Paying taxes

Imagine a woman named Amina who owns a manufacturing company in Morocco. In 2004 she had to make 28 payments and spend more than 44 days (358 hours) to comply with tax regulations. Today, thanks to changes over the past 7 years, her administrative burden is lighter. The government merged many taxes and eliminated others, and now Amina needs to make only 17 payments a year as measured by *Doing Business*. A new electronic filing and payment system, now fully implemented, saves Amina 15 days a year (120 hours). This is time she can invest in developing her business. "New technology makes compliance easier and more transparent," said Mahat Chraibi, a partner at PwC Morocco. "This is one example of how technology helps to bridge the development gap."

Doing Business records the taxes and mandatory contributions that a medium-size company must pay in a given year and also measures the administrative burden of paying taxes and contributions. It does this with 3 indicators: payments, time and the total tax rate borne by a case study firm in a given year. The number of payments indicates the frequency with which the company has to file and pay different types of taxes and contributions, adjusted for the way in which those payments are made. The time indicator captures the number of hours it takes to prepare, file and pay 3 major types of taxes: profit taxes, consumption taxes, and labor taxes and mandatory contributions. The total tax rate measures the tax cost borne by the standard firm (figure 1).

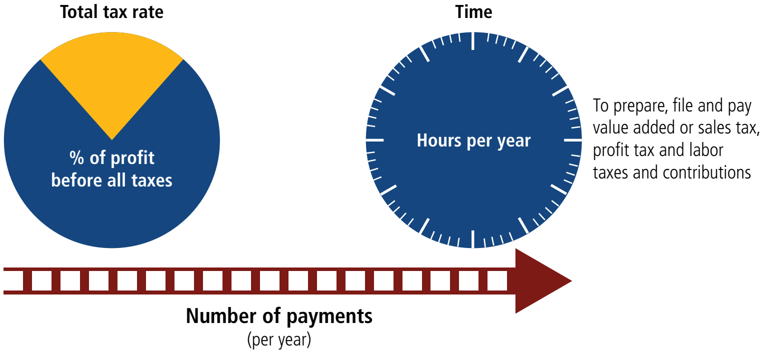
With these indicators *Doing Business* compares tax systems and tracks tax reforms around the world from the perspective of local businesses, covering both the direct cost of taxes and the administrative burden of complying with them. The methodology looks at the statutory incidence of taxes, and includes all taxes and contributions that the case study firm is obliged to pay. This does not mean that the entire burden falls on the firm; eventually the cost is shared among the owners, customers, workers and suppliers of the firm. The indicators do not measure the fiscal health of economies, the macroeconomic conditions under which governments collect revenue or the provision of public services supported by taxation.

WHY DO TAX RATES AND TAX ADMINISTRATION MATTER?

Oliver Wendell Holmes, a former U.S. supreme court justice, said, "Taxes are what we pay for a civilized society." Governments need sustainable funding for social programs and public investments to promote economic growth and development. Programs providing health, education, infrastructure and other amenities are important to achieve a common goal of a prosperous, functional and orderly society. And they require that governments raise revenues. This is so even in low-income economies that often receive large amounts of external assistance to help meet their needs. Taxation not only pays for public goods and services; it is a key ingredient of the social contract between citizens and the economy and thus key to building effective government. How taxes are raised and spent shapes the legitimacy of governments by promoting their accountability to taxpaying citizens and by encouraging effective administration and good public financial management.[1]

All governments need revenue, but the challenge is to carefully choose not only the level of tax rates but also the tax base. Governments also need to design a tax compliance system that will not discourage taxpayers from participating. Tax rates and burdensome tax administration remain a top obstacle to business. Recent firm surveys in 123 economies show that companies consider tax rates to be among the top 3 constraints to their business, and tax administration to be among the top 8.[2] Firms in economies that rank better on the ease of paying taxes tend to perceive both tax rates and tax administration as less of an obstacle to business (figure 2).

FIGURE 1 What are the time, total tax rate and number of payments necessary for a local medium-size company to pay all taxes?



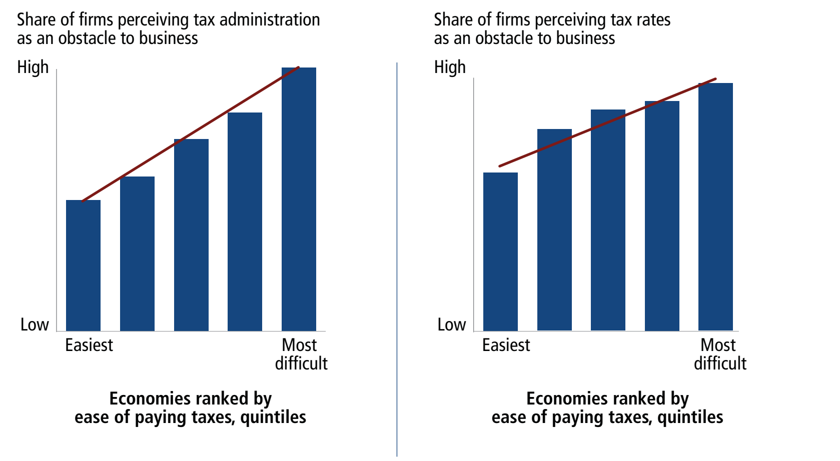
Why tax rates matter

The size of the tax cost for businesses matters for investment and growth. Where taxes are high, businesses are more inclined to opt out of the formal sector. A recent study shows that higher tax rates are associated with fewer formal businesses and lower private investment. A 10 percentage point increase in the effective corporate income tax rate is associated with a reduction in the ratio of investment to GDP of up to 2 percentage points and a decrease in the business entry rate of about 1 percentage point.[3] A tax increase equivalent to 1% of GDP reduces output over the next 3 years by nearly 3%.[4] Research looking at multinational firms' decisions on where to invest suggests that a 1 percentage point increase in the statutory corporate income tax rate would reduce the local profits from existing investment by 1.3% on average.[5] A 1 percentage point increase in the effective corporate income tax rate reduces the likelihood of establishing a subsidiary in an economy by 2.9%.[6]

