

# Paying Taxes

## The global picture



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## Foreword

The World Bank's Doing Business Project and PricewaterhouseCoopers LLP are delighted to share with you the results of a survey which has been conducted as part of the World Bank Doing Business report ([www.doingbusiness.org/taxes](http://www.doingbusiness.org/taxes)) to look at and compare tax regimes around the world. The results focus on the need for governments to ensure the effectiveness of the tax systems they implement, and for companies to appreciate the benefits of making tax reporting more transparent.

The effectiveness of a tax system relies on well-informed policy decision-making and the ability of businesses to comply with legislation. This publication considers improvements from the perspective of both government and business.

The conclusions are based on the findings of a survey on paying taxes which looked at the position of a standard modest-sized company in each of 175 countries. The work was carried out by the World Bank during the months of April to July 2006, with the support of PricewaterhouseCoopers LLP in terms of tax technical data and the methodology to be applied for the calculation of total tax rate. The survey represents a significant step forward in facilitating a comparison of the world's tax regimes. We aim to build on the foundation laid, and to further improve this information in the future.

This publication sets out the results of the survey. It provides commentary by the World Bank and by PricewaterhouseCoopers LLP on the findings and presents some thoughts on the way forward for greater transparency in tax reporting.

We hope you will find this interesting and would welcome your feedback.

World Bank and PricewaterhouseCoopers LLP.



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# Contents

Foreword	02
Executive summary	05
Survey methodology	06
Section 1: Paying taxes around the world	
Who makes paying taxes easy and who does not?	07
Corporate income taxes versus the total tax contribution	10
Section 2: Is there a need for reform?	
Why reform tax systems?	13
The increasing burden of tax administration and compliance	16
The effect of the tax system on the economy	18
Employment taxes – scope or scourge?	19
Section 3: How to reform	
The options for reform?	21
VAT/GST: The win:win taxation systems of the future?	25
Section 4: The way forward	
Understanding the total tax contribution	29
Appendix 1	
PwC Total Tax Contribution framework	31
Appendix 2	
Data notes and tables	33
References	50
Caveats and disclaimers	51

## Executive summary

Taxes are essential to finance public services but there are good and bad ways to collect them.

The design of the tax system can have significant economic impacts and can influence multinationals in deciding where to invest. Tax regimes with relatively high marginal rates and which include a number of exemptions and allowances tend to be less economically efficient in relation to encouraging employment, saving and investment. Such regimes generally also impose higher tax compliance and administration costs. Evidence suggests that simpler tax systems promote economic growth and can help achieve a win:win for governments and industry.

Burdensome tax systems can be a deterrent and can lead to tax evasion. Companies in 90% of surveyed countries rank tax administration among the top five obstacles to doing business. The main factors contributing to this are:

- the large number of business taxes to pay;
- lengthy and complex tax administration;
- complex tax legislation; and
- high tax rates.

To help with paying taxes and implementing reform, governments and tax authorities need to consider all aspects of a tax system. All taxes borne and collected by businesses should be recognised along with the related tax compliance costs - the Total Tax Contribution.

Currently there is too much focus on corporate income taxes alone when considering reform. The Doing Business survey data shows that on average corporate

income taxes only account for 36% of the Total Tax Rate, 11% of the number of tax payments made and 25% of the compliance time. The reason for this is that there is insufficient information available in the public domain on the Total Tax Contribution. Corporate reporting standards are geared towards corporate income taxes and there is little or no information available on the other business taxes which impact on companies.

The risk is that in discussions on reform these other business taxes are neglected or at worst overlooked. The increasing global trend to replace direct with indirect taxes underlines this issue.

This survey seeks to better inform the debate on reform. Better information around the Total Tax Contribution will encourage a clearer understanding from governments and help facilitate the appropriate steps that need to be taken.

Transparency is key. Governments need to be accountable for how taxes are spent. Businesses will potentially be more willing to pay taxes if they can see the benefits of improved public services and infrastructure. Businesses need to understand and communicate their Total Tax Contribution, so that they are more able to manage and control it and demonstrate the full extent of the contribution made to public finances.

Better information can be achieved through the systematic collection and reporting of data on the Total Tax Contribution, combined with regular consultation and dialogue between businesses, government and the tax authorities.

## Survey methodology

The Paying Taxes survey is carried out as part of the World Bank's Doing Business report, which compares business regulations in 175 countries. It was originally launched in the 2006 report (published in September 2005). The results of the second survey (2007) were published in September 2006. PricewaterhouseCoopers LLP provides the tax technical data for the survey.

The concept of the Total Tax Rate has been a key element of both of the surveys. In the 2007 report the methodology applied to calculate the Total Tax Rate for each country has been updated so that it is aligned with the broad principles from the PricewaterhouseCoopers LLP Total Tax Contribution framework (see Appendix 1 for further details). Two additional indicators of tax contribution are measured by the Doing Business Project, which are related to administration and compliance.

The study involved gathering information on all business taxes borne by companies in 175 countries, by reviewing the financial statements and a list of transactions of a standard modest-sized business called TaxpayerCo. (See Appendix 2 – Data notes, for a further explanation of the methodology).

