

Protection of rights of borrowers and lenders through collateral laws

Protection of secured creditors' rights through bankruptcy laws

Depth of credit information index (0–6)

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

Public credit registry coverage (% of adults)

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

Private credit bureau coverage (% of adults)

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

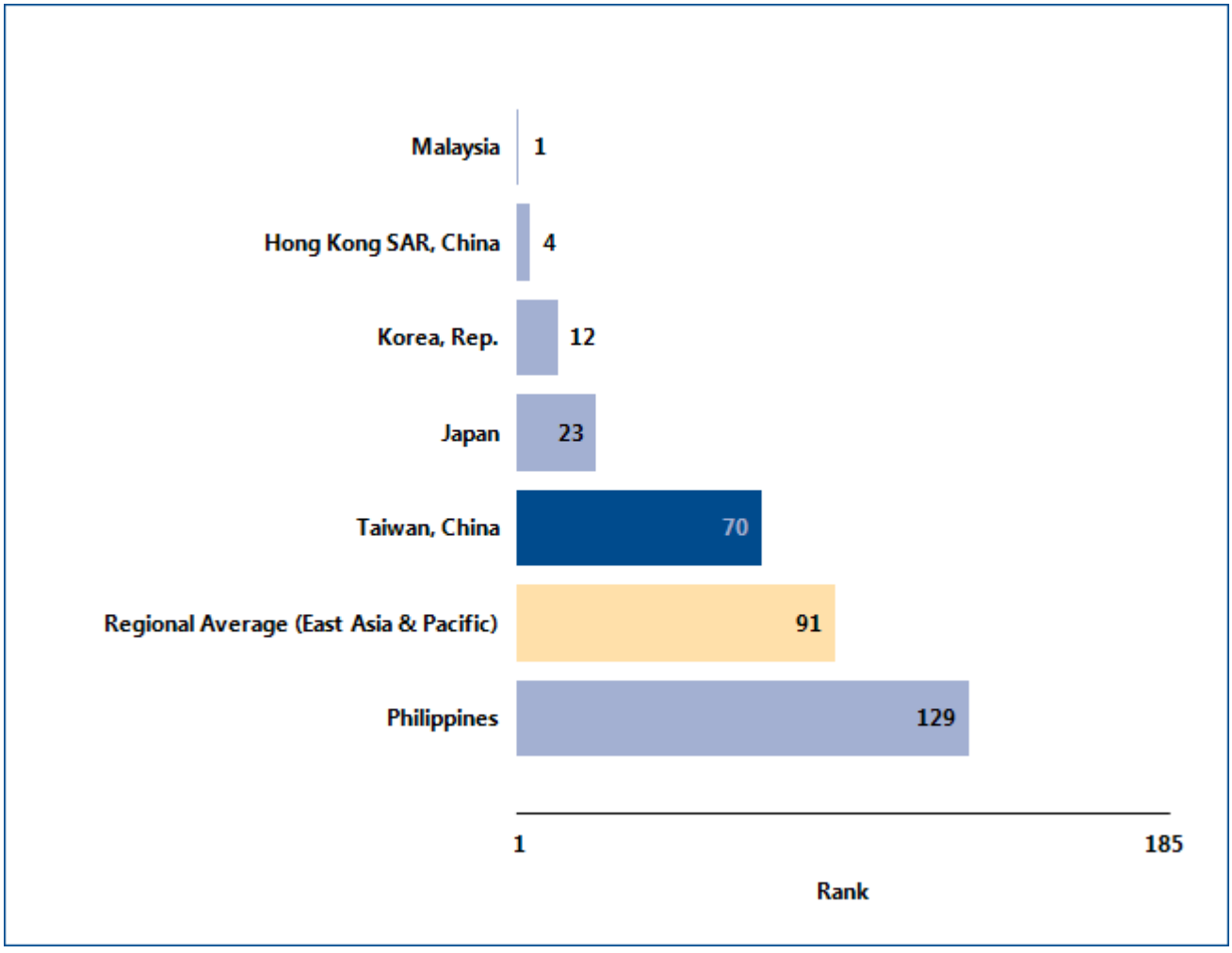
GETTING CREDIT

Where does the economy stand today?

How well do the credit information system and collateral and bankruptcy laws in Taiwan, China facilitate access to credit? The economy has a score of 5 on the depth of credit information index and a score of 5 on the strength of legal rights index (see the summary of scoring at the end of this chapter for details). Higher scores indicate more credit information and stronger legal rights for borrowers and lenders.

Globally, Taiwan, China stands at 70 in the ranking of 185 economies on the ease of getting credit (figure 6.1). The rankings for comparator economies and the regional average ranking provide other useful information for assessing how well regulations and institutions in Taiwan, China support lending and borrowing.

Figure 6.1 How Taiwan, China and comparator economies rank on the ease of getting credit



Source: Doing Business database.

GETTING CREDIT

What are the changes over time?

While the most recent *Doing Business* data reflect how well the credit information system and collateral and bankruptcy laws in Taiwan, China support lending and borrowing today, data over time can help show where institutions and regulations have been strengthened—and where they have not (table 6.1). That can help identify where the potential for improvement is greatest.

Table 6.1 The ease of getting credit in Taiwan, China over time

By *Doing Business* report year

Indicator	DB2005	DB2006	DB2007	DB2008	DB2009	DB2010	DB2011	DB2012	DB2013
Rank	..	..	..	..	..	..	..	67	70
Strength of legal rights index (0-10)	4	4	4	4	5	5	5	5	5
Depth of credit information index (0-6)	5	5	5	5	5	5	5	5	5
Public registry coverage (% of adults)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Private bureau coverage (% of adults)	33.4	57.1	59.5	67.1	62.7	63.2	90.4	90.9	94.1

Note: n.a. = not applicable (the economy was not included in *Doing Business* for that year). DB2012 rankings shown are not last year's published rankings but comparable rankings for DB2012 that capture the effects of such factors as data corrections and the addition of 2 economies (Barbados and Malta) to the sample this year.

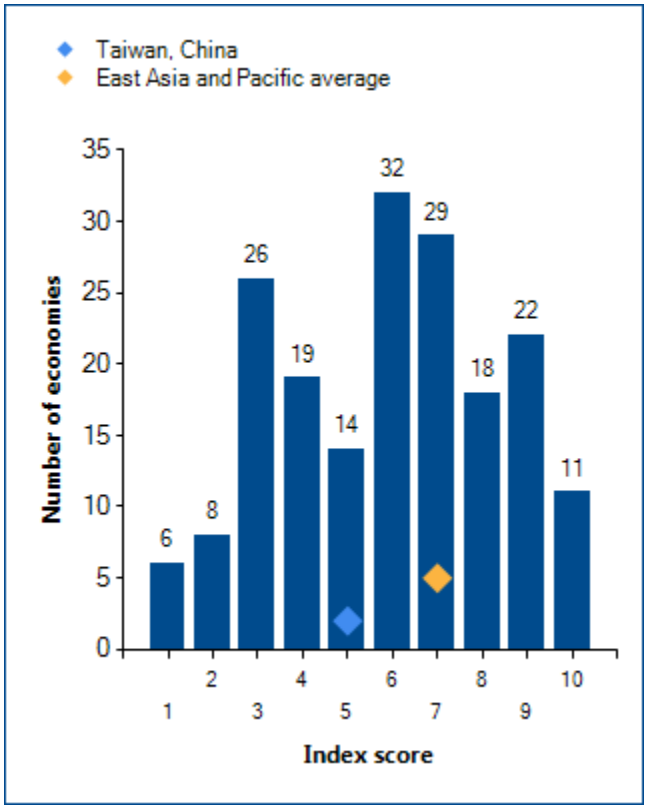
Source: Doing Business database.

GETTING CREDIT

One way to put an economy's score on the getting credit indicators into context is to see where the economy stands in the distribution of scores across economies. Figure 6.2 highlights the score on the strength of legal rights index for Taiwan, China in 2012 and shows the number of economies with this score in 2012 as well as the regional average score. Figure 6.3 shows the same thing for the depth of credit information index.

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

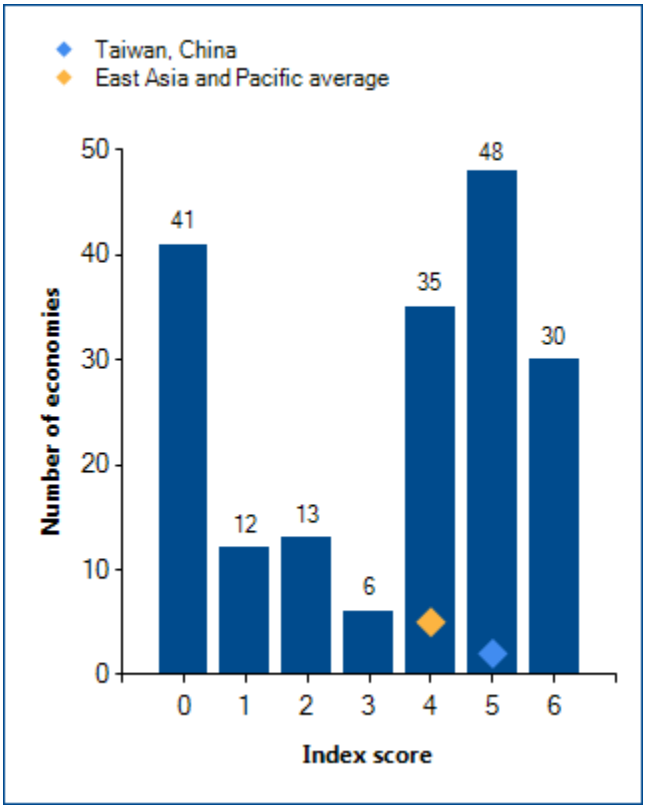
Number of economies with each score on strength of legal rights index (0–10), 2012



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

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

Number of economies with each score on depth of credit information index (0–6), 2012



Note: Higher scores indicate the availability of more credit information, from either a public credit registry or a private credit bureau, to facilitate lending decisions. Regional averages for the depth of credit information index exclude economies with no public registry or private bureau.
Source: Doing Business database.

GETTING CREDIT

When economies strengthen the legal rights of lenders and borrowers under collateral and bankruptcy laws, and increase the scope, coverage and accessibility of credit information, they can increase entrepreneurs' access to credit. What credit reforms has *Doing Business* recorded in Taiwan, China (table 6.2)?

Table 6.2 How has Taiwan, China made getting credit easier—or not?
By *Doing Business* report year

DB year	Reform
DB2008	No reform as measured by Doing Business.
DB2009	Taiwan (China) amended its Civil Code to make secured lending more flexible. As of September 2007, mortgages and pledges can be secured with a line of credit; so that the debt must only be a specified maximum amount.
DB2010	No reform as measured by Doing Business.
DB2011	No reform as measured by Doing Business.
DB2012	No reform as measured by Doing Business.
DB2013	No reform as measured by Doing Business.

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

GETTING CREDIT

What are the details?

The getting credit indicators reported here for Taiwan, China are based on detailed information collected in that economy. The data on credit information sharing are collected through a survey of a public credit registry or private credit bureau (if one exists). To construct the depth of credit information index, a score of 1 is assigned for each of 6 features of the public credit registry or private credit bureau (see summary of scoring below).

The data on the legal rights of borrowers and lenders are gathered through a survey of financial lawyers and verified through analysis of laws and regulations as well as public sources of information on collateral and bankruptcy laws. For the strength of legal rights index, a score of 1 is assigned for each of 8 aspects related to legal rights in collateral law and 2 aspects in bankruptcy law.

Summary of scoring for the getting credit indicators in Taiwan, China

Indicator	Taiwan, China	East Asia & Pacific average	OECD high income average
Strength of legal rights index (0-10)	5	7	7
Depth of credit information index (0-6)	5	4	5
Public registry coverage (% of adults)	0.0	36.4	31.5
Private bureau coverage (% of adults)	94.1	51.2	74.6

Note: In cases where an economy's regional classification is "OECD high income," regional averages above are only displayed once. Regional averages for the depth of credit information index exclude economies with no public registry or private bureau. Regional averages for the public registry coverage exclude economies with no public registry. Regional averages for the private bureau coverage exclude economies with no private bureau.

Strength of legal rights index (0–10)	Index score: 5
Can any business use movable assets as collateral while keeping possession of the assets; and any financial institution accept such assets as collateral ?	Yes
Does the law allow businesses to grant a non possessory security right in a single category of movable assets, without requiring a specific description of collateral?	No
Does the law allow businesses to grant a non possessory security right in substantially all of its assets, without requiring a specific description of collateral?	No
May a security right extend to future or after-acquired assets, and may it extend automatically to the products, proceeds or replacements of the original assets ?	No
Is a general description of debts and obligations permitted in collateral agreements; can all types of debts and obligations be secured between parties; and can the collateral agreement include a maximum amount for which the assets are encumbered?	Yes
Is a collateral registry in operation, that is unified geographically and by asset type, with an electronic database indexed by debtor's names?	No

Strength of legal rights index (0–10)	Index score: 5
Are secured creditors paid first (i.e. before general tax claims and employee claims) when a debtor defaults outside an insolvency procedure?	Yes
Are secured creditors paid first (i.e. before general tax claims and employee claims) when a business is liquidated?	Yes
Are secured creditors either not subject to an automatic stay or moratorium on enforcement procedures when a debtor enters a court-supervised reorganization procedure, or the law provides secured creditors with grounds for relief from an automatic stay or	No
Does the law allow parties to agree in a collateral agreement that the lender may enforce its security right out of court, at the time a security interest is created?	Yes

Depth of credit information index (0–6)	Private credit bureau	Public credit registry	Index score: 5
Are data on both firms and individuals distributed?	Yes	No	1
Are both positive and negative data distributed?	Yes	No	1
Does the registry distribute credit information from retailers, trade creditors or utility companies as well as financial institutions?	No	No	0
Are more than 2 years of historical credit information distributed?	Yes	No	1
Is data on all loans below 1% of income per capita distributed?	Yes	No	1
Is it guaranteed by law that borrowers can inspect their data in the largest credit registry?	Yes	No	1

Note: An economy receives a score of 1 if there is a "yes" to either private bureau or public registry.

Coverage	Private credit bureau	Public credit registry
Number of firms	260,000	0
Number of individuals	13,780,000	0

Source: Doing Business database.

PROTECTING INVESTORS

Investor protections matter for the ability of companies to raise the capital they need to grow, innovate, diversify and compete. If the laws do not provide such protections, investors may be reluctant to invest unless they become the controlling shareholders. Strong regulations clearly define related-party transactions, promote clear and efficient disclosure requirements, require shareholder participation in major decisions of the company and set clear standards of accountability for company insiders.

What do the indicators cover?

Doing Business measures the strength of minority shareholder protections against directors' use of corporate assets for personal gain—or self-dealing. The indicators distinguish 3 dimensions of investor protections: transparency of related-party transactions (extent of disclosure index), liability for self-dealing (extent of director liability index) and shareholders' ability to sue officers and directors for misconduct (ease of shareholder suits index). The ranking on the strength of investor protection index is the simple average of the percentile rankings on these 3 indices. To make the data comparable across economies, a case study uses several assumptions about the business and the transaction.

The business (Buyer):

- Is a publicly traded corporation listed on the economy's most important stock exchange (or at least a large private company with multiple shareholders).
- Has a board of directors and a chief executive officer (CEO) who may legally act on behalf of Buyer where permitted, even if this is not specifically required by law.

The transaction involves the following details:

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

WHAT THE PROTECTING INVESTORS INDICATORS MEASURE

Extent of disclosure index (0–10)

Who can approve related-party transactions

Disclosure requirements in case of related-party transactions

Extent of director liability index (0–10)

Ability of shareholders to hold interested parties and members of the approving body liable in case of related-party transactions

Available legal remedies (damages, repayment of profits, fines, imprisonment and rescission of the transaction)

Ability of shareholders to sue directly or derivatively

Ease of shareholder suits index (0–10)

Access to internal corporate documents (directly or through a government inspector)

Documents and information available during trial

Strength of investor protection index (0–10)

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

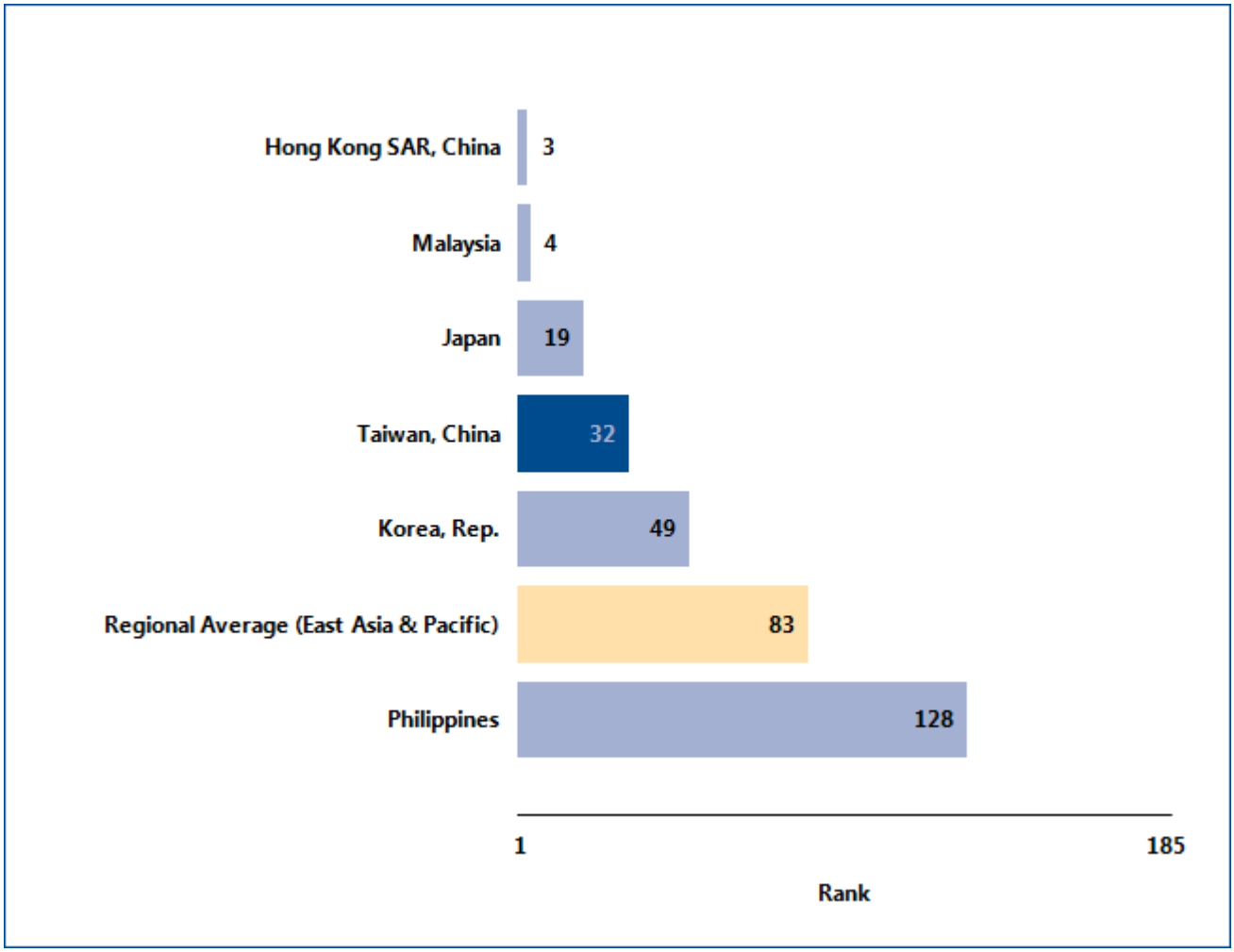
PROTECTING INVESTORS

Where does the economy stand today?