Profit taxes are only part of the total business tax cost—less than 36% on average. In República Bolivariana de Venezuela, for example, the nominal corporate income tax is based on a progressive scale of 6–34% of net income, but the total business tax bill, after taking into account deductions and exemptions, is 63.5% of commercial profit because of 1 other profit tax, 4 labor taxes and contributions, 1 sales tax, 1 property tax and 3 other taxes.

Keeping tax rates at a reasonable level can encourage the development of the private sector and the formalization of businesses. This is particularly important for small and medium-size enterprises, which contribute to growth and job creation but do not add significantly to tax revenue.[7] Typical distributions of tax revenue by firm size for economies in Sub-Saharan Africa and the Middle East and North Africa show that micro, small and medium-size enterprises make up more than 90% of taxpayers but contribute only 25–35% of revenue.[8] Thus imposing high tax costs on businesses of this size might not add much to government tax revenue, but it might cause businesses to become informal or, in the worst case, to never exist at all.

FIGURE 2 Tax administration and tax rates perceived as less of an obstacle in economies that rank better on the ease of paying taxes



Note: Relationships are significant at the 1% level and remain significant when controlling for income per capita.
Source: Doing Business database; World Bank Enterprise Surveys (2006–10 data).

In Brazil a tax simplification scheme for microenterprises ("SIMPLES") that consolidated several taxes, leading to a reduction in the overall tax cost of 8%, resulted in an 11.6% increase in the business licensing rate, a 6.3% increase in the registration of microenterprises and a 7.2% increase in the number of firms registered with the tax authority. Budgetary revenue rose by 7.4% as a result of increased tax payments and social security contributions. SIMPLES was also found to increase the revenues, profits, paid employment and fixed capital of formalized firms.[9]

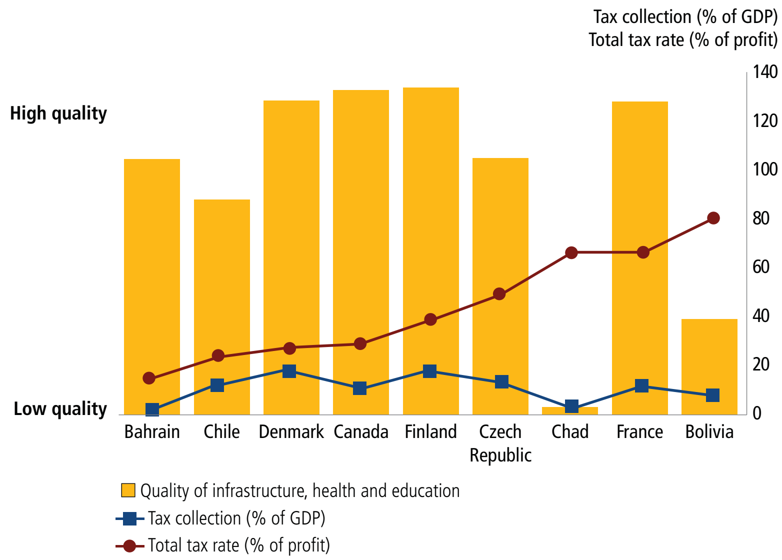
Businesses care about what they get for their taxes. Extensive and efficient infrastructure is critical for the sound functioning of an economy because it plays an important part in determining the location of economic activity and the kinds of activities or sectors that can develop. A healthy workforce is vital to an economy's competitiveness and productivity—so investing in the provision of health services is clearly essential for economic as well as moral reasons. Basic education increases the efficiency of each worker, and good-quality higher education and training allow economies to move up the value chain beyond simple production processes and products.

But how effectively tax revenue is converted into public goods and services varies around the world. Recent data from the World Economic Forum show that in economies such as France high tax rates fund high levels of public goods and services such as infrastructure, health, primary education, higher education and training (figure 3). The data show the opposite for economies such as Bolivia and Chad. Economic development often generates additional needs for tax revenue to finance a rise in public spending, but at the same time it requires the economy's ability to raise revenue to meet these needs. More important than the level of taxation, however, is how revenue is used. In economies such as Canada and Denmark total tax rates are moderate, but the public services provided rank high in a global comparison.[10] In developing economies high tax rates and weak tax administration are not the only reasons for low tax collection. The tax base is much narrower because most workers earn very low wages or are in the informal sector.

Why tax administration matters

Efficient tax administration can help encourage businesses to become formally registered and the economy to grow—and thus expand the tax base and increase tax revenues. Administration that is unfair and capricious will bring the tax system into disrepute and weaken the legitimacy of government. In many transition economies in the 1990s, failure to improve tax administration when new tax systems were introduced

FIGURE 3 High tax rates do not always lead to high tax revenue or good public services



Note: Quality of infrastructure, health and education refers to the average of the rankings on infrastructure, on health and primary education and on higher education and training as measured by the Global Competitiveness Index (see http://gcr.weforum.org/gcr2010/). Tax collection covers corporate income, value added and personal income taxes.

