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Methodology

Introduction

The Paying Taxes indicator is one of ten indicators assessed as part of the World Bank Group's annual *Doing Business* report, which, this year, was published on 9 September 2009. This is the fifth year in which tax data has been collected as part of the *Doing Business* project.

The Paying Taxes study involves gathering information on the tax affairs of a standard case study company in 183 economies, by reviewing the financial statements and a list of transactions of a standard small to medium sized firm. This information is used to generate three sub-indicators related to the number of tax payments, the time taken to comply with its tax affairs, and the total tax cost. These are equally weighted to produce an overall ranking for each country for 'the ease of paying taxes'. Rankings of each of the individual components are also available. All the rankings are included in Appendix 1, and further details for each economy are available at www.doingbusiness.org

The study also collects additional data, which, whilst not used to determine a country's ranking, assists with understanding the tax system in each country. Some of this additional data is referred to in this report.

This appendix includes detailed information on the methodology behind the collection of data for the main indicators, and the fundamental distinction between taxes borne and taxes collected. It also explains more about the PricewaterhouseCoopers Total Tax Contribution methodology (basic principles of which are incorporated in the design of the *Doing Business* paying taxes indicator), and some of the matters that must be considered when deciding what payments should be included when considering the tax burden of a company.

The case study company

In order to gather the necessary information to generate the tax indicators mentioned for the standardised business in each economy, a case study company has been developed. The case study company is a domestic flower-pot manufacturer and retailer. It has been chosen as a business that can be readily understood worldwide, and has an activity that involves both manufacture and retail of a low-technology product. The overriding objective is to generate a standard fact-pattern, so that the tax indicators generated using the same criteria can be compared across many economies without being significantly distorted by industry-specific incentives and reliefs. It is also specified to be a domestic operation in the economy, so the assessment is purely of the local tax system.

The company has a set of financial statements, and comparability is assisted by detailed assumptions made with regard to the company's operations, staff, transactions, size etc., as well as the process by which the information is gathered and reviewed.

The facts and assumptions allow the World Bank Group to generate tax indicators for each economy based on the application of their tax rules to the case study company.

Expert contributors from each economy provide data in a standard format, which is sense-checked and validated by the World Bank Group team. The data provided is based on the standardised case study facts and assumptions and on the tax rules applying for the year from 1 January to 31 December 2008. While the basic elements of the case study do not change year on year, the period for which the rules are deemed to apply is updated.

The framework of the *Doing Business* study

The *Doing Business* 'paying taxes' data records the taxes and mandatory contributions that a small to medium sized company must pay in a given year, and also measures the administrative burden of paying taxes and contributions. Taxes and contributions measured include the profit or corporate income tax, social contributions and labour taxes paid by the employer, property taxes, dividend tax, capital gains tax, financial transactions tax, waste collection taxes and vehicle and road taxes.

Doing Business measures all taxes and contributions that are government mandated (at any level – federal, state or local), apply to the standardised business, and have an impact on its income statements. In doing so, *Doing Business* goes beyond the traditional definition of a tax, as defined for the purposes of government national accounts, where 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 just government accounts. The main differences relate to certain labour contributions.

The *Doing Business* 'paying taxes' data includes government mandated contributions, paid by the employer, to a required private pension fund or workers insurance fund. The indicator includes, for example, Australia's compulsory superannuation guarantee and workers compensation insurance.

Assumptions about the business

The business:

- Is a limited liability, taxable company. If there is more than one type of limited liability company in a country, the limited liability form most popular among domestic firms is chosen. The most popular form is reported by incorporation lawyers or the statistical office.

- Started operations on 1 January 2007. At that time it 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 five owners, all of whom are natural persons (resident for tax purposes in the economy).
- Has a start-up capital of 102 times income per capita at the end of 2007.
- Performs general industrial and commercial activities. Specifically, it produces ceramic flower-pots 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, alcohol or tobacco.
- At the beginning of 2007, the company owns two plots of land, one building, machinery, office equipment, computers and one truck. Another truck is leased.
- Does not qualify for investment incentives, or any benefits apart from those related to the age or size of the company.
- Has 60 employees, comprising four managers, eight assistants and 48 workers. All of these workers are nationals of the country and one of the managers is also an owner.
- No employees have left or joined the company since the company was established.
- Has a turnover of 1,050 times income per capita.
- Made a loss in the first year of operation.
- Has a gross margin (pre-tax) of 20% (that is sales are 120% of the cost of goods sold).