How strong are investor protections in Taiwan, China? The economy has a score of 6.3 on the strength of investor protection index, with a higher score indicating stronger protections (see the summary of scoring at the end of this chapter for details).

Globally, Taiwan, China stands at 32 in the ranking of 185 economies on the strength of investor protection index (figure 7.1). While the indicator does not measure all aspects related to the protection of minority investors, a higher ranking does indicate that an economy's regulations offer stronger investor protections against self-dealing in the areas measured.

Figure 7.1 How Taiwan, China and comparator economies rank on the strength of investor protection index



Source: Doing Business database.

PROTECTING INVESTORS

What are the changes over time?

While the most recent *Doing Business* data reflect how well regulations in Taiwan, China protect minority investors today, data over time show whether the protections have been strengthened (table 7.1). And the global ranking on the strength of investor protection index over time shows whether the economy is slipping behind other economies in investor protections—or surpassing them.

Table 7.1 The strength of investor protections in Taiwan, China over time
By *Doing Business* report year

Indicator	DB2006	DB2007	DB2008	DB2009	DB2010	DB2011	DB2012	DB2013
Rank	..	..	..	..	..	..	79	32
Extent of disclosure index (0-10)	7	7	7	7	7	7	7	9
Extent of director liability index (0-10)	4	4	4	4	4	4	4	5
Ease of shareholder suits index (0-10)	5	5	5	5	5	5	5	5
Strength of investor protection index (0-10)	5.3	5.3	5.3	5.3	5.3	5.3	5.3	6.3

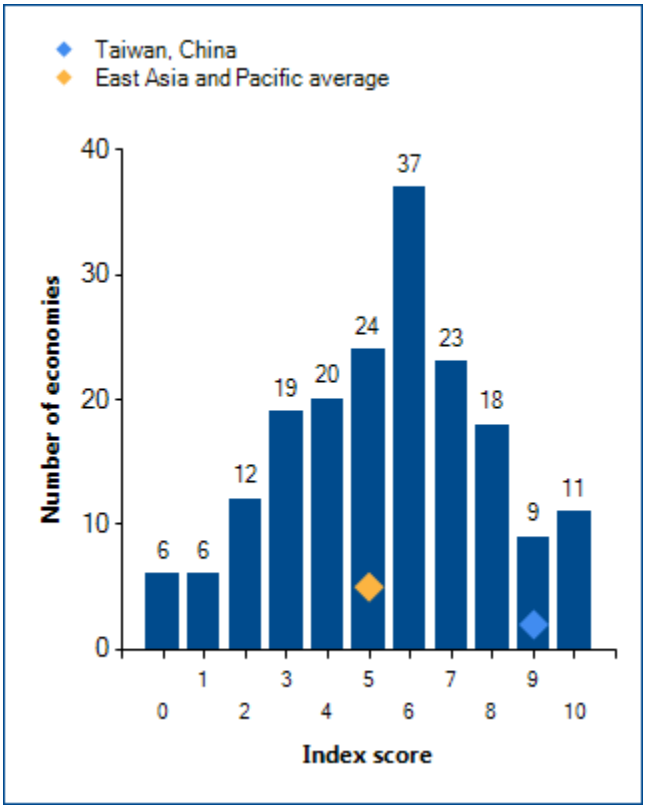
Note: n.a. = not applicable (the economy was not included in *Doing Business* for that year). DB2012 rankings shown are not last year's published rankings but comparable rankings for DB2012 that capture the effects of such factors as data corrections and the addition of 2 economies (Barbados and Malta) to the sample this year.
Source: Doing Business database.

PROTECTING INVESTORS

One way to put an economy's scores on the protecting investors indicators into context is to see where the economy stands in the distribution of scores across economies. Figure 7.2 highlights the score on the extent of disclosure index for Taiwan, China in 2012 and shows the number of economies with this score in 2012 as well as the regional average score. Figure 7.3 shows the same thing for the extent of director liability index, and figure 7.4 for the ease of shareholder suits index.

Figure 7.2 How strong are disclosure requirements?

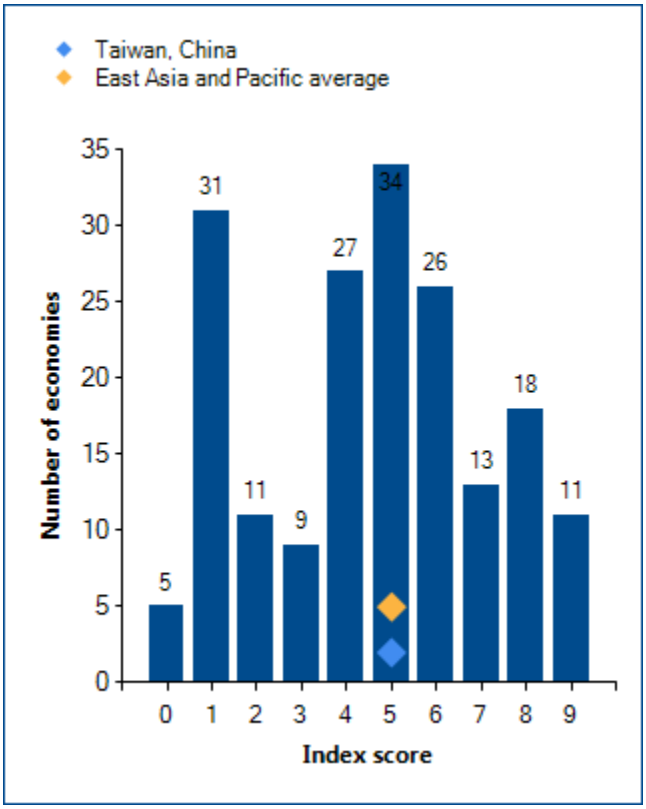
Number of economies with each score on extent of disclosure index (0–10), 2012



Note: Higher scores indicate greater disclosure.
Source: Doing Business database.

Figure 7.3 How strong is the liability regime for directors?

Number of economies with each score on extent of director liability index (0–10), 2012

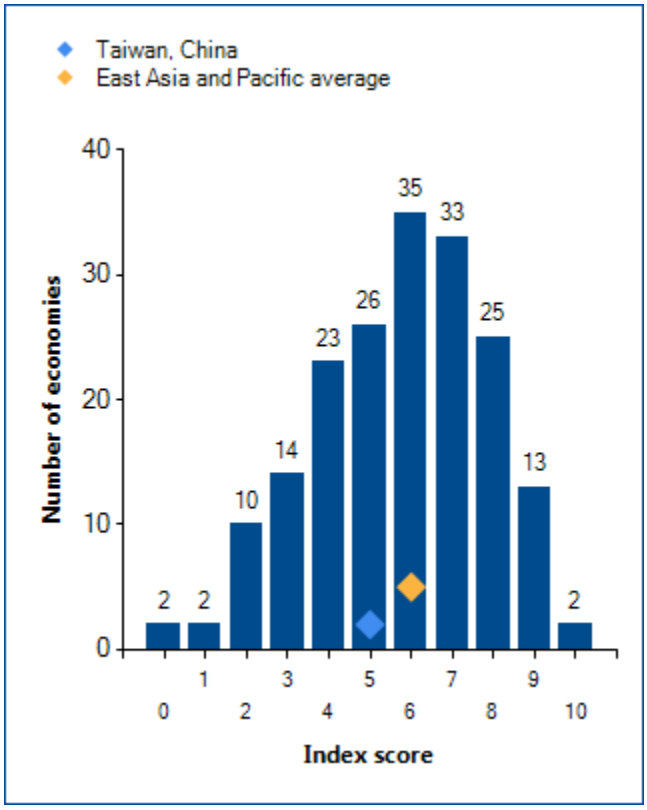


Note: Higher scores indicate greater liability of directors. No economy receives a score of 10 on the extent of director liability index.
Source: Doing Business database.

PROTECTING INVESTORS

Figure 7.4 How easy is access to internal corporate documents?

Number of economies with each score on ease of shareholder suits index (0–10), 2012



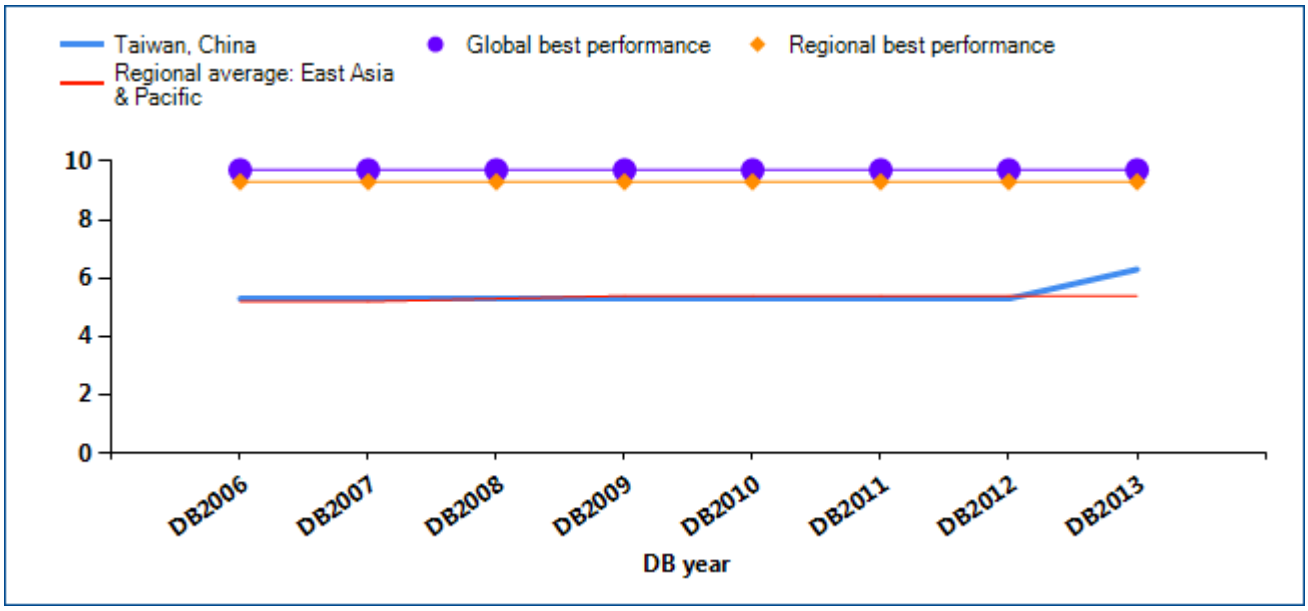
Note: Higher scores indicate greater powers of shareholders to challenge the transaction.
Source: Doing Business database.

PROTECTING INVESTORS

The scores recorded over time for Taiwan, China on the strength of investor protection index may also be revealing (figure 7.5). Equally interesting may be the changes over time in the regional average score on this index.

Figure 7.5 Have investor protections become stronger over time?

Strength of investor protection index (0–10)



Note: The higher the score, the stronger the investor protections.
Source: Doing Business database.

PROTECTING INVESTORS

Economies with the strongest protections of minority investors from self-dealing require more disclosure and define clear duties for directors. They also have well-functioning courts and up-to-date procedural rules that give minority investors the means to prove their case and obtain a judgment within a reasonable time. So reforms to strengthen investor protections may move ahead on different fronts—such as through new or amended company laws or civil procedure rules. What investor protection reforms has *Doing Business* recorded in Taiwan, China (table 7.2)?

Table 7.2 How has Taiwan, China strengthened investor protections—or not?
By *Doing Business* report year

DB year	Reform
DB2008	No reform as measured by Doing Business.
DB2009	No reform as measured by Doing Business.
DB2010	No reform as measured by Doing Business.
DB2011	No reform as measured by Doing Business.
DB2012	No reform as measured by Doing Business.
DB2013	Taiwan, China, strengthened investor protections by increasing disclosure requirements for related-party transactions and improving the liability regime for company directors in cases where such transactions are abusive.

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

PROTECTING INVESTORS

What are the details?

The protecting investors indicators reported here for Taiwan, China are based on detailed information collected through a survey of corporate and securities lawyers as well as on securities regulations, company laws and court rules of evidence. To construct the extent of disclosure, extent of director liability and ease of shareholder suits indices, a score is assigned for each of a range of conditions relating to disclosure, director liability and shareholder suits in a standard case study transaction (see the notes at the end of this chapter). The summary below shows the details underlying the scores for Taiwan, China.

Summary of scoring for the protecting investors indicators in Taiwan, China

Indicator	Taiwan, China	East Asia & Pacific average	OECD high income average
Extent of disclosure index (0-10)	9	5	6
Extent of director liability index (0-10)	5	5	5
Ease of shareholder suits index (0-10)	5	6	7
Strength of investor protection index (0-10)	6.3	5.4	6.1

Note: In cases where an economy's regional classification is "OECD high income," regional averages above are only displayed once.

	Score	Score description
Extent of disclosure index (0-10)	9	
What corporate body provides legally sufficient approval for the transaction?	2	Board of directors and Mr. James is not allowed to vote
Whether disclosure of the conflict of interest by Mr. James to the board of directors is required?	2	Full disclosure of all material facts
Whether immediate disclosure of the transaction to the public and/or shareholders is required?	2	Disclosure on the transaction and Mr. James' conflict of interest
Whether disclosure of the transaction in published periodic filings (annual reports) is required?	2	Disclosure on the transaction and Mr. James' conflict of interest
Whether an external body must review the terms of the transaction before it takes place?	1	Yes
Extent of director liability index (0-10)	5	
Whether shareholders can sue directly or derivatively for the damage that the Buyer-Seller transaction causes to the company?	1	Yes

	Score	Score description
Whether shareholders can hold Mr. James liable for the damage that the Buyer-Seller transaction causes to the company?	1	Liable for negligence or influencing the approval of the transaction
Whether shareholders can hold members of the approving body liable for the damage that the Buyer-Seller transaction causes to the company?	1	Liable for negligence
Whether a court can void the transaction upon a successful claim by a shareholder plaintiff?	0	Not possible or only in case of Seller's fraud or bad faith
Whether Mr. James pays damages for the harm caused to the company upon a successful claim by the shareholder plaintiff?	1	Yes
Whether Mr. James repays profits made from the transaction upon a successful claim by the shareholder plaintiff?	0	No
Whether fines and imprisonment can be applied against Mr. James?	1	Yes
Ease of shareholder suits index (0-10)	5	
Whether shareholders owning 10% or less of Buyer's shares can inspect transaction documents before filing suit?	0	No
Whether shareholders owning 10% or less of Buyer's shares can request an inspector to investigate the transaction?	0	No
Whether the plaintiff can obtain any documents from the defendant and witnesses during trial?	3	Any information that is relevant to the subject matter of the claim
Whether the plaintiff can request categories of documents from the defendant without identifying specific ones?	0	No
Whether the plaintiff can directly question the defendant and witnesses during trial?	1	Yes
Whether the level of proof required for civil suits is lower than that of criminal cases?	1	Yes
Strength of investor protection index (0-10)	6.3	

Source: Doing Business database.

PAYING TAXES

Taxes are essential. They fund the public amenities, infrastructure and services that are crucial for a properly functioning economy. But the level of tax rates needs to be carefully chosen—and needless complexity in tax rules avoided. According to *Doing Business* data, in economies where it is more difficult and costly to pay taxes, larger shares of economic activity end up in the informal sector—where businesses pay no taxes at all.

What do the indicators cover?

Using a case scenario, *Doing Business* measures the taxes and mandatory contributions that a medium-size company must pay in a given year as well as the administrative burden of paying taxes and contributions. This case scenario uses a set of financial statements and assumptions about transactions made over the year. Information is also compiled on the frequency of filing and payments as well as time taken to comply with tax laws. The ranking on the ease of paying taxes is the simple average of the percentile rankings on its component indicators: number of annual payments, time and total tax rate, with a threshold being applied to the total tax rate.[1] To make the data comparable across economies, several assumptions about the business and the taxes and contributions are used.

- TaxpayerCo is a medium-size business that started operations on January 1, 2010.
- The business starts from the same financial position in each economy. All the taxes and mandatory contributions paid during the second year of operation are recorded.
- Taxes and mandatory contributions are measured at all levels of government.
- Taxes and mandatory contributions include corporate income tax, turnover tax and all labor taxes and contributions paid by the company.
- A range of standard deductions and exemptions are also recorded.