Source: World Economic Forum 2010; U.S. Agency for International Development, Fiscal Reform and Economic Governance Project (2009 data); *Doing Business* database.

resulted in very uneven imposition of taxes, widespread tax evasion and lower-than-expected revenue.[11]

Compliance with tax laws is important to keep the system working for all and to support the programs and services that improve lives. One way to encourage compliance is to keep the rules as clear and simple as possible. Overly complicated tax systems are associated with high evasion. High tax compliance costs are associated with larger informal sectors, more corruption and less investment. Economies with simple, well-designed tax systems are able to help the growth of businesses and, ultimately, the growth of overall investment and employment.[12]

Low tax compliance cost and efficient procedures can make a big difference for firms. In Hong Kong SAR, China, for example, the standard case study firm would have to make only 3 payments a year, the lowest number of payments globally (table 1). In Singapore it would have to make 5 payments, still among the lowest requirements in the world. In Ireland, complying with profit tax, value added tax, and labor taxes and contributions takes only 76 hours a year, less than 10 working days. These numbers are among the reasons that these 3 economies rank among the top 10 on the ease of paying taxes.

Recent research found that it takes the *Doing Business* case study company longer on average to comply with value added tax than to comply with corporate income tax. But the time it takes the company to comply with value added tax requirements varies widely, and the research shows that differences in administrative practices and in how value added tax is implemented are key reasons for this. Compliance tends to take less time in economies where value added tax is administered by the same tax authority as the one that deals with corporate income tax. The use of online filing and payment greatly reduces compliance time. The frequency and length of value added tax returns also matter. Requirements to submit invoices or other documentation with the returns add to compliance time. Streamlining the compliance process and reducing the time needed to comply is important for value added tax systems to work efficiently.[13]

REGULATORY REFORMS AND GLOBAL GOOD PRACTICES

In the past 7 years more than 60% of the 183 economies covered by *Doing Business*

TABLE 1 Who makes paying taxes easy and who does not—and where is the total tax rate highest?

Payments (number per year)			
Fewest		Most	
Hong Kong SAR, China	3	Senegal	59
Maldives	3	Congo, Rep.	61
Qatar	3	Côte d'Ivoire	62
Georgia	4	Serbia	66
Norway	4	Tajikistan	69
Sweden	4	Venezuela, RB	70
Singapore	5	Sri Lanka	71
Bhutan	6	Jamaica	72
Mexico	6	Romania	113
Timor-Leste	6	Ukraine	135

Time (hours per year)			
Fastest		Slowest	
Maldives	0[a]	Cameroon	654
United Arab Emirates	12	Ukraine	657
Bahrain	36	Senegal	666
Qatar	36	Mauritania	696
Bahamas, The	58	Chad	732
Luxembourg	59	Venezuela, RB	864
Oman	62	Nigeria	938
Switzerland	63	Vietnam	941
Ireland	76	Bolivia	1,080
Seychelles	76	Brazil	2,600

Total tax rate (% of profit)	
Highest	
Colombia	74.8
Bolivia	80.0
Tajikistan	84.5
Eritrea	84.5
Uzbekistan	97.5
Sri Lanka	105.2[b]
Argentina	108.2[b]
Comoros	217.9[b]
Gambia, The	283.5[b]
Congo, Dem. Rep.	339.7[b]

Note: The indicator on payments is adjusted for the possibility of electronic or joint filing and payment when used by the majority of firms in an economy. See the data notes for more details.

a. In Maldives, where the hotel and tourism industry provides most tax revenue, the 3 major types of taxes covered by the time indicator do not exist.

b. Where the data show that taxes exceed profit, the company must apply a price markup of more than 120% of the cost of goods sold to pay its taxes under the assumptions of the *Doing Business* case study. See the data notes for more details.

Source: Doing Business database.

implemented changes aimed at simplifying tax administration and reducing the tax burden—244 such reforms in all. In 2010/11, 33 economies made it easier to pay taxes or reduced tax rates. Introducing electronic systems to make compliance easier was the most common feature of tax reform for the first time since 2004. Over the past 7 years the most common features were reducing tax rates, introducing electronic systems and simplifying tax compliance by reducing the frequency of filing or allowing joint payment and filing of several taxes.

Reducing tax rates

The total tax rate measures the burden of all the taxes that a company must pay in relation to its commercial profit. Thus all kinds of taxes that impose a cost on the firm are considered: profit taxes, property taxes, labor taxes and mandatory contributions paid by the employer, certain sales taxes, and other payments that do not require filing, such as property transfer taxes, stamp duties, dividend tax, capital gains tax, financial transactions tax, environmental tax, and vehicle and road tax.