- Sells one of its plots of land at a profit during the second year.
- Has annual fuel costs for its trucks equal to twice income per capita.
- Distributes 50% of its profits as dividends to the owners at the end of the second year.
- Is subject to a series of other detailed assumptions on expenses and transactions to further standardise the case. All financial statement variables are proportional to 2006 income per capita. For example, the owner, who is also a manager, spends 10% of income per capita on travelling for the company (20% of this owner's expenses are purely private, 20% are for entertaining customers, and 60% for business travel).

Assumptions about taxes and contributions

- The taxes and contributions are those paid in the second year of operation (fiscal year 2008). 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 one. The frequency of payment includes advance payments (or withholding), as well as regular payments (or withholding).

The case study company has a turnover which is the same multiple of the income per capita for each economy. In absolute terms, therefore, the numbers can be different. For example, in the UK, the turnover of the business is assumed to be £21.5m, whereas, in Argentina, turnover is 13,941,603 pesos, which at 31 December 2008 (the end of the fiscal year of the study) equates to £0.4m. In both economies however, the calculation is the same and is based on income per capita. This allows the case study financials to be flexed to reflect the relative wealth of the economy in which it operates. While the turnover is flexed, the gross margin of the company is fixed at the same percentage regardless of the economy in which the company operates.

The indicators:

Number of tax payments

- The tax payments indicator reflects the total number of taxes and contributions paid, the method of payment, the frequency of payment and the number of agencies involved for this standardised case study company, during the second year of its operation. It includes payments made by the company on consumption taxes, such as sales tax or value added tax. Although these taxes 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 small to medium sized businesses), the tax is counted as paid once a year, even if the payment is more frequent. For taxes paid through third parties, such as tax on

interest paid by a financial institution or fuel tax paid by the fuel distributor, only one payment is included, even if payments are more frequent. These are taxes withheld at source, where no filing is made by the company.

- Where two or more taxes or contributions are 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 and paid together, only one of these contributions would be included in the number of payments.

Time to comply

- Time is recorded in hours per year. The indicator measures the time to prepare, file and pay (or withhold) three major types of taxes and contributions:
 - corporate income tax,
 - value added or sales tax, and
 - labour taxes, including payroll taxes and social security contributions.
- Preparation time includes the time to collect all information necessary to compute the tax 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 fulfil the tax accounting requirements, in which case the incremental time required is included. (The time estimated does not include the time spent developing the entries on tax for inclusion in the statutory accounts).
- Filing time includes the time to complete all necessary tax forms and to make all necessary calculations and submissions.

- 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. (Payment time can also include analysis of forecast data and associated calculations if advance payments are required).
- It is important to note that the hours to comply measure does not include any time spent on tax audits or inspections, or dealing with tax authority queries. The case study does not include any facts or assumptions which would enable such time to be estimated.

Tax Cost – Total Tax Rate (TTR)

- The TTR indicator measures the amount of all taxes and mandatory contributions borne by the business in the second year of operation, expressed as a percentage of commercial profits. *Doing Business 2010* reports the TTR for the fiscal year 2008 (1 January to 31 December 2008).
- The total amount of taxes borne is the sum of all the different taxes and contributions payable after accounting for deductions and exemptions. The taxes withheld (such as personal income tax), or collected by the company, but not remitted to the tax authorities (such as sales or value added tax), and not borne by the company, are excluded from the TTR (while noting that these still contribute to the compliance indicators; hours and payments).
- The taxes and contributions included can be divided into five categories:
 - profit or corporate income tax;
 - social contributions and labour taxes paid by the employer (for which all mandatory contributions are included, even if paid to a private entity such as a required pension fund);