WHAT THE PAYING TAXES INDICATORS MEASURE

Tax payments for a manufacturing company in 2011 (number per year adjusted for electronic or joint filing and payment)

- Total number of taxes and contributions paid, including consumption taxes (value added tax, sales tax or goods and service tax)
- Method and frequency of filing and payment

Time required to comply with 3 major taxes (hours per year)

- Collecting information and computing the tax payable
- Completing tax return forms, filing with proper agencies
- Arranging payment or withholding
- Preparing separate tax accounting books, if required

Total tax rate (% of profit before all taxes)

- Profit or corporate income tax
- Social contributions and labor taxes paid by the employer
- Property and property transfer taxes
- Dividend, capital gains and financial transactions taxes
- Waste collection, vehicle, road and other taxes

[1] The threshold is defined as the highest total tax rate among the top 15% of economies in the ranking on the total tax rate. It is calculated and adjusted on a yearly basis. The threshold is not based on any economic theory of an "optimal tax rate" that minimizes distortions or maximizes efficiency in the tax system of an economy overall. Instead, it is mainly empirical in nature, set at the lower end of the distribution of tax rates levied on medium-size enterprises in the manufacturing sector as observed through the paying taxes indicators. This reduces the bias in the indicators toward economies that do not need to levy significant taxes on companies like the *Doing Business* standardized case study company because they raise public revenue in other ways—for example, through taxes on foreign companies, through taxes on sectors other than manufacturing or from natural resources (all of which are outside the scope of the methodology). This year's threshold is 25.7%.

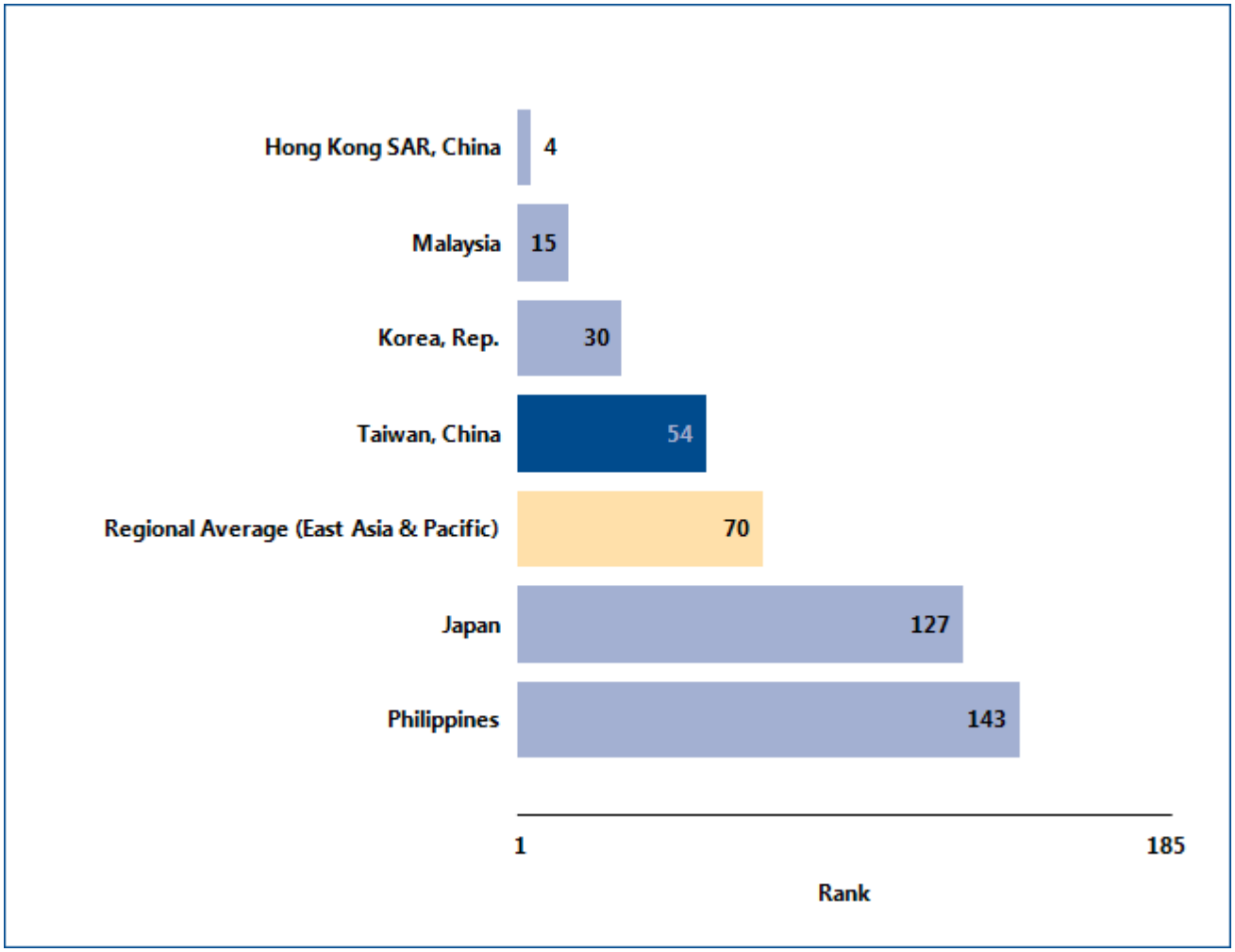
PAYING TAXES

Where does the economy stand today?

What is the administrative burden of complying with taxes in Taiwan, China—and how much do firms pay in taxes? On average, firms make 12 tax payments a year, spend 221 hours a year filing, preparing and paying taxes and pay total taxes amounting to 34.8% of profit (see the summary at the end of this chapter for details).

Globally, Taiwan, China stands at 54 in the ranking of 185 economies on the ease of paying taxes (figure 8.1). The rankings for comparator economies and the regional average ranking provide other useful information for assessing the tax compliance burden for businesses in Taiwan, China.

Figure 8.1 How Taiwan, China and comparator economies rank on the ease of paying taxes



Note: DB2013 rankings reflect changes to the methodology. For all economies with a total tax rate below the threshold of 25.7% applied in DB2013, the total tax rate is set at 25.7% for the purpose of calculating the ranking on the ease of paying taxes.
Source: Doing Business database.

PAYING TAXES

What are the changes over time?

While the most recent *Doing Business* data reflect how easy (or difficult) it is to comply with tax rules in Taiwan, China today, data over time show which aspects of the process have changed — and which have not (table 8.1). That can help identify where the potential for easing tax compliance is greatest.

Table 8.1 The ease of paying taxes in Taiwan, China over time
By *Doing Business* report year

Indicator	DB2006	DB2007	DB2008	DB2009	DB2010	DB2011	DB2012	DB2013
Rank	..	..	..	..	..	..	64	54
Payments (number per year)	20	21	21	21	15	15	15	12
Time (hours per year)	340	340	340	340	281	269	245	221
Total tax rate (% profit)	34.3	37.7	41.8	41.6	41.6	41.3	35.6	34.8

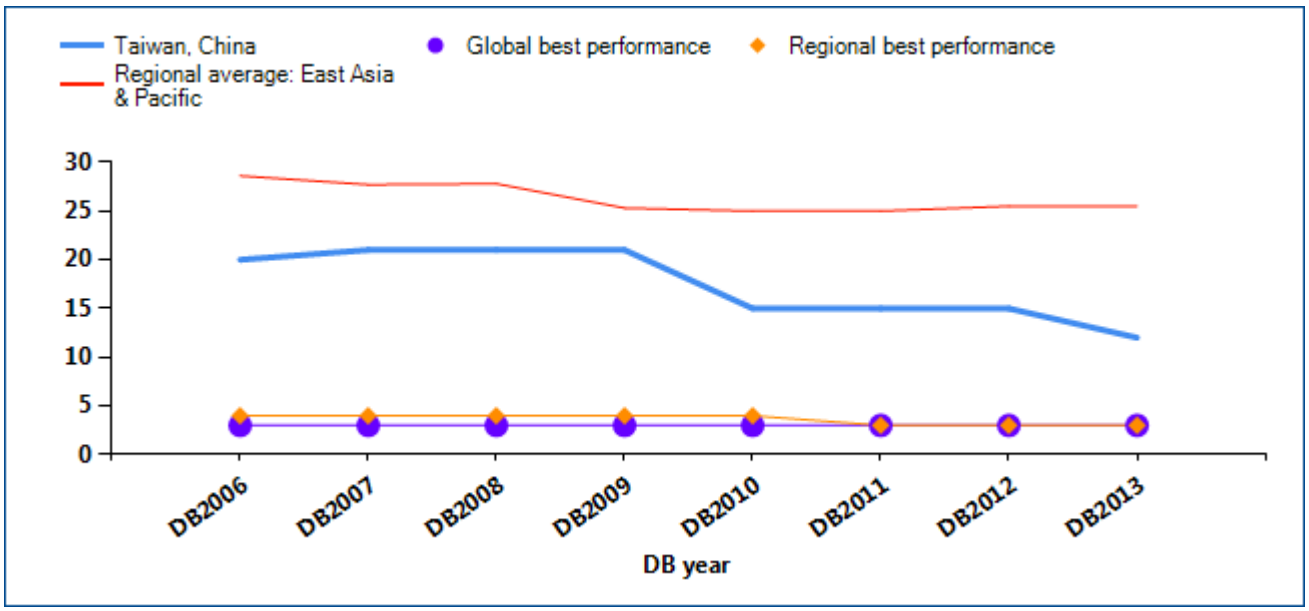
Note: n.a. = not applicable (the economy was not included in *Doing Business* for that year). DB2012 rankings shown are not last year's published rankings but comparable rankings for DB2012 that capture the effects of such factors as data corrections and the addition of 2 economies (Barbados and Malta) to the sample this year. DB2013 rankings reflect changes to the methodology. For all economies with a total tax rate below the threshold of 25.7% applied in DB2013, the total tax rate is set at 25.7% for the purpose of calculating the ranking on the ease of paying taxes.
Source: Doing Business database.

PAYING TAXES

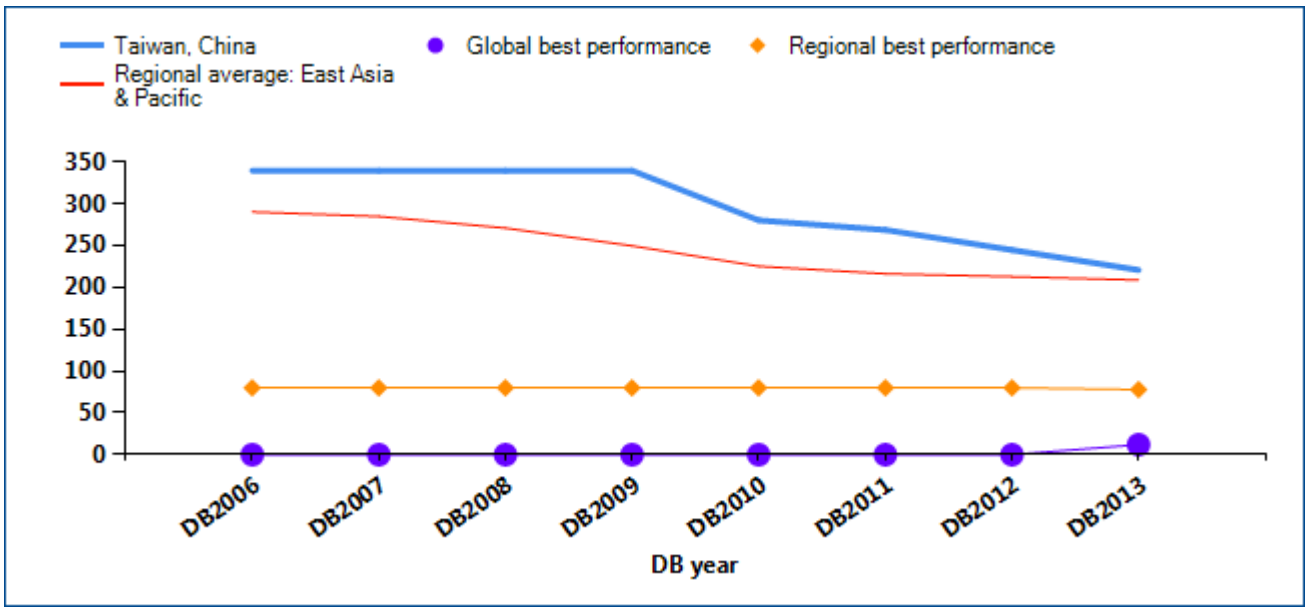
Equally helpful may be the benchmarks provided by the economies that over time have had the best performance regionally or globally on the number of payments or the time required to prepare and file taxes (figure 8.2). These benchmarks help show what is possible in easing the administrative burden of tax compliance. And changes in regional averages can show where Taiwan, China is keeping up—and where it is falling behind.

Figure 8.2 Has paying taxes become easier over time?

Payments (number per year)

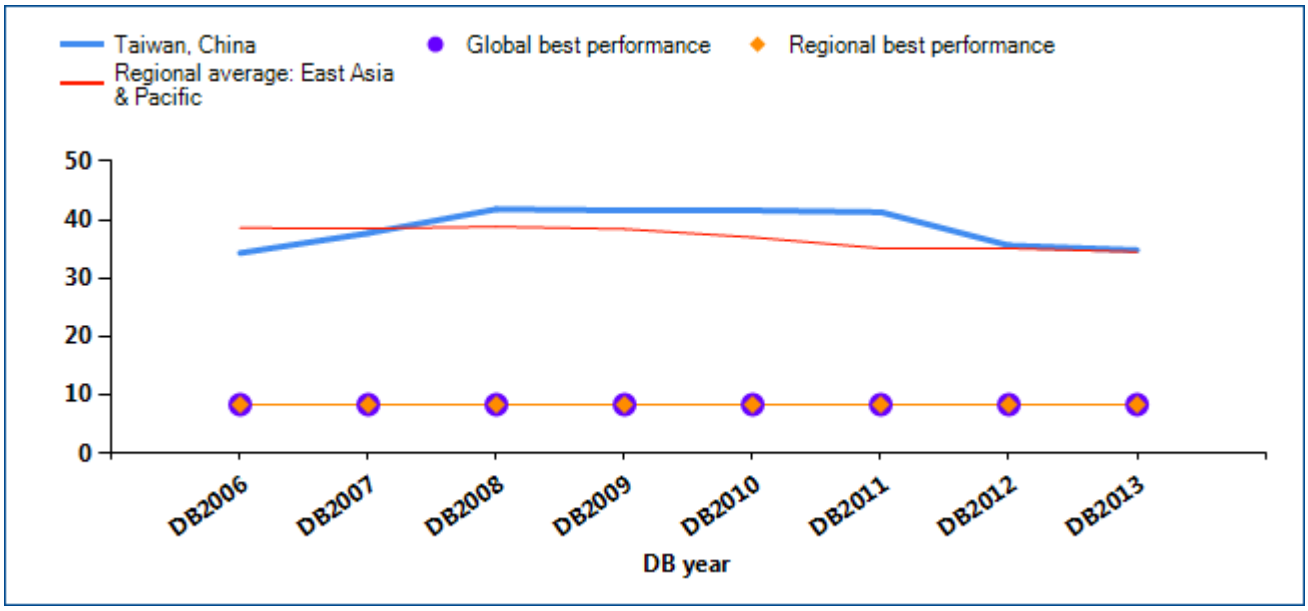


Time (hours per year)



PAYING TAXES

Total tax rate (% of profit)



Source: Doing Business database.

PAYING TAXES

Economies around the world have made paying taxes faster and easier for businesses—such as by consolidating filings, reducing the frequency of payments or offering electronic filing and payment. Many have lowered tax rates. Changes have brought concrete results. Some economies simplifying tax payment and reducing rates have seen tax revenue rise. What tax reforms has *Doing Business* recorded in Taiwan, China (table 8.2)?

Table 8.2 How has Taiwan, China made paying taxes easier—or not?
By *Doing Business* report year

DB year	Reform
DB2008	No reform as measured by Doing Business.
DB2009	No reform as measured by Doing Business.
DB2010	Taiwan (China) has made it easier to pay taxes by making both e-filing and e-payment applicable to value added tax (VAT).
DB2011	Taiwan (China) reduced the corporate income tax rate and simplified tax return forms, rules for assessing corporate income tax and the calculation of interim tax payments.
DB2012	No reform as measured by Doing Business.
DB2013	No reform as measured by Doing Business.

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

PAYING TAXES

What are the details?

The indicators reported here for Taiwan, China are based on a standard set of taxes and contributions that would be paid by the case study company used by *Doing Business* in collecting the data (see the section in this chapter on what the indicators cover). Tax practitioners are asked to review standard financial statements as well as a standard list of transactions that the company completed during the year. Respondents are asked how much in taxes and mandatory contributions the business must pay and what the process is for doing so.

LOCATION OF STANDARDIZED COMPANY

City: Taipei

The taxes and contributions paid are listed in the summary below, along with the associated number of payments, time and tax rate.

Summary of tax rates and administrative burden in Taiwan, China

Indicator	Taiwan, China	East Asia & Pacific average	OECD high income average
Payments (number per year)	12	25	12
Time (hours per year)	221	209	176
Profit tax (%)	12.7	16.7	15.2
Labor tax and contributions (%)	18.6	10.9	23.8
Other taxes (%)	3.5	6.9	3.7
Total tax rate (% profit)	34.8	34.5	42.7

Note: In cases where an economy's regional classification is "OECD high income," regional averages above are only displayed once.

Tax or mandatory contribution	Payments (number)	Notes on payments	Time (hours)	Statutory tax rate	Tax base	Total tax rate (% of profit)	Notes on total tax rate
Corporate income tax	1	online filing	161	17%	taxable profit	11.7	
Employer paid - Pension contributions	1	online filing	0	6%	gross salaries	6.9	
Employer paid - Mandatory health insurance contributions	1	online filing	0	various rates	gross salaries	6	
Employer paid - Labor insurance contributions	1	online filing	27	various rates	gross salaries	5.8	

Tax or mandatory contribution	Payments (number)	Notes on payments	Time (hours)	Statutory tax rate	Tax base	Total tax rate (% of profit)	Notes on total tax rate
Taipei City house tax	1		0	3%	assessed building value	2.9	
Land value increment tax	1		0	20%	gain	1	
Taipei City land value tax	1		0	1-5.5%	assessed land value	0.5	
Tax on interest	0		0	10%	interest income	0.3	not included
Fuel tax	1	online filing	0	various rates	engine size	0.1	
Stamp duty on contracts	1		0	0%	transaction value	0	small amount
Vehicle license tax	2		0	TWD 11,700	fixed fee	0	
Value added tax (VAT)	1	online filing	33	5%	value added	0	not included
Totals	**12**		**221**			**34.8**	

Source: Doing Business database.

TRADING ACROSS BORDERS

In today's globalized world, making trade between economies easier is increasingly important for business. Excessive document requirements, burdensome customs procedures, inefficient port operations and inadequate infrastructure all lead to extra costs and delays for exporters and importers, stifling trade potential. Research shows that exporters in developing countries gain more from a 10% drop in their trading costs than from a similar reduction in the tariffs applied to their products in global markets.