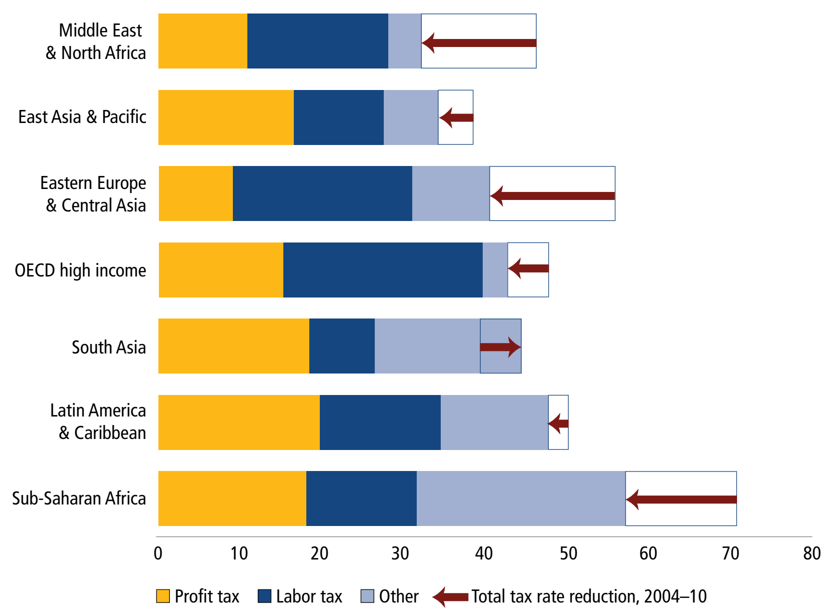
Globally, the average total tax rate is 44.8% of profit. For the 174 economies included in the sample in *Doing Business 2006*, the average is 7.4 percentage points lower than it was 7 years ago (figure 4). This reduction reflects the 133 reductions of profit tax rates by 2 or more percentage points recorded by *Doing Business* in the past 7 years—including those in 8 economies in 2010/11. These 8 economies, most of which had statutory tax rates of more than 30% on companies' profit, had an average total tax rate of 75.3% before these reductions. Until 2010/11 reducing profit tax rates was the most common feature of tax reform globally. Economies in Eastern Europe and Central Asia and OECD high-income economies reduced profit tax rates the most, followed by Sub-Saharan Africa.

Labor taxes and government-mandated contributions paid by the employer account on average for 36.2% of the total tax rate in the 183 economies covered by *Doing Business*. In some economies the statutory incidence of labor taxes falls on the employee rather than the employer. This case is beyond the scope of the *Doing Business* analysis and is not captured by any of the paying taxes indicators. Twelve economies do not require the payment of any social security contributions or labor taxes—Afghanistan, Bangladesh, Botswana, the Comoros, Eritrea, Ethiopia, Georgia, Lesotho, Maldives, Timor-Leste, Tonga, and West Bank and Gaza.[14] But the other 171 economies studied (93.4% of the total) collect some form of social security contributions, paid by the employer, the employee or both. In 9 economies—Brunei Darussalam; Hong Kong SAR, China; Kiribati; Kosovo; the Federated States of Micronesia; Palau; Serbia; St. Lucia; and Vanuatu—the employee and employer pay the same share of social security contributions, while in 20 economies the employee pays a higher share than the employer (figure 5).

In 5 economies taxes and mandatory contributions for the standard case study firm add up to more than 100% of profit, ranging from 105.2% to 339.7% (see table 1). *Doing Business* assumes that the case study firm has a gross margin of 20%.[15] Because taxes are calculated on the gross amount, the size of the

FIGURE 4 Eastern Europe and Central Asia has biggest reduction in total tax rates

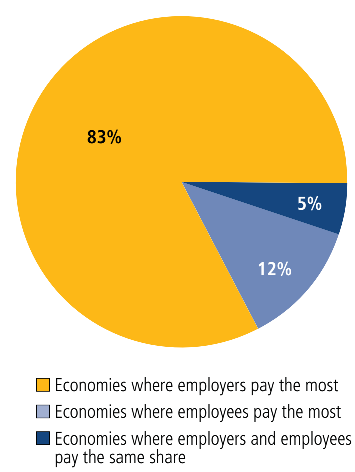
Average total tax rate (% of profit)



Note: The increase in the average total tax rate in the South Asia region is driven by 1 major reform in 1 economy that increased the total tax rate in 2010 by 48.4 percentage points between 2004 and 2010. Without this outlier, the average total tax rate for the region would be 38.4%. The data sample for DB2006 (2004) includes 174 economies. The sample for DB2012 (2010) also includes The Bahamas, Bahrain, Brunei Darussalam, Cyprus, Kosovo, Liberia, Luxembourg, Montenegro and Qatar, for a total of 183 economies.

Source: Doing Business database.

FIGURE 5 In most economies employers pay a larger share of social security contributions



Note: Includes 171 economies that levy labor taxes or social security contributions. Personal income tax is not included.

Source: Doing Business database.

margin directly affects the ratio. For example, in the Democratic Republic of Congo, where the total tax rate equals 339.7%, the company would have to have a gross profit margin of 30% to be able to meet its tax liability.[16]

Making tax compliance easier

Complying with tax regulations takes 29 payments and 277 hours a year on average. This reflects improvements, with tax compliance taking 5 payments and 46 hours fewer today than it did 7 years ago (figure 6).

And making the process easier continues to be a concern. In 2010/11, 23 economies made compliance easier, by introducing or enhancing electronic systems, simplifying tax compliance or merging or eliminating some taxes (table 2). Eleven of these did so as part of ongoing reforms that had begun in 2009 or earlier. For example, *Doing Business* has recorded reforms easing tax compliance in Mexico every year since 2005/06. In 2010 Mexico continued to reduce the administrative burden on businesses by eliminating some filing requirements for firms, including the obligation to file yearly value added tax returns.