In outline, the business started with the same financial position in every country. Respondents were asked for details of the total tax that the business must pay and the process for doing so. All taxes - from corporate income tax and mandatory social security contributions paid by the employer to advertising or environmental tax - and all applicable deductions and exemptions are taken into account in determining the total tax contribution. Sales and consumption taxes are not included as part of the analysis to calculate the Total Tax Rate, as they are not considered to be borne by the business.

The recognition of Total Tax Rate as a key component of the ease of doing business, is a significant enhancement to the Doing Business report. It enables companies and governments alike to appreciate the full extent of businesses' tax contributions globally. This in turn enables both governments and businesses to make better informed policy and risk management decisions.

# Section 1: Paying taxes around the world

## Who makes paying taxes easy and who does not?

By Caralee McLiesh and Rita Ramalho, Doing Business Project, World Bank

Tax collection has long been a despised activity. But taxes are essential. Without them there would be no money to build schools, hospitals, courts, roads, airports or other public infrastructure that helps businesses and society to be more productive and better off.

Still, there are good ways and bad ways to collect taxes. Imagine a modest-sized business – TaxpayerCo – that produces and sells consumer goods. In Hong Kong the business pays one income tax, one labour tax, one property tax and one fuel tax totalling 29% of profits. It takes 80 hours to comply with tax requirements. Meanwhile, in Belarus TaxpayerCo is subject to 12 taxes, including an income tax, sales tax, value added tax (VAT), transport duty, three labour contributions, land tax, property tax, ecological tax, fuel tax and a turnover tax where taxes are paid on inputs and again on outputs. Despite many deductions and exemptions, required payments add up to 186% of profits - which in an extreme case could lead to business failure or tax evasion. The business would make 125 tax payments to three agencies, all by paper, and spend 1,188 hours doing so. Tax refunds would take two years to process. This complexity and delay make Belarus' tax system among the world's most burdensome. Most companies can't afford to declare all their output, and 42% of business activity therefore goes unrecorded.

The results of the Doing Business survey on Paying Taxes show the full breakdown of taxes that an average business pays. For example, in Tunisia social security contributions paid by the employer amount to 16% of gross salaries, which is equivalent to 18.6% of commercial profits (Table 1.1). On top of that, the company pays jointly with social security contributions, and an accident insurance of 3.8% of gross salaries, that is 4.4% of profits. There are two additional labour taxes paid by employers of 1% gross salaries each – the FOPROLOS (social housing tax) and the TFP (professional labour tax). Both taxes amount to 2.4% of profits. After taking into account deductions and exemptions, the corporate income tax is 35% of taxable income – equivalent to 11.1% of profits. The company also pays FODEC (industrial development competitiveness tax), which is 1% of turnover and therefore 18.2% of profits. Additionally the business pays TCL (local municipality tax), and small taxes such as vehicle tax and stamp duty, which amount to 4.3% profit. Thus tax payments total 59% of profits, leaving TaxpayerCo with only 41% to invest in new products and distribute to shareholders.

Table 1.1: Paying taxes in Tunisia

Tax	Payments (number)	Time (hours)	Statutory tax rate	Tax base	Total Tax Rate (% profit)
Value added tax (VAT)	12	96	18%	value added	54.5
Social security contributions	4	36	16%	gross salaries	18.6
FODEC (development of industrial competitiveness tax)	12	-	a) 1%	turnover	18.2
Corporate income tax	1	136	35%	taxable income	11.1
Workers compensation (accident insurance)	0	d)	a) 3.80%	gross salaries	4.4
TCL (local municipality tax)	12	-	a) 0.20%	turnover including VAT	4.3
FOPROLOS (social lodging tax)	1	-	a) 1%	gross salaries	1.2
TFP (professional training tax)	1	-	a) 1%	gross salaries	1.2
Stamp duty	1	-	a) fixed fee (0.15 cents)		c)
Vehicle tax	1	-	a) various rates		c)
<b>Totals:</b>	<b>45</b>	<b>268</b>			<b>59</b>

a) - Data not collected

b) - VAT is not included in the Total Tax Rate because it is a tax levied on consumers

c) - Very small amount

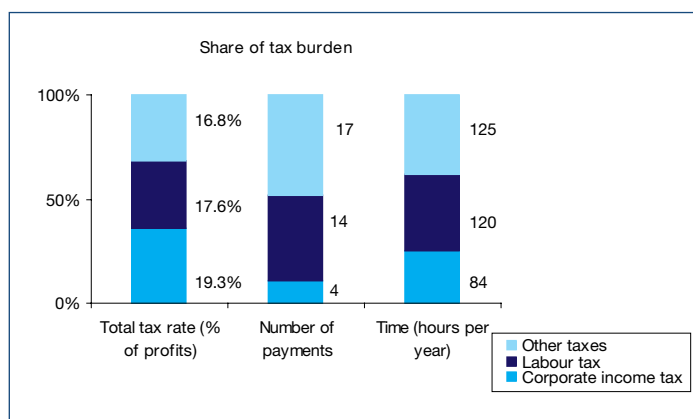
d) - Paid jointly with another tax



Arguments for business tax reform usually emphasise corporate income tax rates. But corporate income taxes are only a small share of the total business tax contribution – close to a third on average. For example, Argentina's profit tax is 9% of total taxes, while social security contributions paid by employers account for 26% and turnover and financial transaction taxes account for almost 62%. Moreover, the corporate income tax is just one of 34 required payments. Simplifying the other 33 payments spread over 11 separate taxes would go a long way towards reducing the tax burden on businesses. Latvia is another example: social security and other labour contributions account for 66% of the tax burden, whereas profit taxes account for 21%.