What do the indicators cover?

Doing Business measures the time and cost (excluding tariffs and the time and cost for sea transport) associated with exporting and importing a standard shipment of goods by sea transport, and the number of documents necessary to complete the transaction. The indicators cover procedural requirements such as documentation requirements and procedures at customs and other regulatory agencies as well as at the port. They also cover trade logistics, including the time and cost of inland transport to the largest business city. The ranking on the ease of trading across borders is the simple average of the percentile rankings on its component indicators: documents, time and cost to export and import.

To make the data comparable across economies, *Doing Business* uses several assumptions about the business and the traded goods.

The business:

- Is of medium size and employs 60 people.
- Is located in the periurban area of the economy's largest business city.
- Is a private, limited liability company, domestically owned, formally registered and operating under commercial laws and regulations of the economy.

The traded goods:

- Are not hazardous nor do they include military items.
- Do not require refrigeration or any other special environment.
- Do not require any special phytosanitary or environmental safety standards other than accepted international standards.
- Are one of the economy's leading export or import products.
- Are transported in a dry-cargo, 20-foot full container load.

WHAT THE TRADING ACROSS BORDERS INDICATORS MEASURE

Documents required to export and import (number)

- Bank documents
- Customs clearance documents
- Port and terminal handling documents
- Transport documents

Time required to export and import (days)

- Obtaining, filling out and submitting all the documents
- Inland transport and handling
- Customs clearance and inspections
- Port and terminal handling
- Does not include sea transport time

Cost required to export and import (US$ per container)

- All documentation
- Inland transport and handling
- Customs clearance and inspections
- Port and terminal handling
- Official costs only, no bribes

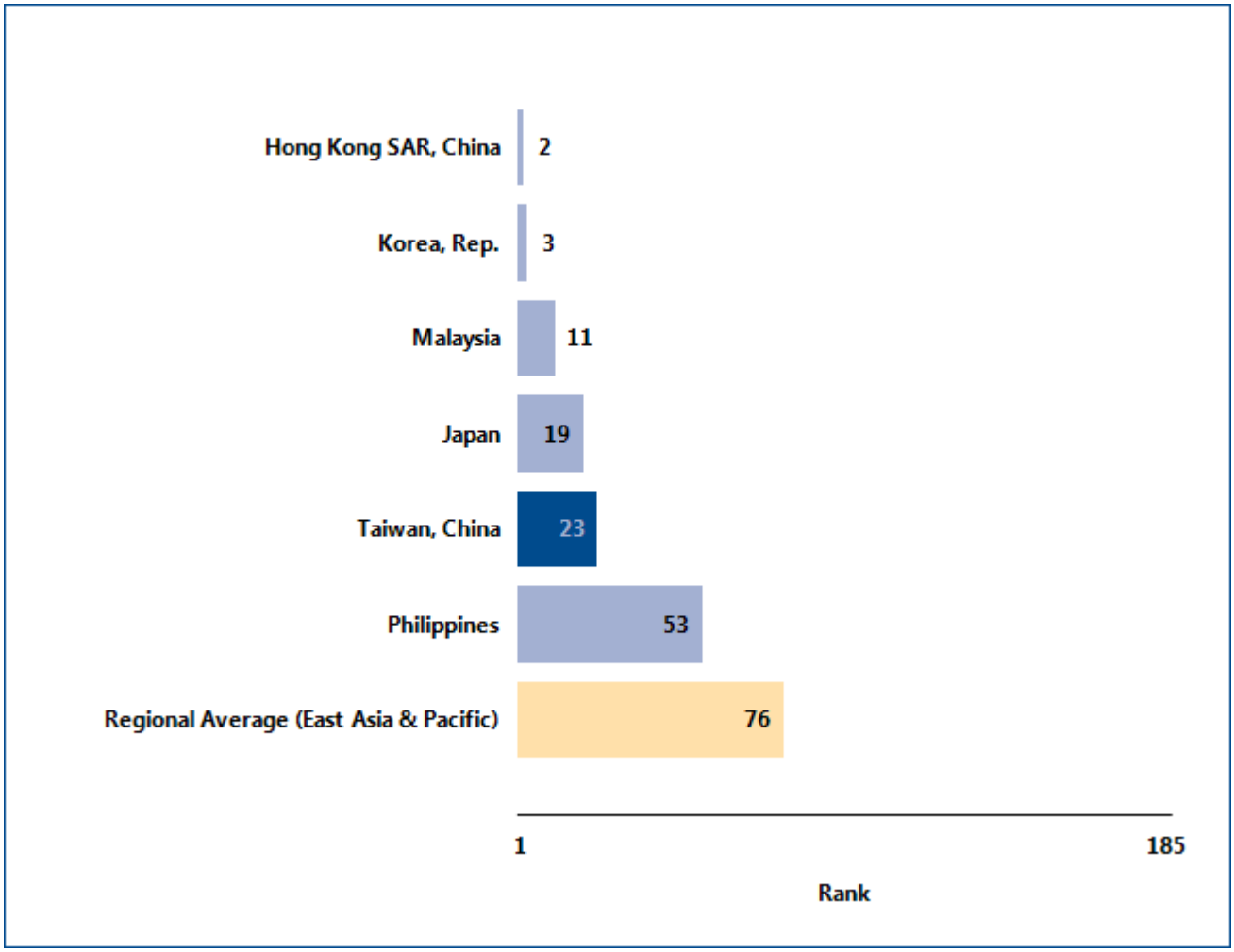
TRADING ACROSS BORDERS

Where does the economy stand today?

What does it take to export or import in Taiwan, China? According to data collected by *Doing Business*, exporting a standard container of goods requires 6 documents, takes 10 days and costs $655. Importing the same container of goods requires 6 documents, takes 10 days and costs $720 (see the summary of procedures and documents at the end of this chapter for details).

Globally, Taiwan, China stands at 23 in the ranking of 185 economies on the ease of trading across borders (figure 9.1). The rankings for comparator economies and the regional average ranking provide other useful information for assessing how easy it is for a business in Taiwan, China to export and import goods.

Figure 9.1 How Taiwan, China and comparator economies rank on the ease of trading across borders



Source: Doing Business database.

TRADING ACROSS BORDERS

What are the changes over time?

While the most recent *Doing Business* data reflect how easy (or difficult) it is to export or import in Taiwan, China today, data over time show which aspects of the process have changed—and which have not (table 9.1). That can help identify where the potential for improvement is greatest.

Table 9.1 The ease of trading across borders in Taiwan, China over time
By *Doing Business* report year

Indicator	DB2006	DB2007	DB2008	DB2009	DB2010	DB2011	DB2012	DB2013
Rank	..	..	..	..	..	..	27	23
Documents to export (number)	6	6	6	6	6	6	6	6
Time to export (days)	12	12	12	12	12	12	12	10
Cost to export (US$ per container)	747	747	747	757	720	645	655	655
Documents to import (number)	6	6	6	6	6	6	6	6
Time to import (days)	12	12	12	12	12	12	12	10
Cost to import (US$ per container)	747	747	747	769	732	700	720	720

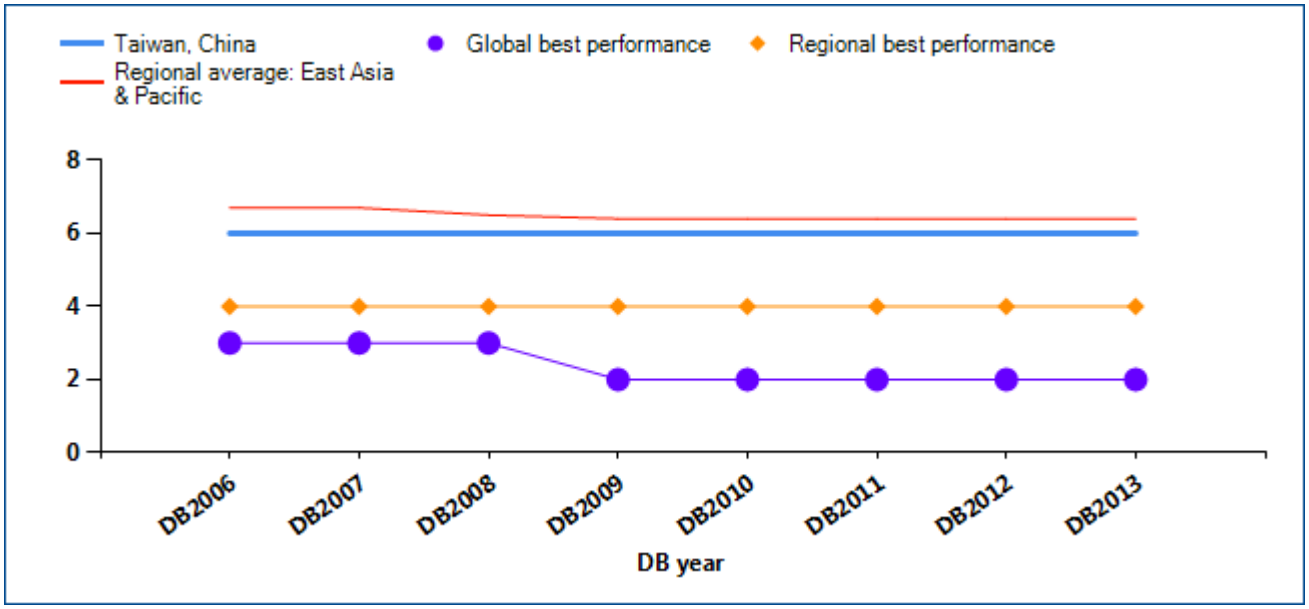
Note: n.a. = not applicable (the economy was not included in *Doing Business* for that year). DB2012 rankings shown are not last year's published rankings but comparable rankings for DB2012 that capture the effects of such factors as data corrections and the addition of 2 economies (Barbados and Malta) to the sample this year.
Source: Doing Business database.

TRADING ACROSS BORDERS

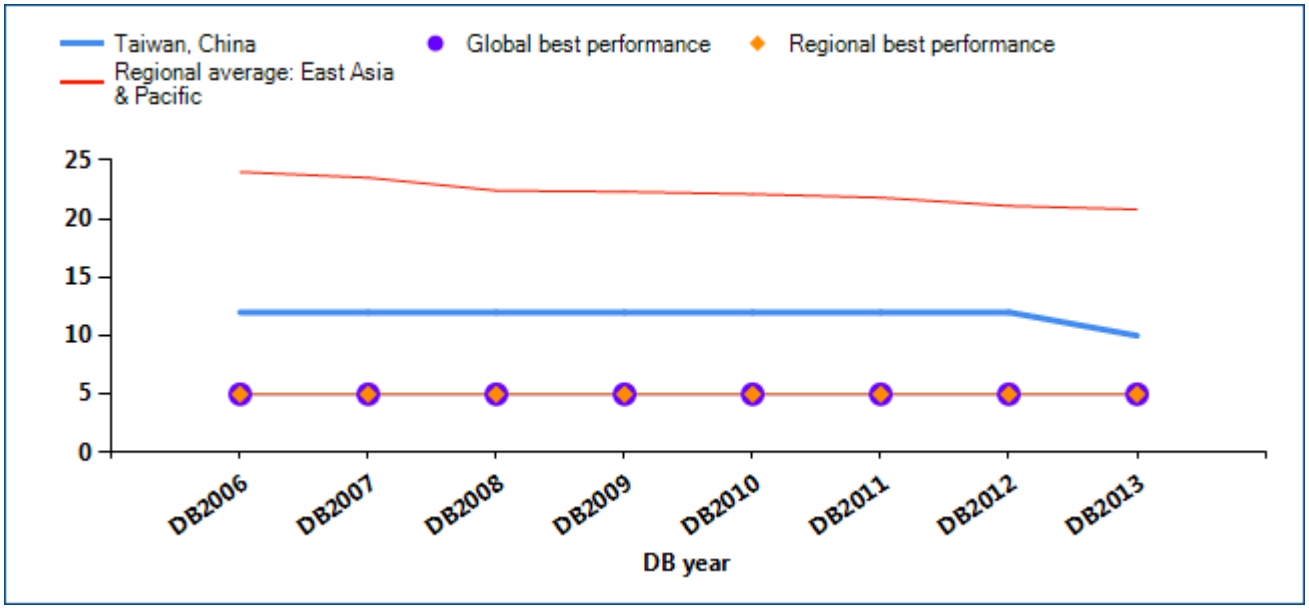
Equally helpful may be the benchmarks provided by the economies that over time have had the best performance regionally or globally on the documents, time or cost required to export or import (figure 9.2). These benchmarks help show what is possible in making it easier to trade across borders. And changes in regional averages can show where Taiwan, China is keeping up—and where it is falling behind.

Figure 9.2 Has trading across borders become easier over time?

Documents to export (number)

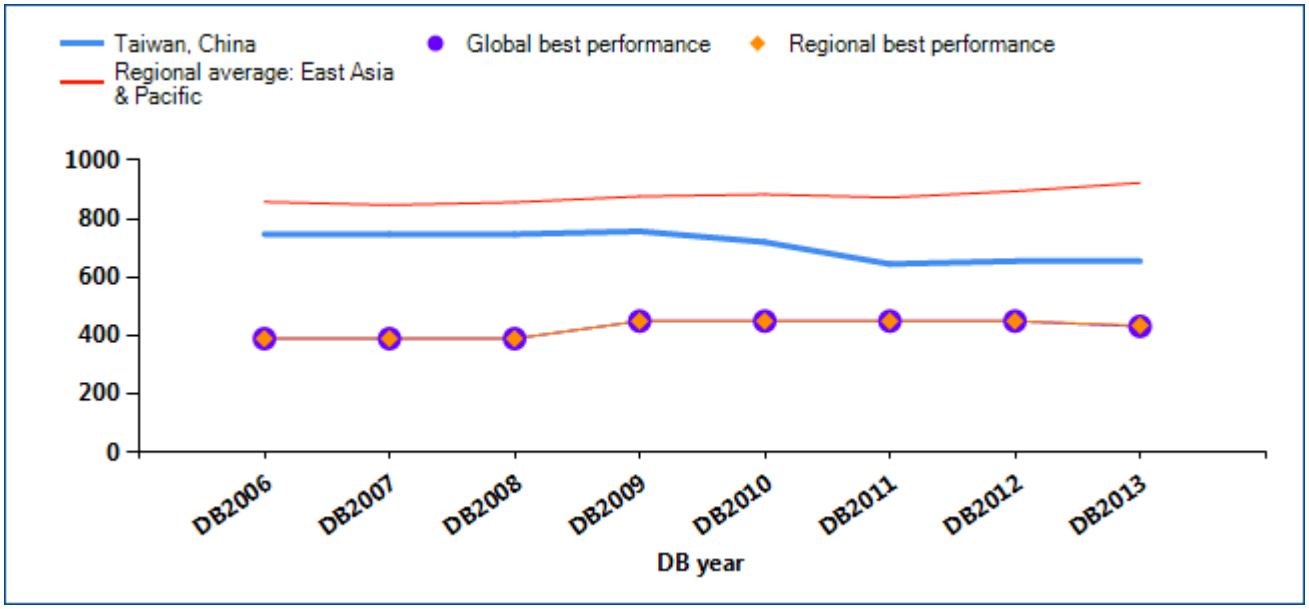


Time to export (days)

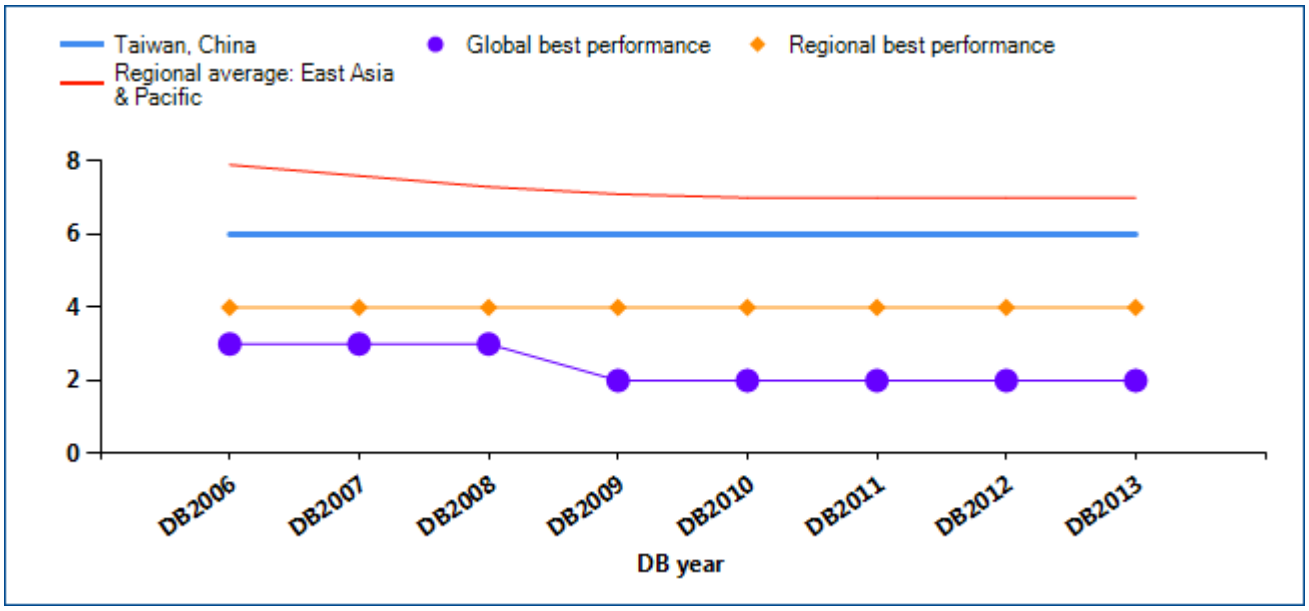


TRADING ACROSS BORDERS

Cost to export (US$ per container)