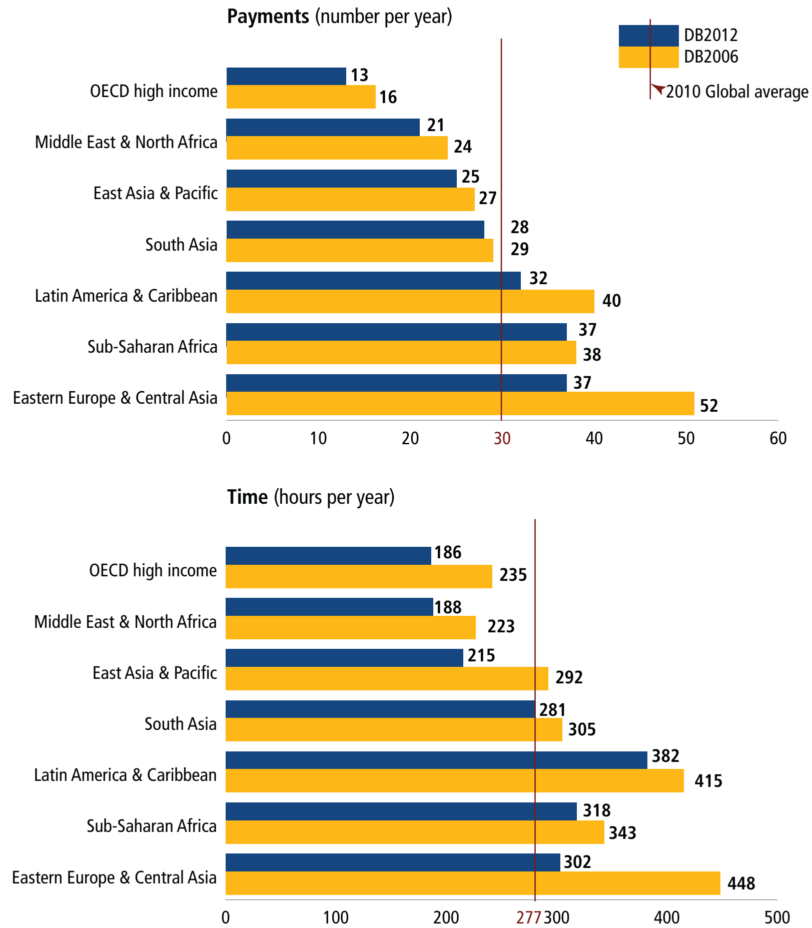
Offering electronic filing and payment

An electronic system for filing and paying taxes, if implemented well and used by most taxpayers, benefits both tax authorities and firms. For tax authorities, electronic filing lightens the workload and reduces operational costs—such as the costs of processing, storing and handling tax returns. At the same time, it increases tax compliance and saves time. For taxpayers, electronic filing saves time by reducing calculation errors on tax returns and making it easier to prepare, file and pay taxes.[17] And both sides benefit from a reduction in potential incidents of corruption, which are more likely to occur with more frequent contact with tax administration staff.[18]

Rolling out an electronic filing and payment system and educating taxpayers in its use are not easy tasks for a government. The necessary infrastructure must be put into place, especially where not all citizens have broadband access. Consider the example of India, where the Central Board of Direct

FIGURE 6 Administrative burden eased the most in Eastern Europe and Central Asia

Regional averages in paying taxes



Note: The data sample for DB2006 (2004) includes 174 economies. The sample for DB2012 (2010) also includes The Bahamas, Bahrain, Brunei Darussalam, Cyprus, Kosovo, Liberia, Luxembourg, Montenegro and Qatar, for a total of 183 economies. DB2006 data are adjusted for any data revisions and changes in methodology and regional classifications of economies.

Source: Doing Business database.

Taxes took a series of steps to ensure a smooth process:

- Publishing detailed help manuals on the forms and how to complete them on its website.
- Providing free, downloadable software for preparing tax returns on its website.
- Organizing, in collaboration with the Institute of Chartered Accountants of India, live phone-in question-and-answer sessions with accountants.
- Distributing CDs with software and help content to accountants, trade bodies, and professional and business associations through tax offices throughout India.
- Setting up help centers at all field office headquarters.
- Organizing meetings and seminars with taxpayers and tax practitioners.
- Answering taxpayers' queries by phone and e-mail at the call center.

India is far from the only one to undertake the challenging process of introducing an electronic option. By 2010, 66 economies had fully implemented electronic filing and payment of taxes. Twenty of them adopted the

TABLE 2 Who made paying taxes easier and lowered the tax burden in 2010/11—and what did they do?

	Feature	Economies	Some highlights
Easing compliance	Introduced or enhanced electronic systems	Armenia; Belarus; Belize; Colombia; Costa Rica; Georgia; India; Republic of Korea; Morocco; Nicaragua; Peru	Colombia established mandatory electronic filing and payment for major taxes, including corporate income tax and value added tax.
	Simplified tax compliance process	Armenia; Belarus; Burundi; Finland; Georgia; Mexico; Montenegro; Romania; Rwanda	Burundi reduced the frequency of payment for social security contributions from monthly to quarterly.
	Merged or eliminated taxes other than profit tax	Belarus; Canada; Côte d'Ivoire; Iceland; Republic of Korea; Montenegro; Romania; Seychelles; Sri Lanka; Ukraine	Côte d'Ivoire retired the contribution for national reconstruction, a tax it had established 5 years before.
Reducing tax rates	Reduced profit tax rate by 2 percentage points or more	Canada; The Gambia; Greece; New Zealand; Sri Lanka; Togo; Ukraine; Republic of Yemen	New Zealand's 2010/11 budget reduced its corporate income tax rate from 30% to 28%.
	Reduced labor taxes and mandatory contributions	New Zealand; Turkey	Turkey lowered its social security contribution rate from 19.5% to 14.5% by offering a 5% rebate to companies complying with all their social security filing and payment liabilities by the deadlines.
Introducing new systems	Introduced new or substantially revised tax law	Belarus; Czech Republic; Oman; Ukraine; Republic of Yemen	The Czech Republic revised its tax legislation to simplify provisions relating to administrative procedures and relationships between tax authorities and taxpayers.
	Introduced change in cascading sales tax	Democratic Republic of Congo; St. Kitts and Nevis	The Democratic Republic of Congo replaced its sales tax with a value added tax.