- property taxes;
- turnover taxes and cascading sales taxes as well as other consumption taxes such as irrecoverable VAT; and
- other taxes (such as municipal fees and vehicle and fuel taxes).
- This is a comprehensive measure of all the taxes and contributions borne by business. As such, it differs from the statutory rate, which merely provides the factor to be applied to the tax base. It is more informative and more useful than other measures, which, for example, focus only on corporate income tax.
- It is important to note that the profit figure used in the TTR calculation (the commercial profit) is not the conventional figure found in the financial statements of a company – the profit before tax figure (PBT). In computing commercial profit, these taxes are not deductible, and are added back to present 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 profits are defined 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. If any of the taxes and contributions are included in ‘other expenses’, then these are added back to the commercial profits figure. Commercial profit amounts to 59.4 times the income per capita.
- The TTR excludes value added taxes (where not irrecoverable), because they do not affect the accounting profits of the business – and therefore they are not reflected in the income statement.
- The principles used for the tax cost indicator are broadly consistent with the PricewaterhouseCoopers Total Tax Contribution framework methodology. However, PricewaterhouseCoopers, in its empirical work, calculates TTR including only taxes as defined later in this appendix. Other mandatory contributions such as the Australian superannuation guarantee obligation are excluded. Such payments are usually disclosed by the company in other elements of the Total Tax Contribution framework, together with additional payments made by the company such as contributions to infrastructure costs. These are often required of companies in the extractive industries, by economies in which they invest, but do not strictly count as taxes.

Ease of Paying Taxes ranking

- The data collected by the *Doing Business* team is used to generate a system of ranking based on three indicators:

Steps: the number of tax payments

Time: the number of hours to comply with the company’s tax obligations

Cost: the total tax rate (TTR)

- This three step approach is linked to a broader methodology used by the World Bank Group in the *Doing Business* project which requires these three components of steps, time and cost.

- The World Bank Group report, '*Doing Business 2010*', aggregates these three indicators to generate an overall ranking. The aggregation of the indicators gives each indicator an equal weighting.
- Here is one example of how the ranking on the ease of paying taxes is constructed. In Iceland, it takes 31 payments, 140 hours and 25% of commercial profits to comply with business taxes during one year. In these three indicators, Iceland ranks in the 52nd, 22nd and 12th percentiles. Therefore, Iceland ranks in the 29th percentile for the overall ease of paying taxes – the average of the three percentiles. By ordering the ease of paying taxes percentile for each economy, the ranking is obtained, which is 31 out of 183 economies in the case of Iceland.
- The data tables in Appendix 1 show this overall ranking, and additionally the ranking for each individual indicator i.e. for the Total Tax Rate, for the time to comply and for tax payments. The appendix also gives a breakdown of the results for each indicator across the main types of taxes.
- The details on paying taxes can be found for each economy at www.doingbusiness.org and www.pwc.com/payingtaxes

The PricewaterhouseCoopers Total Tax Contribution ('TTC') framework

The PricewaterhouseCoopers Total Tax Contribution framework was developed with a view to establishing a methodology which enables companies to collect and communicate total tax information in a consistent manner, meeting the needs of their various stakeholders and helping to improve transparency³⁵.

The framework encompasses all the taxes that are paid by companies and includes, for example, property taxes, labour taxes and contributions, sales taxes and other taxes, as well as corporate income tax. It makes

a fundamental distinction between two types of taxes paid by companies: these are known as 'taxes borne' and 'taxes collected'. In essence, taxes borne are those which are a cost to the company, such as property taxes, employer social security and corporate income tax. Taxes collected are those where the company is collecting the tax on behalf of the authority, including taxes deducted from employees' salaries, sales taxes and excise duties.

The Total Tax Rate indicator which is included in the World Bank Group's Paying Taxes study has been calculated using the principles of the Total Tax Contribution framework. It is important to note that for the purpose of calculating the TTR, it is only taxes borne which are included (tax borne is discussed in more detail below).

Details of taxes collected are also gathered by the study and these have an impact, along with taxes borne, on the indicators dealing with hours to comply and the number of tax payments. The Total Tax Contribution framework also includes the cost of tax compliance.

It must be understood that the Total Tax Contribution framework is a data gathering and reporting mechanism, designed to increase transparency around a company's tax impacts. It is acknowledged that there are economic arguments over whether companies, consumers, or employees ultimately bear the economic incidence of taxes. This is not addressed in this framework.

What is a tax?

In the context of the PricewaterhouseCoopers Total Tax Contribution framework, and the surveys undertaken around the world, the question of defining 'what is a tax?' has been an important one to answer, in order to ensure a solid base for comparison and analysis for those surveys. The Paying Taxes data generated by the *Doing Business* report, and included in this study, includes government-mandated contributions, even though they may not fit the traditional definition of tax.

³⁵ Total Tax Contribution Framework – What is your company's overall tax contribution? – A PricewaterhouseCoopers discussion paper, published April 2005.

As a starting point, a tax can be defined as something which:

- is paid to government;
- is compulsory;
- is used by the authority as part of the public finances; and
- has no direct return of value to the payer.

Each of the terms needs a little expansion.