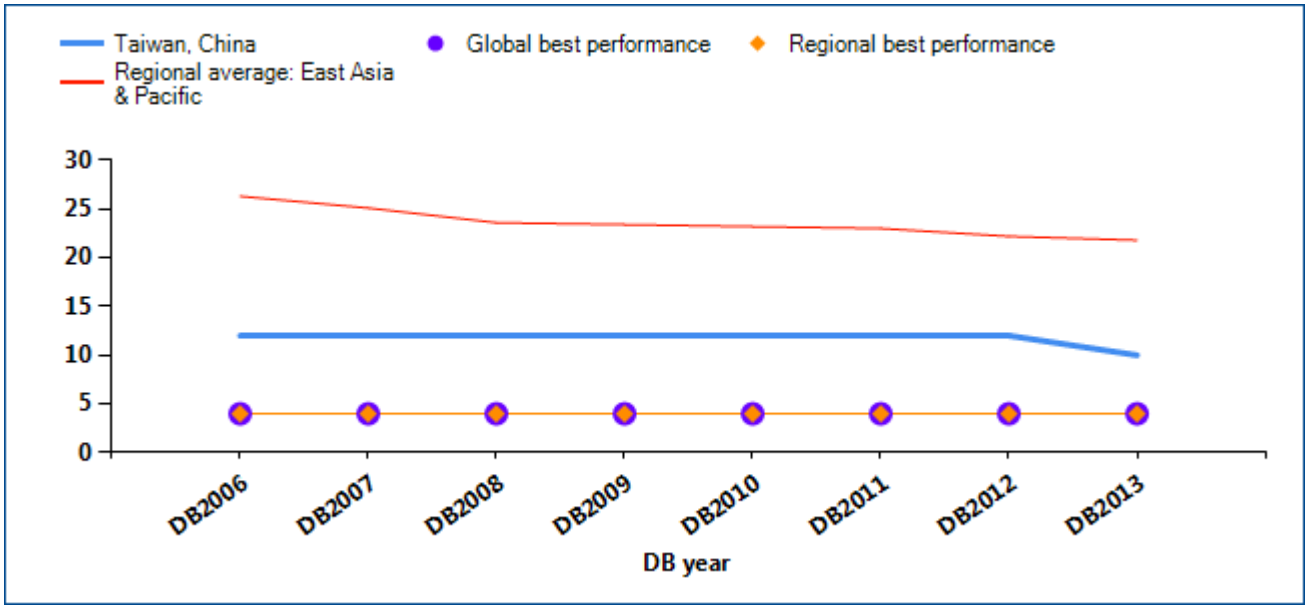


Documents to import (number)

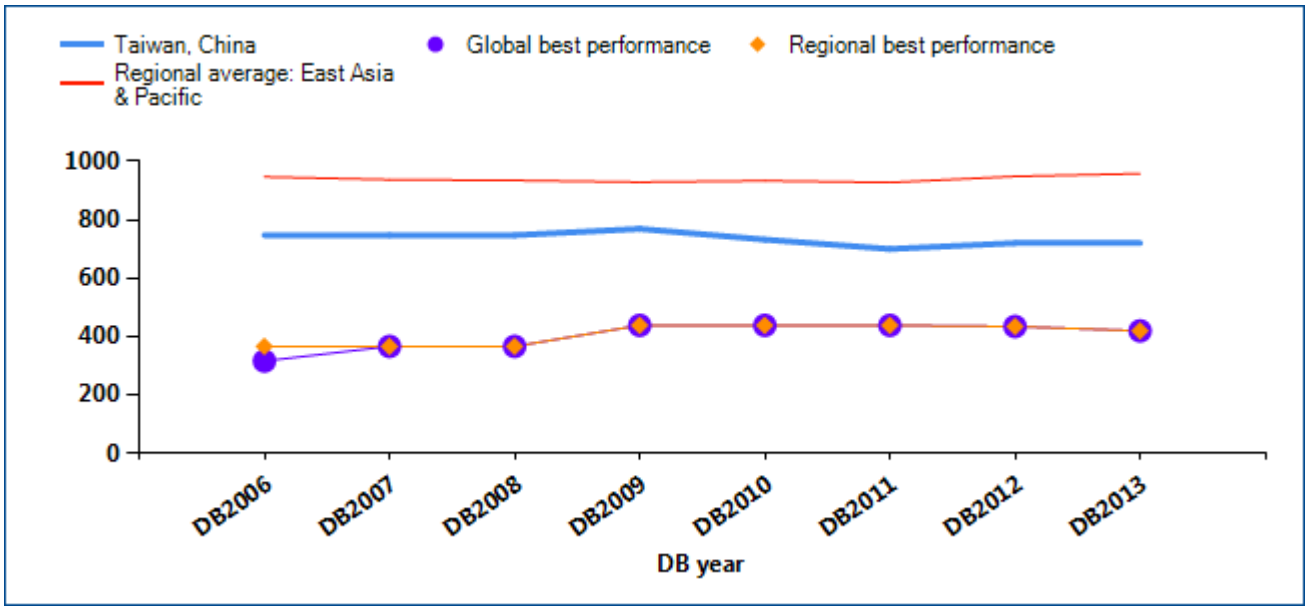


TRADING ACROSS BORDERS

Time to import (days)



Cost to import (US$ per container)



Source: Doing Business database.

TRADING ACROSS BORDERS

In economies around the world, trading across borders as measured by *Doing Business* has become faster and easier over the years. Governments have introduced tools to facilitate trade—including single windows, risk-based inspections and electronic data interchange systems. These changes help improve the trading environment and boost firms' international competitiveness. What trade reforms has *Doing Business* recorded in Taiwan, China (table 9.2)?

Table 9.2 How has Taiwan, China made trading across borders easier—or not?
By *Doing Business* report year

DB year	Reform
DB2008	No reform as measured by Doing Business.
DB2009	No reform as measured by Doing Business.
DB2010	No reform as measured by Doing Business.
DB2011	No reform as measured by Doing Business.
DB2012	No reform as measured by Doing Business.
DB2013	No reform as measured by Doing Business.

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

TRADING ACROSS BORDERS

What are the details?

The indicators reported here for Taiwan, China are based on a set of specific procedural requirements for trading a standard shipment of goods by ocean transport (see the section in this chapter on what the indicators cover). Information on the procedures as well as the required documents and the time and cost to complete each procedure is collected from local freight forwarders, shipping lines, customs brokers, port officials and banks.

LOCATION OF STANDARDIZED COMPANY

City: Taipei

The procedural requirements, and the associated time and cost, for exporting and importing a standard shipment of goods are listed in the summary below, along with the required documents.

Summary of procedures and documents for trading across borders in Taiwan, China

Indicator	Taiwan, China	East Asia & Pacific average	OECD high income average
Documents to export (number)	6	6	4
Time to export (days)	10	21	10
Cost to export (US$ per container)	655	923	1,028
Documents to import (number)	6	7	5
Time to import (days)	10	22	10
Cost to import (US$ per container)	720	958	1,080

Note: In cases where an economy's regional classification is "OECD high income," regional averages above are only displayed once.

Procedures to export	Time (days)	Cost (US$)
Documents preparation	5	175
Customs clearance and technical control	1	100
Ports and terminal handling	2	180
Inland transportation and handling	2	200
Totals	10	655

Procedures to import	Time (days)	Cost (US$)
Documents preparation	5	240
Customs clearance and technical control	1	100

Procedures to import	Time (days)	Cost (US$)
Ports and terminal handling	2	180
Inland transportation and handling	2	200
Totals	10	720

Documents to export
Bill of Lading
Certificate of Origin
Commercial invoice
Customs export declaration
Packing list
Terminal handling receipts

Documents to import
Bill of Lading
Certificate of origin
Commercial invoice
Customs import declaration
Packing list
Terminal handling receipts

Source: Doing Business database.

ENFORCING CONTRACTS

Well-functioning courts help businesses expand their network and markets. Without effective contract enforcement, people might well do business only with family, friends and others with whom they have established relationships. Where contract enforcement is efficient, firms are more likely to engage with new borrowers or customers, and they have greater access to credit.

What do the indicators cover?

Doing Business measures the efficiency of the judicial system in resolving a commercial dispute before local courts. Following the step-by-step evolution of a standardized case study, it collects data relating to the time, cost and procedural complexity of resolving a commercial lawsuit. The ranking on the ease of enforcing contracts is the simple average of the percentile rankings on its component indicators: procedures, time and cost.

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

- The seller and buyer are located in the economy's largest business city.
- The buyer orders custom-made goods, then fails to pay.
- The seller sues the buyer before a competent court.
- The value of the claim is 200% of income per capita.
- The seller requests a pretrial attachment to secure the claim.
- The dispute on the quality of the goods requires an expert opinion.
- The judge decides in favor of the seller; there is no appeal.
- The seller enforces the judgment through a public sale of the buyer's movable assets.

WHAT THE ENFORCING CONTRACTS INDICATORS MEASURE

Procedures to enforce a contract through the courts (number)

Any interaction between the parties in a commercial dispute, or between them and the judge or court officer

Steps to file and serve the case

Steps for trial and judgment

Steps to enforce the judgment

Time required to complete procedures (calendar days)

Time to file and serve the case

Time for trial and obtaining judgment

Time to enforce the judgment

Cost required to complete procedures (% of claim)

No bribes

Average attorney fees

Court costs

Enforcement costs

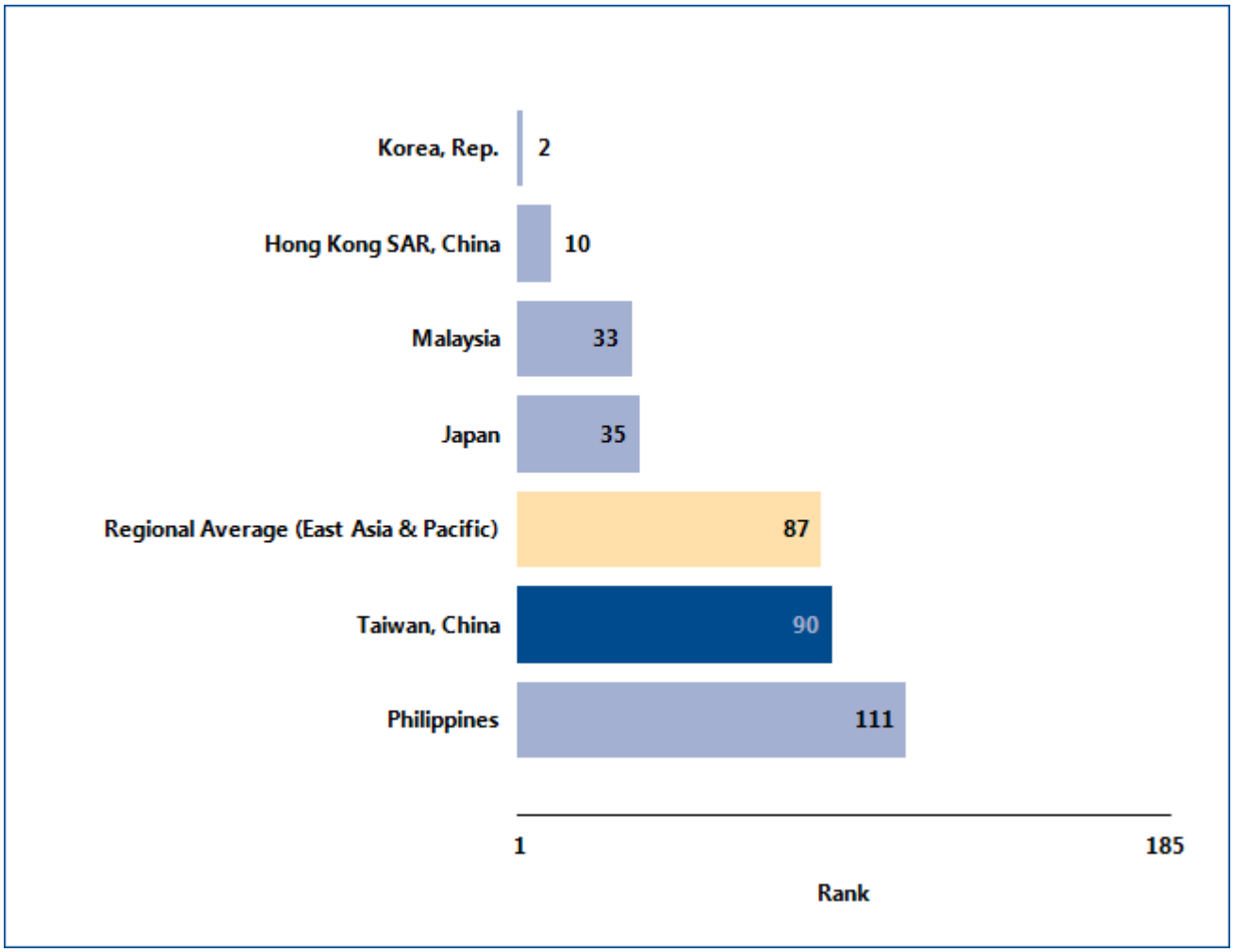
ENFORCING CONTRACTS

Where does the economy stand today?

How efficient is the process of resolving a commercial dispute through the courts in Taiwan, China? According to data collected by *Doing Business*, enforcing a contract takes 510 days, costs 17.7% of the value of the claim and requires 45 procedures (see the summary at the end of this chapter for details).

Globally, Taiwan, China stands at 90 in the ranking of 185 economies on the ease of enforcing contracts (figure 10.1). The rankings for comparator economies and the regional average ranking provide other useful benchmarks for assessing the efficiency of contract enforcement in Taiwan, China.

Figure 10.1 How Taiwan, China and comparator economies rank on the ease of enforcing contracts



Source: Doing Business database.

ENFORCING CONTRACTS

What are the changes over time?

While the most recent *Doing Business* data reflect how easy (or difficult) it is to enforce a contract in Taiwan, China today, data on the underlying indicators over time help identify which areas have changed and where the potential for improvement is greatest (table 10.1).

Table 10.1 The ease of enforcing contracts in Taiwan, China over time

By *Doing Business* report year

Indicator	DB2004	DB2005	DB2006	DB2007	DB2008	DB2009	DB2010	DB2011	DB2012	DB2013
Rank	..	..	..	..	..	..	..	..	89	90
Time (days)	510	510	510	510	510	510	510	510	510	510
Cost (% of claim)	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7
Procedures (number)	45	45	45	45	45	45	45	45	45	45

Note: n.a. = not applicable (the economy was not included in *Doing Business* for that year). DB2012 rankings shown are not last year's published rankings but comparable rankings for DB2012 that capture the effects of such factors as data corrections and the addition of 2 economies (Barbados and Malta) to the sample this year.

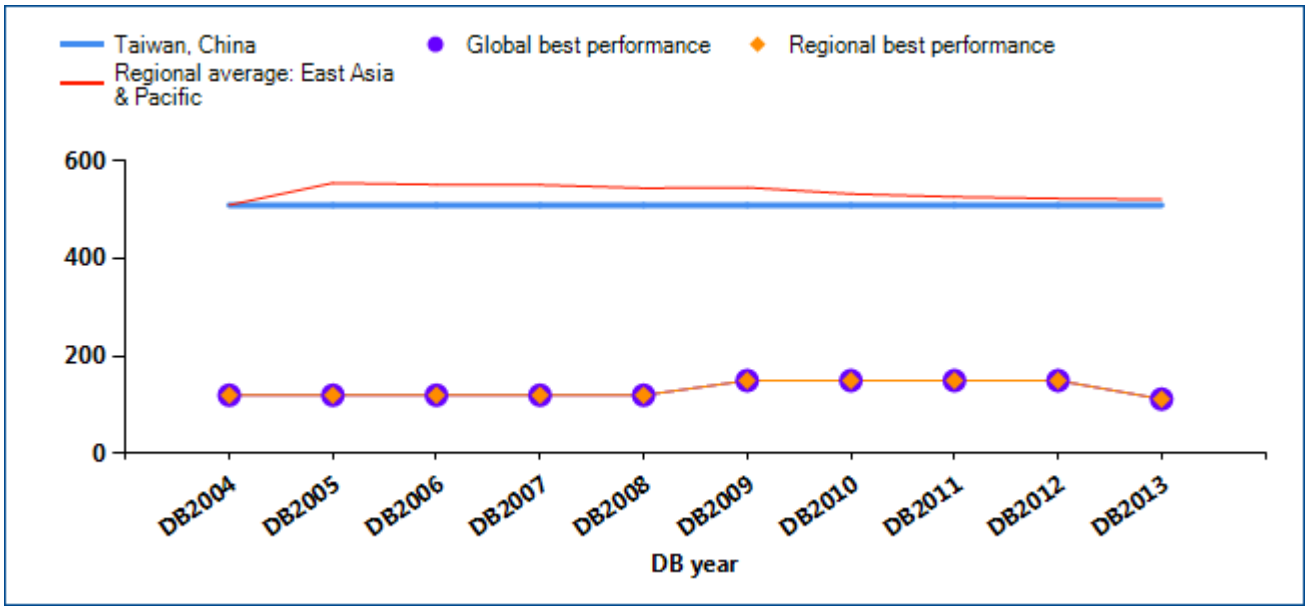
Source: Doing Business database.

ENFORCING CONTRACTS

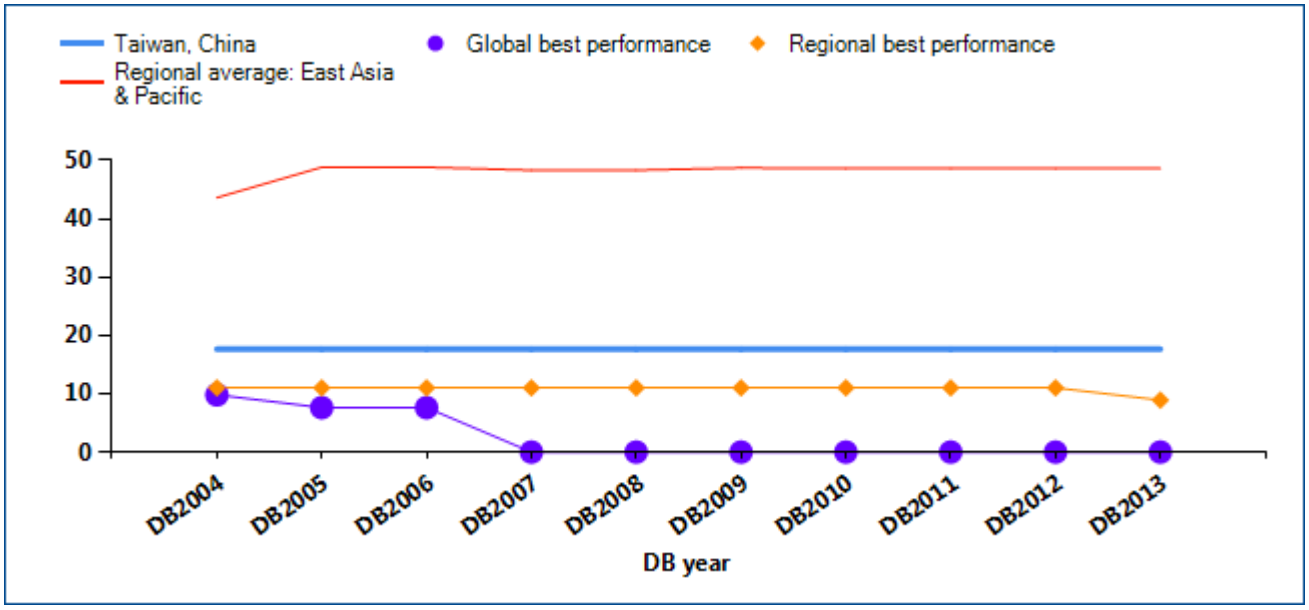
Equally helpful may be the benchmarks provided by the economies that over time have had the best performance regionally or globally on the number of steps, time or cost required to enforce a contract through the courts (figure 10.2). These benchmarks help show what is possible in improving the efficiency of contract enforcement. And changes in regional averages can show where Taiwan, China is keeping up—and where it is falling behind.