Source: Doing Business database.

system in the past 7 years. Ten OECD high-income economies have made electronic filing and payment mandatory. And this trend is likely to continue. In the next few years many other OECD high-income economies, having introduced requirements for electronic filing and payment for larger businesses, plan to extend them to smaller ones.[19]

Electronic filing and payment of taxes has made a big difference for businesses in some economies in Latin America and the Caribbean. Belize, Colombia, Costa Rica and Nicaragua had made online filing and payment available since the beginning of 2000. But the new systems were fully implemented only in 2010 because taxpayers needed time to get used to them. The biggest improvements: Nicaragua reduced the number of payments by 22 and compliance time by 15 hours, and Costa Rica cut payments by 11 and time by 26 hours.

Companies saw similar improvements in the ease of tax compliance in Georgia, where most were able to take advantage of the electronic system only recently. India made paying taxes easier by introducing electronic filing for the state value added tax in 2010. This lowered the total number of payments from 56 to 33. Unlike the Latin American economies, India made electronic filing and payment mandatory, phasing in the change over time—first for corporate income tax, in 2006, then for the federal value added tax, in 2009.

Keeping it simple: one tax base, one tax

Some 235 years after Adam Smith proclaimed simplicity to be one of the pillars of the effective tax system,[20] multiple taxation—where the same tax base is subject to more than one tax treatment—appears to be making tax compliance inconvenient and cumbersome for taxpayers in many economies. Multiple taxation increases the cost of doing business for firms because it increases the number of payments they must make and frequently the compliance time as well. Different forms have to be filled out, often requiring different methods for calculating the tax. In Haiti, for example, the case study business is subject to the local tax on profit in addition to the corporate income tax. Multiple taxation also complicates tax administration for tax authorities and increases the cost of revenue administration for governments. And it risks damaging investor confidence in an economy.

TABLE 3 Good practices around the world in making it easy to pay taxes

Practice	Economies[a]	Examples
Allowing self-assessment	145	Argentina; Canada; China; Arab Republic of Egypt; Rwanda; Sri Lanka; Turkey
Allowing electronic filing and payment	66	Australia; Colombia; India; Lithuania; Mauritius; Singapore; Tunisia
Having one tax per tax base	49	Hong Kong SAR, China; FYR Macedonia; Morocco; Namibia; Paraguay; United Kingdom

a. Among 183 economies surveyed.
Source: Doing Business database.

Forty-nine economies have one tax per tax base for taxes measured by *Doing Business* (table 3). This keeps things simple. Having more types of taxes requires more interaction between businesses and tax agencies. It also complicates tax compliance. In 17 economies businesses must prepare one return for corporate income tax and another for an additional tax on profit. In India, Lesotho, São Tomé and Príncipe, South Africa and Ukraine, besides the profit tax, companies are subject to a tax levied on dividends distributed to shareholders.

Businesses in the Republic of Korea no longer need to calculate numerous taxes on the same base. Starting with the 2010 tax year, property taxes and city planning taxes are being merged with other taxes. And thanks to an effort aimed at unifying social security laws and administration, businesses can now file and pay 4 labor taxes and contributions jointly. This freed them from the requirement to file additional returns and bear additional tax compliance costs.

Canada continued efforts to harmonize and simplify its tax system. After harmonizing federal and provincial profit taxes beginning in the 2009 tax year, the country unified federal and municipal sales taxes in Ontario and British Columbia, lessening the tax compliance burden. Beginning in the 2010 tax year businesses are subject only to the federal harmonized sales tax, which replaces the former federal goods and services tax and provincial sales tax. The harmonization creates a tax regime that is easy to administer and easy to comply with.

In the past 7 years 40 economies eliminated and merged some taxes to simplify tax compliance and reduce costs for firms. Another way to make compliance easier when firms are subject to numerous taxes is to allow joint filing and payment of taxes levied on the same base. Firms in Colombia face 4 different taxes on salaries—but can meet these tax obligations by filing 1 form and making 1 payment. In most OECD high-income economies taxes levied on the same base are paid and filed jointly, and as a result the average number of payments across all economies in this group is only 13. Compare this with the average of 29 payments across all 183 economies covered by *Doing Business*. Joint filing and payment of taxes is not widespread in Latin America and the Caribbean, where the average is 32 payments, or in Sub-Saharan Africa, where the average is 37. Seventy-two economies allow firms to file and pay several taxes jointly, greatly reducing the time they must spend to comply with these taxes.

Adopting self-assessment as an effective tool for tax collection

Driven by a desire to reduce administrative costs for tax authorities and aided by modern technology, most economies have adopted the principle of self-assessment. Taxpayers determine their own liability under the law and pay the correct amount. For governments, the computer system and software for self-assessment, if they function well, ensure effective quality control. Self-assessment systems generally make it possible to collect taxes earlier and reduce the likelihood of disputes over tax assessments.[21] They also lessen the discretionary powers of tax officials and reduce opportunities for corruption.[22] To be effective, however, self-assessment needs to be properly introduced and implemented, with transparent rules, an automated reporting process, penalties for noncompliance and risk assessment procedures for audit processes.