Payment should be made to an independent authority – therefore government includes a central, state or local authority. In many economies, TaxpayerCo in the Paying Taxes study will pay taxes at all three levels. It is still a tax if it is collected on behalf of the government by an agency, provided that the agency submits the taxes collected. In some economies (for example, in China), certain social security contributions made by employers are governed and collected by a separate taxing authority. As this authority operates on behalf of central government, albeit separate from the main tax authority, these payments are therefore a tax and are included within the Paying Taxes indicators.

It must be a compulsory levy – the only way to be exempt from paying is not to undertake the action that triggers the tax payment. To give a simple example, if property transfer tax is payable by the seller in a jurisdiction, the only way to avoid paying this tax would be not to sell the property.

Most taxes go into a central pot and are used as the authority wishes. A hypothecated tax remains a tax, but a levy that is a direct payment for a service may well not be a tax.

The last point requires the return of value to be considered. This is most easily illustrated by considering a company that leases space in a building owned by

the government. The rent paid is not a tax, as there is a full return of value to the company. Whilst this example is clear, others may not be quite so straightforward. For example, payments to a local authority will often be a tax as they do not result in the receipt of local government services of comparable value. On this basis, charges for rubbish/garbage collection will be a tax if the charge is clearly in excess of the cost of providing that service. However, road tolls will usually not be a tax as they are directly tied to the use of the road.

Payments in respect of labour

As evidenced in the results, payments in respect of labour, such as payroll taxes and social security contributions, can constitute a significant part of the TTR (where they are borne by the employer), and the compliance burden (where they are collected from the employee). Such payments are included in the study where they meet the definition of a tax, notwithstanding that they may be governed by separate legislation, or called a contribution rather than a tax.

Companies in many economies are required to pay to government forms of social security or other taxes connected with employing their workers. In most cases, these payments are compulsory and are used by the government as part of public finances – they are not, for example, used for the direct benefit of the employees of the company, and therefore do not provide any direct return of value to the company or the employee. These payments can be rightly included as a tax. However, unless all of the necessary requirements listed above are met, treatment as a tax may not be appropriate.

A specific illustration of this point, over which there has been some debate, is a payment made by employers in Australia. This payment, known as the superannuation guarantee obligation, is mandatory and equivalent to 9% of an employee's salary. While it is compulsory, it is paid into a separate superannuation fund which

is specifically allocated for the benefit of each employee. As such, under the PricewaterhouseCoopers methodology, it is accepted that this payment is not a tax as it is an employee benefit, rather than a general payment into public finances. For the World Bank Group *Doing Business* project, however, as it is a mandatory contribution, it has been included within the TTR calculation to ensure that international comparisons in the context of this survey are valid.

Taxes borne and taxes collected

As mentioned above, the PricewaterhouseCoopers Total Tax Contribution framework makes a fundamental distinction between taxes borne and taxes collected, and this principle is followed by the Paying Taxes study. The split is important for the purpose of understanding the impact of taxes on the company and for analysis of the results.

For the Paying Taxes study, taxes borne contribute to the TTR, but taxes collected do not. Taxes collected are important, however, as they do contribute to the number of hours that the company takes to comply with the tax system and they also impact on the number of tax payments. They therefore contribute significantly to the administrative cost of the tax system and to the effort and resource required. A common definition of the terms is as follows:

Taxes borne – those which are paid by the company and are a cost to the company.

Taxes collected – those for which the company acts as tax collector/administrator for the tax authority.

Taxes borne could also be termed 'taxes suffered', in that these are the levies that truly impact the company concerned. It does not matter whether the charge to the profit and loss account is direct (for example, the corporate profits tax charge), or indirect (such as the transfer tax paid on the purchase of a building

which is capitalised as part of the building's cost and then amortised over a period). Both the corporate income tax and the transfer tax would count as taxes borne. For the transfer tax, the amount borne would be the full amount paid in the period rather than the amount amortised.

Taxes borne are a cost to the company and, as with other costs, will ultimately be passed on – for example, in higher prices to customers, lower wages to employees, or lower dividends to shareholders. This ultimate incidence does not affect the treatment under TTC or the Paying Taxes study as a tax borne.

Taxes collected are those where the company acts, in effect, as (unpaid) tax collector on behalf of the tax authority. The classic examples are sales and excise taxes, together with taxes and contributions deducted from employees' pay. The only impact taxes collected have on the company's profits will be via administrative costs.