Figure 10.2 Has enforcing contracts become easier over time?

Time (days)

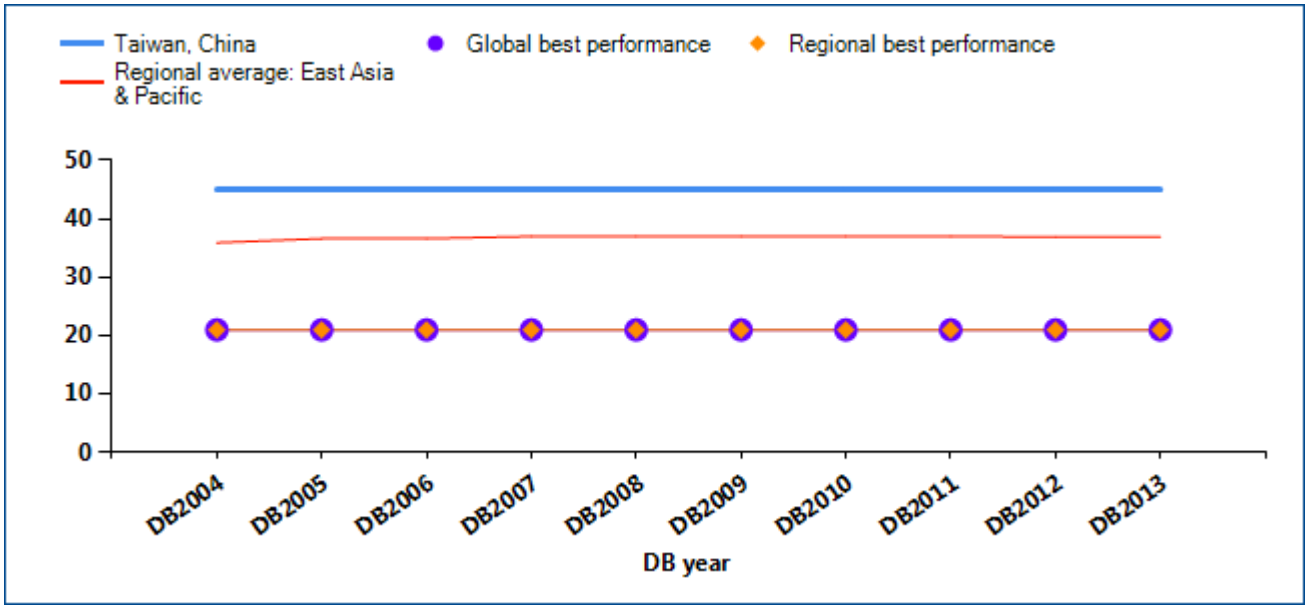


Cost (% of claim)



ENFORCING CONTRACTS

Procedures (number)



Source: Doing Business database.

ENFORCING CONTRACTS

Economies in all regions have improved contract enforcement in recent years. A judiciary can be improved in different ways. Higher-income economies tend to look for ways to enhance efficiency by introducing new technology. Lower-income economies often work on reducing backlogs by introducing periodic reviews to clear inactive cases from the docket and by making procedures faster. What reforms making it easier (or more difficult) to enforce contracts has *Doing Business* recorded in Taiwan, China (table 10.2)?

Table 10.2 How has Taiwan, China made enforcing contracts easier—or not?
By *Doing Business* report year

DB year	Reform
DB2008	No reform as measured by Doing Business.
DB2009	No reform as measured by Doing Business.
DB2010	No reform as measured by Doing Business.
DB2011	No reform as measured by Doing Business.
DB2012	No reform as measured by Doing Business.
DB2013	No reform as measured by Doing Business.

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

ENFORCING CONTRACTS

What are the details?

The indicators reported here for Taiwan, China are based on a set of specific procedural steps required to resolve a standardized commercial dispute through the courts (see the section in this chapter on what the indicators cover). These procedures, and the time and cost of completing them, are identified through study of the codes of civil procedure and other court regulations, as well as through surveys completed by local litigation lawyers (and, in a quarter of the economies covered by *Doing Business*, by judges as well).

COMPETENT COURT

City: **Taipei**

The procedures for resolving a commercial lawsuit, and the associated time and cost, are listed in the summary below.

Summary of procedures for enforcing a contract in Taiwan, China—and the time and cost

Indicator	Taiwan, China	East Asia & Pacific average	OECD high income average
Time (days)	510	522	510
Filing and service	30		
Trial and judgment	360		
Enforcement of judgment	120		
Cost (% of claim)	17.7	48.6	20.1
Attorney cost (% of claim)	15.5		
Court cost (% of claim)	1.1		
Enforcement Cost (% of claim)	1.1		
Procedures (number)	45	37	31

Note: In cases where an economy's regional classification is "OECD high income," regional averages above are only displayed once.

ENFORCING CONTRACTS

No.	Procedure
	Filing and service:
1	**Plaintiff requests payment:** Plaintiff or his lawyer asks Defendant orally or in writing to comply with the contract.
2	**Plaintiff's hiring of lawyer:** Plaintiff hires a lawyer to represent him before the court.
*	**Plaintiff's filing of summons and complaint:** Plaintiff files his summons and complaint with the court, orally or in writing.
*	**Plaintiff's payment of court fees:** Plaintiff pays court duties, stamp duties, or any other type of court fee.
3	**Registration of court case:** The court administration registers the lawsuit or court case. This includes assigning a reference number to the lawsuit or court case.
*	**Assignment of court case to a judge:** The court case is assigned to a specific judge through a random procedure, automated system, ruling of an administrative judge, court officer, etc.
4	**Court scrutiny of summons and complaint:** A judge examines Plaintiff's summons and complaint for formal requirements.
5	**Delivery of summons and complaint to person authorized to perform service of process on Defendant:** The judge or a court officer delivers the summons to a summoning office, officer, or authorized person (including Plaintiff), for service of process on Defendant.
*	**Mailing of summons and complaint:** Court or process server, including (private) bailiff, mails summons and complaint to Defendant.
*	**Application for pre-judgment attachment:** Plaintiff submits an application in writing for the attachment of Defendant's property prior to judgment. (see assumption 5)
*	**Decision on pre-judgment attachment:** The judge decides whether to grant Plaintiff's request for pre-judgment attachment of Defendant's property and notifies Plaintiff and Defendant of the decision. This step may include requesting that Plaintiff submit guarantees or bonds to secure Defendant
6	**Guarantees securing attached property:** Plaintiff typically submits guarantees or bonds to secure Defendant against possible damages to attached property. (see assumption 5)
7	**Pre-judgment attachment.:** Defendant's property is attached prior to judgment. Attachment is either physical or achieved by registering, marking, debiting or separating assets. (see assumption 5)
8	**Custody of assets attached prior to judgment:** Defendant's attached assets are put under enforcement officer's or (private) bailiff's care. (see assumption 5)
	Trial and judgment:
9	**Defendant's filing of defense or answer to Plaintiff's claim:** Defendant files a written pleading which includes his defense or answer on the merits of the case. Defendant's written answer may or may not include witness statements, expert statements, the documents Defendant relies on as evidence and the legal authori
10	**Deadline for Plaintiff to answer Defendant's defense or answer:** Judge sets the deadline by which Plaintiff will be allowed to answer Defendant's defense or answer.

No.	Procedure
11	**Plaintiff's written response to Defendant's defense or answer:** Plaintiff responds to Defendant's defense or answer with a written pleading. Plaintiff's answer may or may not include a witness statements or expert (witness) statements.
12	**Filing of pleadings:** Plaintiff and Defendant file written pleadings and submissions with the court and transmit copies of the written pleadings or submissions to one another. The pleadings may or may not include witness statements or expert (witness) statements.
13	**Adjournments:** Court procedure is delayed because one or both parties request and obtain an adjournment to submit written pleadings.
14	**Framing of issues:** Plaintiff and Defendant assist the court in framing issues on which evidence is to be presented.
*	**Court appointment of independent expert:** Judge appoints, either at the parties' request or at his own initiative, an independent expert to decide whether the quality of the goods Plaintiff delivered to Defendant is adequate. (see assumption 6-b of this case)
15	**Notification of court-appointment of independent expert:** The court notifies both parties that the court is appointing an independent expert. (see assumption 6-b of this case)
*	**Delivery of expert report by court-appointed expert:** The independent expert appointed by the court delivers his or her expert report to the court. (see assumption 6-b of this case)
16	**Pre-trial conference on procedure:** The judge meets with the parties to discuss procedural issues (for example which applications and motions parties intend to file, which documents parties intend to rely on, what will be presented as evidence the oral hearing or trial, etc.)
*	**Setting of date(s) for oral hearing or trial:** The judge sets the date(s) for the oral hearing or trial.
17	**Preliminary hearing aimed at preparing for the oral hearing:** The judge meets the parties to make practical arrangements for the oral hearing on the merits of the case.
18	**Pre-trial conference aimed at preparing for trial:** The judge meets with parties to make practical arrangements for the trial (for example, the number of witnesses parties intend to call on during trial, how much time each party is given to present oral arguments etc.).
19	**Summoning of (expert) witnesses:** The court summons (expert) witnesses to appear in court for the oral hearing or trial. (see assumption 6-a)
20	**Trial (prevalent in common law):** The parties argue the merits of the case at (an) oral session(s) before the court. Witnesses and expert witnesses are questioned and cross-examined during trial.
21	**Adjournments:** Court proceedings are delayed because one or both parties request and obtain an adjournment during the oral hearing or trial, resulting in an additional or later trial or hearing date.
22	**Order for submission of final arguments:** The judge sets the deadline for the submission of final factual and legal arguments.
*	**Final arguments:** The parties present their final factual and legal arguments to the court either by oral presentation or by a written submission.
23	**Judgment date:** The judge sets a date for delivery of the judgment.
24	**Notification of judgment in court:** The parties are notified of the judgment at a court hearing.

No.	Procedure
25	**Writing of judgment:** The judge produces a written copy of the judgment.
26	**Registration of judgment:** The court office registers the judgment after receiving a written copy of the judgment.
27	**Plaintiff's receipt of a copy of written judgment:** Plaintiff receives a copy of the written judgment.
28	**Notification of Defendant of judgment:** Plaintiff or court formally notifies the Defendant of the judgment. The appeal period starts to run the day the Defendant is formally notified of the judgment.
29	**Appeal period:** By law, Defendant has the opportunity to appeal the judgment during a period specified in the law. Defendant decides not to appeal. Judgment becomes final the day the appeal period ends.
30	**Reimbursement by Defendant of Plaintiff's court fees:** The judgment obliges Defendant to reimburse Plaintiff for the court fees Plaintiff has advanced, because Defendant has lost the case.
	Enforcement of judgment:
*	**Plaintiff's hiring of lawyer:** Plaintiff hires a lawyer to enforce the judgment or continues to be represented by a lawyer during the enforcement of judgment phase.
31	**Plaintiff's approaching of court enforcement officer or (private) bailiff to enforce the judgment:** To enforce the judgment, Plaintiff approaches a court enforcement officer such as a court bailiff or sheriff, or a private bailiff.
32	**Publication of judgment:** The judgment must be published in an official journal, gazette or local newspaper.
*	**Plaintiff's request for enforcement order:** Plaintiff applies to the court to obtain the enforcement order ('seal' on judgment).
33	**Plaintiff's advancement of enforcement fees:** Plaintiff pays the fees related to the enforcement of the judgment.
*	**Delivery of enforcement order:** The court's enforcement order is delivered to a court enforcement officer or a (private) bailiff.
34	**Request to Defendant to comply voluntarily with judgment:** Plaintiff, a court enforcement officer or a (private) bailiff requests Defendant to voluntarily comply with the judgment, giving Defendant a last chance to comply voluntarily with the judgment.
35	**Identification of Defendant's assets for attachment by court official or Defendant:** Judge, a court enforcement officer, a (private) bailiff or the Defendant himself identifies Defendant's movable assets for attachment.
36	**Plaintiff's identification of Defendant's assets for attachment:** Plaintiff identifies Defendant's assets for attachment.
37	**Attachment:** Defendant's movable goods are attached (physically or by registering, marking or separating assets).
38	**Report on execution of attachment:** A court enforcement officer or private process server delivers a report on the attachment of Defendant's movable goods to the judge.
39	**Valuation or appraisal of attached movable goods:** The court or court appointed valuation expert evaluates the attached goods.
40	**Enforcement disputes before court:** The enforcement of the judgment is delayed because Defendant opposes aspects of the enforcement process before the judge.
41	**Call for public auction:** The judge calls a public auction by, for example, advertising or publication in the newspapers.

No.	Procedure
42	**Sale through public auction:** The Defendant's movable property is sold at public auction.
43	**Distribution of proceeds:** The proceeds of the public auction are distributed to various creditors (including Plaintiff), according to the rules of priority.
44	**Reimbursement of Plaintiff's enforcement fees:** Defendant reimburses Plaintiff's enforcement fees which Plaintiff had advanced previously.
45	**Payment:** Court orders that the proceeds of the public auction or the direct sale be delivered to Plaintiff.

* Takes place simultaneously with another procedure.
Source: Doing Business database.

RESOLVING INSOLVENCY

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

What do the indicators cover?

Doing Business studies the time, cost and outcome of insolvency proceedings involving domestic entities. It does not measure insolvency proceedings of individuals and financial institutions. The data are derived from survey responses by local insolvency practitioners and verified through a study of laws and regulations as well as public information on bankruptcy systems.

The ranking on the ease of resolving insolvency is based on the recovery rate, which is recorded as cents on the dollar recouped by creditors through reorganization, liquidation or debt enforcement (foreclosure) proceedings. The recovery rate is a function of time, cost and other factors, such as lending rate and the likelihood of the company continuing to operate.

To make the data comparable across economies, *Doing Business* uses several assumptions about the business and the case. It assumes that the company:

- Is a domestically owned, limited liability company operating a hotel.
- Operates in the economy's largest business city.
- Has 201 employees, 1 main secured creditor and 50 unsecured creditors.
- Has a higher value as a going concern—and the efficient outcome is either reorganization or sale as a going concern, not piecemeal liquidation.

WHAT THE RESOLVING INSOLVENCY INDICATORS MEASURE

Time required to recover debt (years)

Measured in calendar years

Appeals and requests for extension are included

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

Measured as percentage of estate value

Court fees

Fees of insolvency administrators

Lawyers' fees

Assessors' and auctioneers' fees

Other related fees

Recovery rate for creditors (cents on the dollar)

Measures the cents on the dollar recovered by creditors

Present value of debt recovered

Official costs of the insolvency proceedings are deducted

Depreciation of furniture is taken into account

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

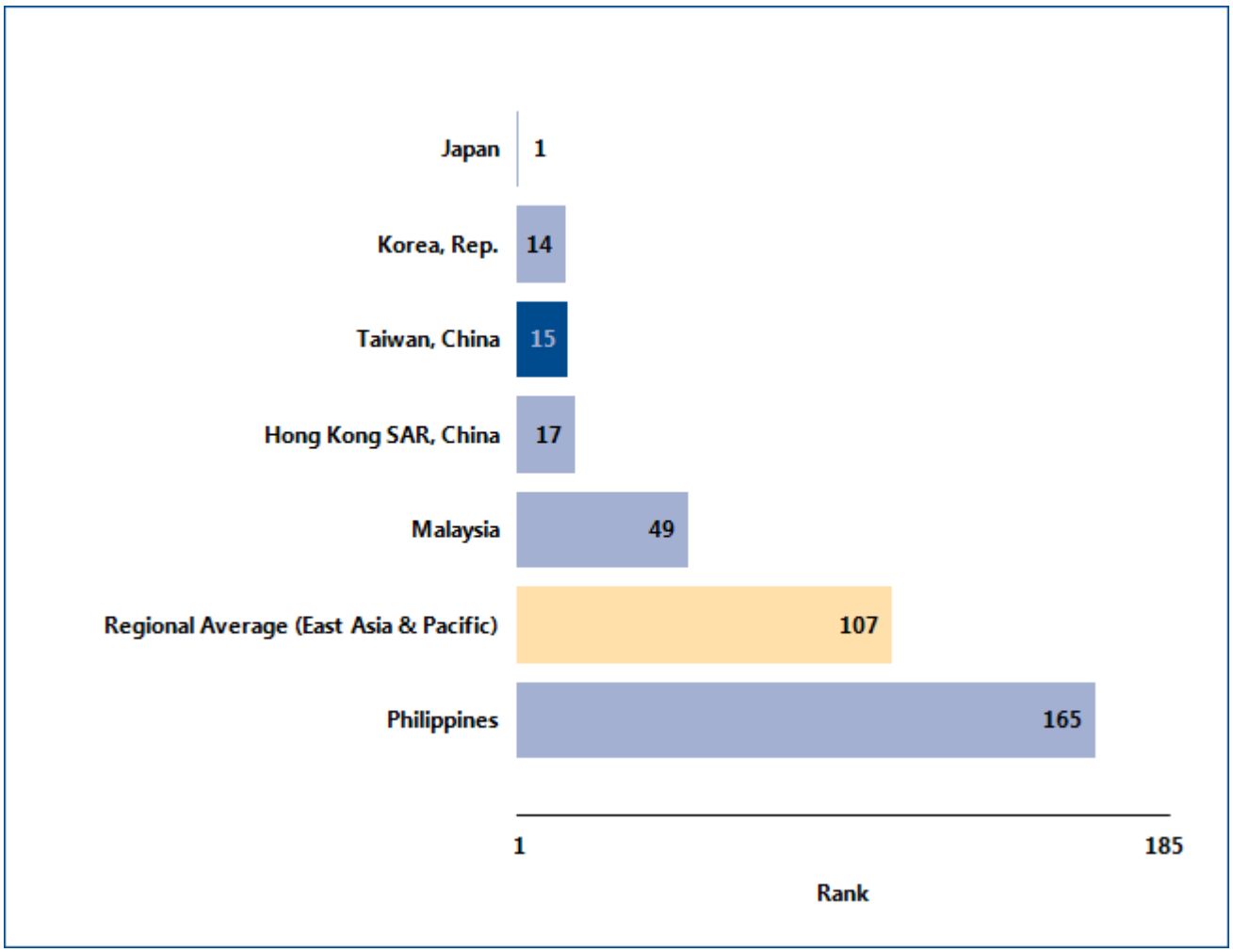
RESOLVING INSOLVENCY

Where does the economy stand today?