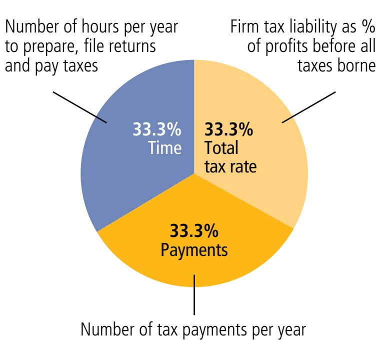
Economies that have introduced their tax system recently or undertaken major revision of their tax regulations have tended to adopt self-assessment principles. These include all economies in Eastern Europe and Central Asia and almost two-thirds in East Asia and the Pacific, the Middle East and North Africa, and South Asia.

DATA NOTES ON PAYING TAXES

Doing Business records the taxes and mandatory contributions that a medium-size company must pay in a given year as well as measures of the administrative burden of paying taxes and contributions. The project was developed and implemented in cooperation with PwC.[23] Taxes and contributions measured include the profit or corporate income tax, social contributions and labor taxes paid by the employer, property taxes, property transfer taxes, dividend tax, capital gains tax, financial transactions tax, waste collection taxes, vehicle and road taxes, and any other small taxes or fees.

FIGURE A.1 Paying taxes: tax compliance for a local manufacturing company

Rankings are based on 3 indicators



The ranking on the ease of paying taxes is the simple average of the percentile rankings on its component indicators, with a threshold being applied to one of the component indicators, the total tax rate (figure A.1). The threshold is defined as the highest total tax rate among the top 30% of economies in the ranking on the total tax rate. It will be calculated and adjusted on a yearly basis. This year's threshold is 32.5%. For all economies with a total tax rate below this threshold, the total tax rate is set at 32.5% this year. The threshold is not based on any underlying theory. Instead, it is intended to mitigate the effect of very low tax rates on the ranking on the ease of paying taxes.

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

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

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

Assumptions about the business

The business:

- Is a limited liability, taxable company. If there is more than one type of limited liability company in the economy, the limited liability form most common among domestic firms is chosen. The most common form is reported by incorporation lawyers or the statistical office.
- Started operations on January 1, 2009. At that time the company purchased all the assets shown in its balance sheet and hired all its workers.
- Operates in the economy's largest business city.
- Is 100% domestically owned and has 5 owners, all of whom are natural persons.
- At the end of 2009, has a start-up capital of 102 times income per capita.
- Performs general industrial or commercial activities. Specifically, it produces ceramic flowerpots and sells them at retail. It does not participate in foreign trade (no import or export) and does not handle products subject to a special tax regime, for example, liquor or tobacco.
- At the beginning of 2010, owns 2 plots of land, 1 building, machinery, office equipment, computers and 1 truck and leases 1 truck.
- Does not qualify for investment incentives or any benefits apart from those related to the age or size of the company.
- Has 60 employees—4 managers, 8 assistants and 48 workers. All are nationals, and 1 manager is also an owner. The company pays for additional medical insurance for employees (not mandated by any law) as an additional benefit. In addition, in some economies reimbursable business travel and client entertainment expenses are considered fringe benefits. When applicable, it is assumed that the company pays the fringe benefit tax on this expense or that the benefit becomes taxable income for the employee. The case study assumes no additional salary additions for meals, transportation, education or others. Therefore, even when such benefits are frequent, they are not added to or removed from the taxable gross salaries to arrive at the labor tax or contribution calculation.
- Has a turnover of 1,050 times income per capita.
- Makes a loss in the first year of operation.
- Has a gross margin (pretax) of 20% (that is, sales are 120% of the cost of goods sold).
- Distributes 50% of its net profits as dividends to the owners at the end of the second year.
- Sells one of its plots of land at a profit at the beginning of the second year.
- Has annual fuel costs for its trucks equal to twice income per capita.
- Is subject to a series of detailed assumptions on expenses and transactions to further standardize the case. All financial statement variables are proportional to 2005 income per capita. For example, the owner who is also a manager spends 10% of income per capita on traveling for the company (20% of this owner's expenses are purely private, 20% are for entertaining customers and 60% for business travel).

Assumptions about the taxes and contributions

- All the taxes and contributions recorded are those paid in the second year of operation (calendar year 2010). A tax or contribution is considered distinct if it has a different name or is collected by a different agency. Taxes and contributions with the same name and agency, but charged at different rates depending on the business, are counted as the same tax or contribution.
- The number of times the company pays taxes and contributions in a year is the number of different taxes or contributions multiplied by the frequency of payment (or withholding) for each tax. The frequency of payment includes advance payments (or withholding) as well as regular payments (or withholding).

Tax payments

The tax payments indicator reflects the total number of taxes and contributions paid, the method of payment, the frequency of payment, the frequency of filing and the number of agencies involved for this standardized case study company during the second year of operation (table A.1). It includes consumption taxes paid by the company, such as sales tax or value added tax. These taxes are traditionally collected from the consumer on behalf of the tax agencies. Although they do not affect the income statements of the company, they add to the administrative burden of complying with the tax system and so are included in the tax payments measure.

The number of payments takes into account electronic filing. Where full electronic filing and payment is allowed and it is used by the majority of medium-size businesses, the tax is counted as paid once a year even if filings

TABLE A.1 What do the paying taxes indicators measure?
Tax payments for a manufacturing company in 2010 (number per year adjusted for electronic and joint filing and payment)
Total number of taxes and contributions paid, including consumption taxes (value added tax, sales tax or goods and service tax)
Method and frequency of filing and payment
Time required to comply with 3 major taxes (hours per year)
Collecting information and computing the tax payable
Completing tax return forms, filing with proper agencies
Arranging payment or withholding
Preparing separate mandatory tax accounting books, if required
Total tax rate (% of profit before all taxes)
Profit or corporate income tax
Social contributions and labor taxes paid by the employer
Property and property transfer taxes
Dividend, capital gains and financial transactions taxes
Waste collection, vehicle, road and other taxes

and payments are more frequent. For payments made through third parties, such as tax on interest paid by a financial institution or fuel tax paid by a fuel distributor, only one payment is included even if payments are more frequent.

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

Time

Time is recorded in hours per year. The indicator measures the time taken to prepare, file and pay 3 major types of taxes and contributions: the corporate income tax, value added or sales tax, and labor taxes, including payroll taxes and social contributions. Preparation time includes the time to collect all information necessary to compute the tax payable and to calculate the amount payable. If separate accounting books must be kept for tax purposes—or separate calculations made—the time associated with these processes is included. This extra time is included only if the regular accounting work is not enough to fulfill the tax accounting requirements. Filing time includes the time to complete all necessary tax return forms and file the relevant returns at the tax authority. Payment time considers the hours needed to make the payment online or at the tax authorities. Where taxes and contributions are paid in person, the time includes delays while waiting.

Total tax rate

The total tax rate measures the amount of taxes and mandatory contributions borne by the business in the second year of operation, expressed as a share of commercial profit. *Doing Business 2012* reports the total tax rate for calendar year 2010. The total amount of taxes borne is the sum of all the different taxes and contributions payable after accounting for allowable deductions and exemptions. The taxes withheld (such as personal income tax) or collected by the company and remitted to the tax authorities (such as value added tax, sales tax or goods and service tax) but not borne by the company are excluded. The taxes included can be divided into 5 categories: profit or corporate income tax, social contributions and labor taxes paid by the employer (in respect of which all mandatory contributions are included, even if paid to a private entity such as a requited pension fund), property taxes, turnover taxes and other taxes (such as municipal fees and vehicle and fuel taxes).

TABLE A.2 Computing the total tax rate for Norway

Type of tax (tax base)	Statutory rate r	Statutory tax base b NKr	Actual tax payable $a = r x b$ NKr	Commercial profit* c NKr	Total tax rate $t = a/c$
Corporate income tax (taxable income)	28.0%	20,612,719	5,771,561	23,651,183	24.4%
Social security contributions (taxable wages)	14.1%	26,684,645	3,762,535	23,651,183	15.9%
Fuel tax (fuel price)	NKr 4 per liter	74,247 liters	297,707	23,651,183	1.3%
Total			9,831,803		41.6%

* Profit before all taxes borne.

Note: NKr is Norwegian kroner. Commercial profit is assumed to be 59.4 times income per capita.

Source: Doing Business database.

The total tax rate is designed to provide a comprehensive measure of the cost of all the taxes a business bears. It differs from the statutory tax rate, which merely provides the factor to be applied to the tax base. In computing the total tax rate, the actual tax payable is divided by commercial profit. Data for Norway illustrate (table A.2).

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

Commercial profit is computed as sales minus cost of goods sold, minus gross salaries, minus administrative expenses, minus other expenses, minus provisions, plus capital gains (from the property sale) minus interest expense, plus interest income and minus commercial depreciation. To compute the commercial depreciation, a straight-line depreciation method is applied, with the following rates: 0% for the land, 5% for the building, 10% for the machinery, 33% for the computers, 20% for the office equipment, 20% for the truck and 10% for business development expenses. Commercial profit amounts to 59.4 times income per capita.

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

The data details on paying taxes can be found for each economy at http://www.doingbusiness.org by selecting the economy in the drop-down list. This methodology was developed in Djankov and others (2010).

NOTES

1. FIAS 2009.
2. Companies ranked 16 obstacles to business

in World Bank Enterprise Surveys in 2006–10 (http://www.enterprisesurveys.org).

3. Djankov and others 2010.
4. Romer and Romer 2010.
5. Huizinga and Laeven 2008.
6. Nicodème 2008.
7. Hibbs and Piculescu 2010.
8. International Tax Dialogue 2007.
9. Fajnzylber, Maloney and Montes-Rojas 2011.
10. World Economic Forum 2010.
11. Bird 2010.
12. Djankov and others 2010.
13. Symons, Howlett and Ramirez Alcantara 2010.
14. This does not include personal income tax; it includes only labor taxes and social security contributions mandated in addition to any personal income tax.
15. That is, sales are 120% of the costs of goods sold.
16. Here, gross profit margin refers to sales minus costs divided by sales, where the sales have been adjusted to a level at which the case study company's profit in the Democratic Republic of Congo would exceed the amount of taxes due. Given the original assumption in the case study of a gross margin of 20%, or 120% of the costs of goods sold, in the Democratic Republic of Congo sales would have to be 142% of the costs of goods sold for the case study company to be able to meet its tax obligation.
17. Che Azmi and Kamarulzaman 2010.
18. James 2009.
19. World Bank Group, Investment Climate Advisory Services, Global Tax Team.
20. Smith 1776.
21. OECD Forum on Tax Administration 2011.
22. Imam and Jacobs 2007.
23. *PwC* refers to the network of member firms of PricewaterhouseCoopers International Limited (PwCIL), or, as the context requires, individual member firms of the PwC network. Each member firm is a separate legal entity and does not act as agent of PwCIL or any other member firm. PwCIL does not provide any services to clients. PwCIL is not responsible or liable for the acts or omissions of any of its member firms nor can it control the exercise of their professional judgment or bind them in any way. No member firm is responsible or liable for the acts or omissions of any other member firm nor can it control the exercise of another member firm's professional judgment or bind another member firm or PwCIL in any way.

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