Speed, low costs and continuation of viable businesses characterize the top-performing economies. How efficient are insolvency proceedings in Taiwan, China? According to data collected by *Doing Business*, resolving insolvency takes 1.9 years on average and costs 4% of the debtor's estate, with the most likely outcome being that the company will be sold as going concern. The average recovery rate is 81.8 cents on the dollar.

Globally, Taiwan, China stands at 15 in the ranking of 185 economies on the ease of resolving insolvency (figure 11.1). The rankings for comparator economies and the regional average ranking provide other useful benchmarks for assessing the efficiency of insolvency proceedings in Taiwan, China.

Figure 11.1 How Taiwan, China and comparator economies rank on the ease of resolving insolvency



Source: Doing Business database.

RESOLVING INSOLVENCY

What are the changes over time?

While the most recent *Doing Business* data reflect the efficiency of insolvency proceedings in Taiwan, China today, data over time show where the efficiency has changed—and where it has not (table 11.1). That can help identify where the potential for improvement is greatest.

Table 11.1 The ease of resolving insolvency in Taiwan, China over time

By *Doing Business* report year

Indicator	DB2004	DB2005	DB2006	DB2007	DB2008	DB2009	DB2010	DB2011	DB2012	DB2013
Rank	..	..	..	..	..	..	..	..	14	15
Time (years)	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
Cost (% of estate)	4	4	4	4	4	4	4	4	4	4
Recovery rate (cents on the dollar)	81.0	81.0	80.2	80.3	80.2	80.9	80.9	82.2	82.1	81.8

Note: n.a. = not applicable (the economy was not included in *Doing Business* for that year). DB2012 rankings shown are not last year's published rankings but comparable rankings for DB2012 that capture the effects of such factors as data corrections and the addition of 2 economies (Barbados and Malta) to the sample this year. "No practice" indicates that in each of the previous 5 years the economy had no cases involving a judicial reorganization, judicial liquidation or debt enforcement procedure (foreclosure). This means that creditors are unlikely to recover their money through a formal legal process (in or out of court). The recovery rate for "no practice" economies is 0.

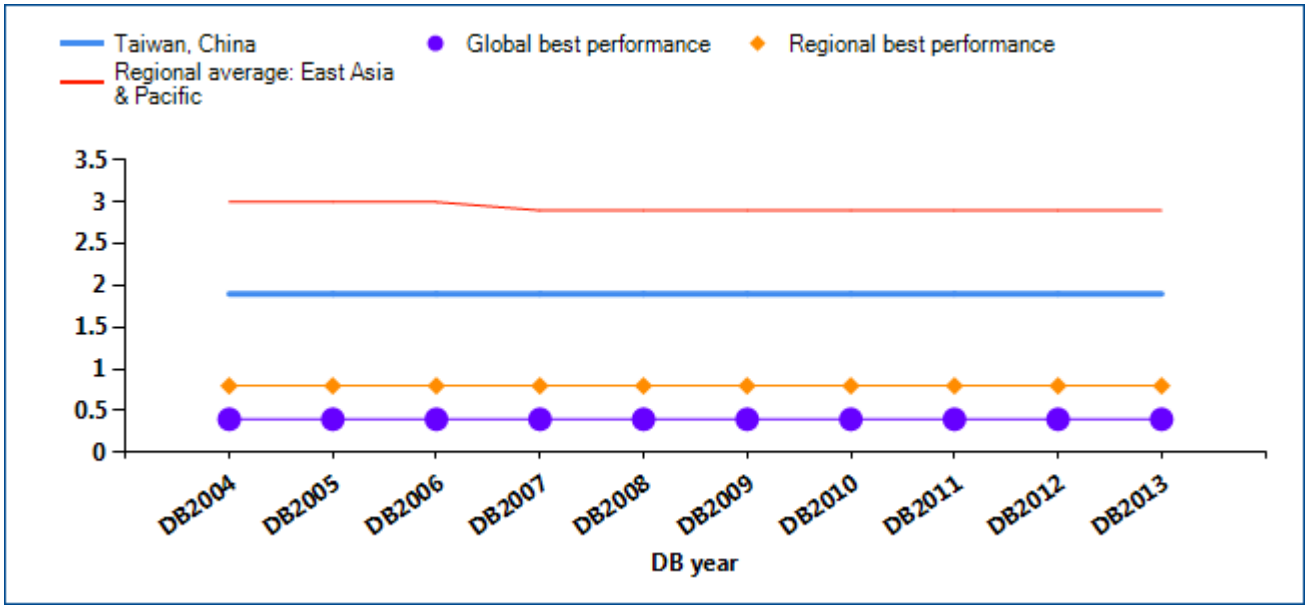
Source: Doing Business database.

RESOLVING INSOLVENCY

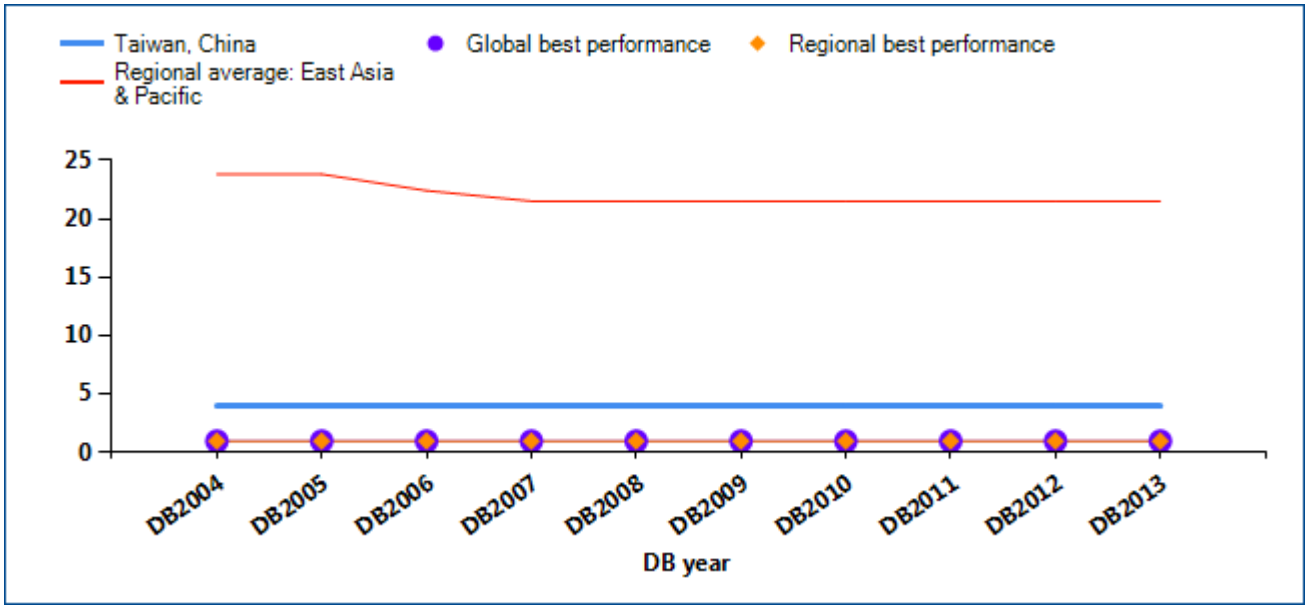
Equally helpful may be the benchmarks provided by the economies that over time have had the best performance regionally or globally on the time or cost of insolvency proceedings or on the recovery rate (figure 11.2). These benchmarks help show what is possible in improving the efficiency of insolvency proceedings. And changes in regional averages can show where Taiwan, China is keeping up—and where it is falling behind.

Figure 11.2 Has resolving insolvency become easier over time?

Time (years)

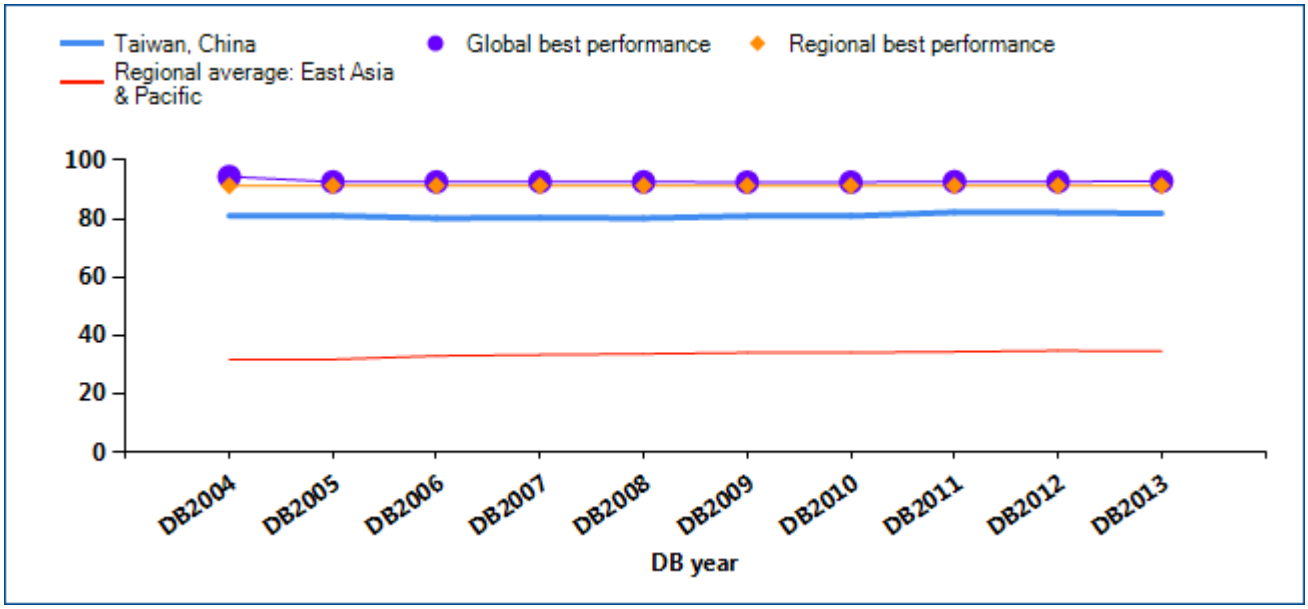


Cost (% of estate)



RESOLVING INSOLVENCY

Recovery rate (cents on the dollar)



Note: Regional averages on time and cost exclude economies with a "no practice" mark.
Source: Doing Business database.

RESOLVING INSOLVENCY

A well-balanced bankruptcy system distinguishes companies that are financially distressed but economically viable from inefficient companies that should be liquidated. But in some insolvency systems even viable businesses are liquidated. This is starting to change. Many recent reforms of bankruptcy laws have been aimed at helping more of the viable businesses survive. What insolvency reforms has *Doing Business* recorded in Taiwan, China (table 11.2)?

Table 11.2 How has Taiwan, China made resolving insolvency easier—or not?
By *Doing Business* report year

DB year	Reform
DB2008	No reform as measured by Doing Business.
DB2009	No reform as measured by Doing Business.
DB2010	No reform as measured by Doing Business.
DB2011	No reform as measured by Doing Business.
DB2012	No reform as measured by Doing Business.
DB2013	No reform as measured by Doing Business.

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

EMPLOYING WORKERS

Doing Business measures flexibility in the regulation of employment, specifically as it affects the hiring and redundancy of workers and the rigidity of working hours. From 2007 to 2011 improvements were made to align the methodology for the employing workers indicators with the letter and spirit of the International Labour Organization (ILO) conventions. Only 4 of the 188 ILO conventions cover areas measured by *Doing Business*: employee termination, weekend work, holiday with pay and night work. The *Doing Business* methodology is fully consistent with these 4 conventions. The ILO conventions covering areas related to the employing workers indicators do not include the ILO core labor standards—8 conventions covering the right to collective bargaining, the elimination of forced labor, the abolition of child labor and equitable treatment in employment practices.

Between 2009 and 2011 the World Bank Group worked with a consultative group—including labor lawyers, employer and employee representatives, and experts from the ILO, the Organisation for Economic Co-operation and Development, civil society and the private sector—to review the employing workers methodology and explore future areas of research.

A full report with the conclusions of the consultative group is available at http://www.doingbusiness.org/methodology/employing-workers.

Doing Business 2013 does not present rankings of economies on the employing workers indicators or include the topic in the aggregate ranking on the ease of doing business. The report does present the data on the employing workers indicators in an annex. Detailed data collected on labor regulations are available on the *Doing Business* website (http://www.doing business.org).

Particular data for Taiwan, China are presented here without scoring.

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

The worker:

- Earns a salary plus benefits equal to the economy's average wage during the entire period of his employment.
- Has a pay period that is the most common for workers in the economy.
- Is a lawful citizen who belongs to the same race and religion as the majority of the economy's population.
- Resides in the economy's largest business city.
- Is not a member of a labor union, unless membership is mandatory.

The business:

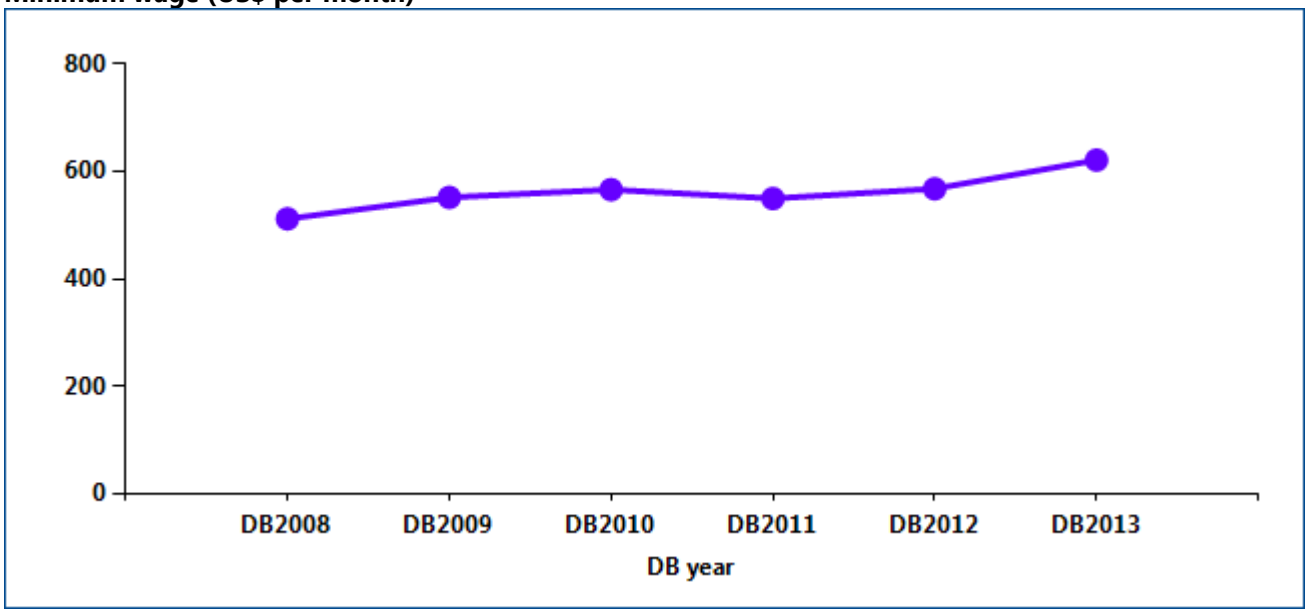
- Is a limited liability company.
- Operates in the economy's largest business city.
- Is 100% domestically owned.
- Operates in the manufacturing sector.
- Has 60 employees.
- Is subject to collective bargaining agreements in economies where such agreements cover more than half the manufacturing sector and apply even to firms not party to them.
- Abides by every law and regulation but does not grant workers more benefits than mandated by law, regulation or (if applicable) collective bargaining agreement.

EMPLOYING WORKERS

What do some of the data show?

One of the employing workers indicators is the difficulty of hiring index. This measure assesses, among other things, the minimum wage for a 19-year-old worker in his or her first job. *Doing Business* data show the trend in the minimum wage applied by Taiwan, China (figure 12.1).

Figure 12.1 Has the minimum wage for a 19-year-old worker or an apprentice increased over time?



Note: A horizontal line along the x-axis of the figure indicates that the economy has no minimum wage.
Source: Doing Business database.

EMPLOYING WORKERS

Employment laws are needed to protect workers from arbitrary or unfair treatment and to ensure efficient contracting between employers and workers. Many economies that changed their labor regulations in the past 4 years did so in ways that increased labor market flexibility. What changes did Taiwan, China adopt that affected the *Doing Business* indicators on employing workers (table 12.1)?

Table 12.1 What changes did Taiwan, China make in employing workers in 2012?

Reform
No reform as measured by Doing Business.

Source: Doing Business database.

EMPLOYING WORKERS

What are the details?

The data on employing workers reported here for Taiwan, China are based on a detailed survey of employment regulations that is completed by local lawyers and public officials. Employment laws and regulations as well as secondary sources are reviewed to ensure accuracy.

Rigidity of employment index

The rigidity of employment index measures 3 areas of labor regulation: difficulty of hiring, rigidity of hours and difficulty of redundancy.

Difficulty of hiring index

The difficulty of hiring index measures whether fixed-term contracts are prohibited for permanent tasks; the maximum cumulative duration of fixed-term contracts; and the ratio of the minimum wage for a trainee or first-time employee to the average value added per worker. (The average value added per worker is the ratio of an economy's gross national income per capita to the working-age population as a percentage of the total population.)

Difficulty of hiring index	Data
Fixed-term contracts prohibited for permanent tasks?	Yes
Maximum length of a single fixed-term contract (months)	Generally 6 to 12 months, but no limit for a "specified work" contract if the prior approval of the competent authority has been obtained - Art. 6, Enforcement Rules of the Labor Standards Act.
Maximum length of fixed-term contracts, including renewals (months)	12
Minimum wage for a 19-year old worker or an apprentice (US$/month)	621.5
Ratio of minimum wage to value added per worker	0.26

Source: Doing Business database.

EMPLOYING WORKERS

Rigidity of hours index

The rigidity of hours index has 5 components: whether there are restrictions on night work; whether there are restrictions on weekly holiday work; whether the workweek can consist of 5.5 days or is more than 6 days; whether the workweek can extend to 50 hours or more (including overtime) for 2 months a year to respond to a seasonal increase in production; and whether the average paid annual leave for a worker with 1 year of tenure, a worker with 5 years and a worker with 10 years is more than 26 working days or fewer than 15 working days.

Rigidity of hours index	Data
Standard workday in manufacturing (hours)	Approximately 8 hours/day - Art. 30, Labour Standards Act
50-hour workweek allowed for 2 months a year in case of a seasonal increase in production?	Yes
Maximum working days per week	6.0
Premium for night work (% of hourly pay) in case of continuous operations	0%
Premium for work on weekly rest day (% of hourly pay) in case of continuous operations	100%
Major restrictions on night work in case of continuous operations?	No
Major restrictions on weekly holiday in case of continuous operations?	No
Paid annual leave for a worker with 1 year of tenure (in working days)	7.0
Paid annual leave for a worker with 5 years of tenure (in working days)	14.0
Paid annual leave for a worker with 10 years of tenure (in working days)	15.0
Paid annual leave (average for workers with 1, 5 and 10 years of tenure, in working days)	12.0

Source: Doing Business database.

EMPLOYING WORKERS

Difficulty of redundancy index

The difficulty of redundancy index has 8 components: whether redundancy is disallowed as a basis for terminating workers; whether the employer needs to notify a third party (such as a government agency) to terminate 1 redundant worker; whether the employer needs to notify a third party to terminate a group of 9 redundant workers; whether the employer needs approval from a third party to terminate 1 redundant worker; whether the employer needs approval from a third party to terminate a group of 9 redundant workers; whether the law requires the employer to reassign or retrain a worker before making the worker redundant; whether priority rules apply for redundancies; and whether priority rules apply for reemployment.

Difficulty of redundancy index	Data
Dismissal due to redundancy allowed by law?	Yes
Third-party notification if 1 worker is dismissed?	Yes
Third-party approval if 1 worker is dismissed?	No
Third-party notification if 9 workers are dismissed?	Yes
Third-party approval if 9 workers are dismissed?	No
Retraining or reassignment obligation before redundancy?	Yes
Priority rules for redundancies?	No
Priority rules for reemployment?	Yes

Source: Doing Business database.

EMPLOYING WORKERS

Redundancy cost

The redundancy cost indicator measures the cost of advance notice requirements, severance payments and penalties due when terminating a redundant worker, expressed in weeks of salary. The average value of notice requirements and severance payments applicable to a worker with 1 year of tenure, a worker with 5 years and a worker with 10 years is used to assign the score.

Redundancy cost indicator	Data
Notice period for redundancy dismissal (for a worker with 1 year of tenure, in salary weeks)	2.9
Notice period for redundancy dismissal (for a worker with 5 years of tenure, in salary weeks)	4.3
Notice period for redundancy dismissal (for a worker with 10 years of tenure, in salary weeks)	4.3
Notice period for redundancy dismissal (average for workers with 1, 5 and 10 years of tenure, in salary weeks)	3.8
Severance pay for redundancy dismissal (for a worker with 1 year of tenure, in salary weeks)	2.2
Severance pay for redundancy dismissal (for a worker with 5 years of tenure, in salary weeks)	10.8
Severance pay for redundancy dismissal (for a worker with 10 years of tenure, in salary weeks)	43.3
Severance pay for redundancy dismissal (average for workers with 1, 5 and 10 years of tenure, in salary weeks)	18.8

Source: Doing Business database.

DATA NOTES

The indicators presented and analyzed in *Doing Business* measure business regulation and the protection of property rights—and their effect on businesses, especially small and medium-size domestic firms. First, the indicators document the complexity of regulation, such as the number of procedures to start a business or to register and transfer commercial property. Second, they gauge the time and cost of achieving a regulatory goal or complying with regulation, such as the time and cost to enforce a contract, go through bankruptcy or trade across borders. Third, they measure the extent of legal protections of property, for example, the protections of investors against looting by company directors or the range of assets that can be used as collateral according to secured transactions laws. Fourth, a set of indicators documents the tax burden on businesses. Finally, a set of data covers different aspects of employment regulation.

The data for all sets of indicators in *Doing Business 2013* are for June 2012.[2]

Methodology

The *Doing Business* data are collected in a standardized way. To start, the *Doing Business* team, with academic advisers, designs a questionnaire. The questionnaire uses a simple business case to ensure comparability across economies and over time—with assumptions about the legal form of the business, its size, its location and the nature of its operations. Questionnaires are administered through more than 9,600 local experts, including lawyers, business consultants, accountants, freight forwarders, government officials and other professionals routinely administering or advising on legal and regulatory requirements. These experts have several rounds of interaction with the *Doing Business* team, involving conference calls, written correspondence and visits by the team. For *Doing Business 2013* team members visited 24 economies to verify data and recruit respondents. The data from questionnaires are subjected to numerous rounds of verification, leading to revisions or expansions of the information collected.

[2] The data for paying taxes refer to January – December 2011.

ECONOMY CHARACTERISTICS

Gross national income per capita

Doing Business 2013 reports 2011 income per capita as published in the World Bank's *World Development Indicators 2012*. Income is calculated using the Atlas method (current US$). For cost indicators expressed as a percentage of income per capita, 2011 gross national income (GNI) in U.S. dollars is used as the denominator. GNI data were not available from the World Bank for Afghanistan; Australia; The Bahamas; Bahrain; Barbados; Brunei Darussalam; Cyprus; Djibouti; Guyana; the Islamic Republic of Iran; Kuwait; Malta; New Zealand; Oman; Puerto Rico (territory of the United States); Sudan; Suriname; the Syrian Arab Republic; Timor-Leste; West Bank and Gaza; and the Republic of Yemen. In these cases GDP or GNP per capita data and growth rates from the International Monetary Fund's World Economic Outlook database and the Economist Intelligence Unit were used.

Region and income group

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

Population

Doing Business 2013 reports midyear 2011 population statistics as published in *World Development Indicators 2012*.

The *Doing Business* methodology offers several advantages. It is transparent, using factual information about what laws and regulations say and allowing multiple interactions with local respondents to clarify potential misinterpretations of questions. Having

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

Information on the methodology for each *Doing Business* topic can be found on the *Doing Business* website at http://www.doingbusiness.org/methodology/.

Limits to what is measured

The *Doing Business* methodology has 5 limitations that should be considered when interpreting the data. First, the collected data refer to businesses in the economy's largest business city (which in some economies differs from the capital) and may not be representative of regulation in other parts of the economy. To address this limitation, subnational *Doing Business* indicators were created (see the section on subnational *Doing Business* indicators). Second, the data often focus on a specific business form—generally a limited liability company (or its legal equivalent) of a specified size—and may not be representative of the regulation on other businesses, for example, sole proprietorships. Third, transactions described in a standardized case scenario refer to a specific set of issues and may not represent the full set of issues a business encounters. Fourth, the measures of time involve an element of judgment by the expert respondents. When sources indicate different estimates, the time indicators reported in *Doing Business* represent the median values of several responses given under the assumptions of the standardized case.

Finally, the methodology assumes that a business has full information on what is required and does not waste time when completing procedures. In practice, completing a procedure may take longer if the business lacks information or is unable to follow up promptly. Alternatively, the business may choose to disregard some burdensome procedures. For both reasons the time delays reported in *Doing Business 2013* would differ from the recollection of entrepreneurs reported in the World Bank Enterprise Surveys or other perception surveys.

Subnational *Doing Business* indicators

This year *Doing Business* completed subnational studies for Indonesia, Kenya, Mexico, the Russian Federation and the United Arab Emirates. Each of these countries had already asked to have subnational data in the past, and this year *Doing Business* updated the indicators, measured improvements over time and expanded geographic coverage to additional cities or added additional indicators. *Doing Business* also published regional studies for the Arab world, the East African Community and member states of the Organization for the Harmonization of Business Law in Africa (OHADA).

The subnational studies point to differences in business regulation and its implementation—as well as in the pace of regulatory reform—across cities in the same economy. For several economies subnational studies are now periodically updated to measure change over time or to expand geographic coverage to additional cities. This year that is the case for all the subnational studies published.

Changes in what is measured

The ranking methodology for paying taxes was updated this year. The threshold for the total tax rate introduced last year for the purpose of calculating the ranking on the ease of paying taxes was updated. All economies with a total tax rate below the threshold (which is calculated and adjusted on a yearly basis) receive the same ranking on the total tax rate indicator. The threshold is not based on any economic theory of an "optimal tax rate" that minimizes distortions or maximizes efficiency in the tax system of an economy overall. Instead, it is mainly empirical in nature, set at the lower end of the distribution of tax rates levied on medium-size enterprises in the manufacturing sector as observed through the paying taxes indicators. This reduces the bias in the indicators toward economies that do not need to levy significant taxes on companies like the *Doing Business* standardized case study company because they raise public revenue in other ways—for example, through

taxes on foreign companies, through taxes on sectors other than manufacturing or from natural resources (all of which are outside the scope of the methodology). Giving the same ranking to all economies whose total tax rate is below the threshold avoids awarding economies in the scoring for having an unusually low total tax rate, often for reasons unrelated to government policies toward enterprises. For example, economies that are very small or that are rich in natural resources do not need to levy broad-based taxes.

Data challenges and revisions

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

Ease of doing business and distance to frontier

Doing Business 2013 presents results for 2 aggregate measures: the aggregate ranking on the ease of doing business and the distance to frontier measure. The ease of doing business ranking compares economies with one another, while the distance to frontier measure benchmarks economies to the frontier in regulatory practice, measuring the absolute distance to the best performance on each indicator. Both measures can be used for comparisons over time. When compared across years, the distance to frontier measure shows how much the regulatory environment for local entrepreneurs in each economy has changed over time in absolute terms, while the ease of doing business ranking can show only relative change.

Ease of doing business

The ease of doing business index ranks economies from 1 to 185. For each economy the ranking is calculated as the simple average of the percentile rankings on each of the 10 topics included in the index in *Doing Business 2013*: starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting investors, paying taxes, trading across borders, enforcing contracts, and resolving insolvency. The employing workers indicators are not included in this year's aggregate ease of doing business ranking. In addition to this year's ranking, *Doing Business* presents a comparable ranking for the previous year, adjusted for any changes in methodology as well as additions of economies or topics.[3]

Construction of the ease of doing business index

Here is one example of how the ease of doing business index is constructed. In Finland it takes 3 procedures, 14 days and 4% of annual income per capita in fees to register a property. On these 3 indicators Finland ranks in the 6th, 16th and 39th percentiles. So on average Finland ranks in the 20th percentile on the ease of registering property. It ranks in the 30th percentile on starting a business, 28th percentile on getting credit, 24th percentile on paying taxes, 13th percentile on enforcing contracts, 5th percentile on trading across borders and so on. Higher rankings indicate simpler regulation and stronger protection of property rights. The simple average of Finland's percentile rankings on all topics is 21st. When all economies are ordered by their average percentile rankings, Finland stands at 11 in the aggregate ranking on the ease of doing business.

More complex aggregation methods—such as principal components and unobserved components—yield a ranking nearly identical to the simple average used by *Doing Business*.[4] Thus, *Doing Business* uses the simplest method: weighting all topics equally and,

[3] In case of revisions to the methodology or corrections to the underlying data, the data are back-calculated to provide a comparable time series since the year the relevant economy or topic was first included in the data set. The time series is available on the *Doing Business* website (http://www.doingbusiness.org). Six topics and more than 50 economies have been added since the inception of the project. Earlier rankings on the ease of doing business are therefore not comparable.

[4] See Simeon Djankov, Darshini Manraj, Caralee McLiesh and Rita Ramalho, "*Doing Business* Indicators: Why Aggregate, and How to Do It" (World Bank, Washington, DC, 2005). Principal components and unobserved components methods yield a ranking nearly identical to that from the simple average method because both these methods assign roughly equal weights to the topics, since the pairwise correlations among indicators do not differ much. An alternative to the simple average method is to give different weights to the topics, depending on which are considered of more or less importance in the context of a specific economy.

within each topic, giving equal weight to each of the topic components.[5]

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

The ease of doing business index is limited in scope. It does not account for an economy's proximity to large markets, the quality of its infrastructure services (other than services related to trading across borders and getting electricity), the strength of its financial system, the security of property from theft and looting, macroeconomic conditions or the strength of underlying institutions.

Variability of economies' rankings across topics

Each indicator set measures a different aspect of the business regulatory environment. The rankings of an economy can vary, sometimes significantly, across indicator sets. The average correlation coefficient between the 10 indicator sets included in the aggregate ranking is 0.37, and the coefficients between any 2 sets of indicators range from 0.19 (between dealing with construction permits and getting credit) to 0.60 (between starting a business and protecting investors). These correlations suggest that economies rarely score universally well or universally badly on the indicators.

Consider the example of Canada. It stands at 17 in the aggregate ranking on the ease of doing business. Its ranking is 3 on starting a business, and 4 on both resolving insolvency and protecting investors. But its ranking is only 62 on enforcing contracts, 69 on dealing with construction permits and 152 on getting electricity.

Variation in performance across the indicator sets is not at all unusual. It reflects differences in the degree of priority that government authorities give to particular areas of business regulation reform and the ability of different government agencies to deliver tangible results in their area of responsibility.

Economies that improved the most across 3 or more Doing Business topics in 2011/12

Doing Business 2013 uses a simple method to calculate which economies improved the most in the ease of doing business. First, it selects the economies that in 2011/12 implemented regulatory reforms making it easier to do business in 3 or more of the 10 topics included in this year's ease of doing business ranking.[6] Twenty-three economies meet this criterion: Benin, Burundi, Costa Rica, the Czech Republic, Georgia, Greece, Guinea, Kazakhstan, Korea, the Lao People's Democratic Republic, Liberia, Mongolia, the Netherlands, Panama, Poland, Portugal, Serbia, the Slovak Republic, Slovenia, Sri Lanka, Ukraine, the United Arab Emirates and Uzbekistan. Second, *Doing Business* ranks these economies on the increase in their ranking on the ease of doing business from the previous year using comparable rankings.

Selecting the economies that implemented regulatory reforms in at least 3 topics and improved the most in the aggregate ranking is intended to highlight economies with ongoing, broad-based reform programs.

Distance to frontier measure

A drawback of the ease of doing business ranking is that it can measure the regulatory performance of economies only relative to the performance of others. It does not provide information on how the absolute quality of the regulatory environment is improving over time. Nor does it provide information on how large the gaps are between economies at a single point in time.

The distance to frontier measure is designed to address both shortcomings, complementing the ease of doing business ranking. This measure illustrates the distance of an economy to the "frontier," and the change in the measure over time shows the extent to which the economy has closed this gap. The frontier is a score derived from the most efficient practice or highest score achieved on each of the component indicators in 9 *Doing Business* indicator sets (excluding

[5] A technical note on the different aggregation and weighting methods is available on the *Doing Business* website (http://www.doingbusiness.org).

[6] *Doing Business* reforms making it more difficult to do business are subtracted from the total number of those making it easier to do business.

the employing workers and getting electricity indicators) by any economy since 2005. In starting a business, for example, New Zealand has achieved the highest performance on the time (1 day), Canada and New Zealand on the number of procedures required (1), Slovenia on the cost (0% of income per capita) and Australia and 90 other economies on the paid-in minimum capital requirement (0% of income per capita). Calculating the distance to frontier for each economy involves 2 main steps. First, individual indicator scores are normalized to a common unit: except for the total tax rate. To do so, each of the 28 component indicators *y* is rescaled to (max − *y*)/(max − min), with the minimum value (min) representing the frontier—the highest performance on that indicator across all economies since 2005. For the total tax rate, consistent with the calculation of the rankings, the frontier is defined as the total tax rate corresponding to the 15th percentile based on the overall distribution of total tax rates for all years. Second, for each economy the scores obtained for individual indicators are aggregated through simple averaging into one distance to frontier score. An economy's distance to frontier is indicated on a scale from 0 to 100, where 0 represents the lowest performance and 100 the frontier.

The difference between an economy's distance to frontier score in 2005 and its score in 2012 illustrates the extent to which the economy has closed the gap to the frontier over time. And in any given year the score measures how far an economy is from the highest performance at that time.

The maximum (max) and minimum (min) observed values are computed for the 174 economies included in the *Doing Business* sample since 2005 and for all years (from 2005 to 2012). The year 2005 was chosen as the baseline for the economy sample because it was the first year in which data were available for the majority of economies (a total of 174) and for all 9 indicator sets included in the measure. To mitigate the effects of extreme outliers in the distributions of the rescaled data (very few economies need 694 days to complete the procedures to start a business, but many need 9 days), the maximum (max) is defined as the 95th percentile of the pooled data for all economies and all years for each indicator. The exceptions are the getting credit, protecting investors and resolving insolvency indicators, whose construction precludes outliers.

Take Ghana, which has a score of 67 on the distance to frontier measure for 2012. This score indicates that the economy is 33 percentage points away from the frontier constructed from the best performances across all economies and all years. Ghana was further from the frontier in 2005, with a score of 54. The difference between the scores shows an improvement over time.

The distance to frontier measure can also be used for comparisons across economies in the same year, complementing the ease of doing business ranking. For example, Ghana stands at 64 this year in the ease of doing business ranking, while Peru, which is 29 percentage points from the frontier, stands at 43.

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