Around the world, corporate income taxes account for an average of 36% of the tax burden on businesses. They also account for only four of 35 business tax payments (Figure 1.1). In several Eastern European countries simplification has not had the desired impact on perceived business obstacles, in part because it focused on income tax only<sup>1</sup>.

Figure 1.1: Corporate income tax accounts for only part of the tax burden



Source: Doing Business database

Administrative requirements are also a burden in many countries. Firms in 90% of surveyed countries rank tax administration among the top five obstacles to doing business. In several – including Bangladesh, Cambodia, the Kyrgyz Republic, Russia and Uzbekistan – working with the tax bureaucracy is considered a bigger problem than tax rates<sup>2</sup>.

To measure these administrative burdens Doing Business and PricewaterhouseCoopers LLP recorded the number of payments TaxpayerCo would have to make to tax

authorities, as well as the time required to prepare and file tax payments. Norway collects 46% of companies' gross profit using three taxes filed electronically. In contrast, it takes 16 taxes and 59 interactions with the tax authorities to collect 53% of gross profit in the Philippines. In Ukraine it takes 98 payments and 2,185 hours a year, compared with only 11 payments and 104 hours in Estonia.

To comply with tax regulation, businesses in the 175 economies covered in this study submit, on average, 35 pages of tax returns a year – equivalent to 100,000 trees a year, even after accounting for the few countries where business taxes can be filed electronically<sup>3</sup>. In Cameroon the average annual tax return for businesses is 172 pages, in Ukraine, 92 and in the United States, 64.

Such complicated tax systems can lead to high evasion, even when rates are low. For example, although taxes in Peru are low by Latin American standards, evasion is a problem because it takes 74 days and 53 payments to fulfil tax requirements. In Brazil, the average business spends 455 days a year to comply with taxes – because there are, on average, 55 changes to tax rules a day<sup>4</sup>. Keeping up to date on tax law isn't easy.

Table 1.2 on page 09 ranks countries on the ease of paying taxes and is based on the average of the country rankings on total taxes, number of payments and time required to comply. Some countries at the top of the list are of no surprise – tax havens like the Maldives and St Lucia, and Middle Eastern countries like Oman, United Arab Emirates and Saudi Arabia, where the government relies on oil revenue to fund spending. However others, such as Ireland, Singapore, Switzerland and New Zealand, are less expected. Several Nordic countries perform better once all business taxes are taken into account and administrative burdens are considered – Iceland ranks 13th, Denmark ranks 15th and Norway ranks 16th. Perhaps this reflects the efforts already made by Nordic countries to push an overall government-to-business simplification agenda to reduce regulation, using a Standard Cost Model (SCM). The UK has embarked on a similar exercise.

<sup>1</sup>Engelschalk (2004).

<sup>2</sup>World Bank Investment Climate Survey database, available at <http://rru.worldbank.org>

<sup>3</sup>A grown tree produces, on average, 80,500 sheets of paper. There are about 250 million formal businesses in the world.

<sup>4</sup>Folha de São Paulo, 'País edita 55 normas tributárias por dia,' May 7, 2006.

On average, Middle Eastern and East Asian countries make paying taxes the easiest. Latin American countries impose the heaviest burdens, mainly because of high compliance costs. Africa follows, largely because of high taxes. The Organisation for Economic Co-operation and Development (OECD) countries impose the smallest administrative burdens and charge moderate tax bills.

Richer countries tend to have lower business taxes and less complex tax administration processes. Simple, moderate taxes and fast, cheap administration mean less hassle for business – as well as higher revenues. In contrast, poorer countries tend to use business as a collection point, charging higher business taxes.

Table 1.2: Where is it easy to pay taxes – and where not?

Who makes paying taxes easy - and who does not?			
Easiest	Rank	Most difficult	Rank
Maldives	1	Bolivia	166
Ireland	2	Venezuela	167
Oman	3	China	168
United Arab Emirates	4	Algeria	169
Hong Kong, China	5	Congo, Rep.	170
Saudi Arabia	6	Central African Republic	171
Switzerland	7	Colombia	172
Singapore	8	Mauritania	173
St. Lucia	9	Ukraine	174
New Zealand	10	Belarus	175

Payments (number per year)			
Fewest		Most	
Maldives	1	Jamaica	72
Afghanistan	2	Bosnia and Herzegovina	73
Norway	3	Montenegro	75
Hong Kong, China	4	Dominican Republic	87
Sweden	5	Kyrgyz Republic	89
Mauritius	7	Romania	89
Portugal	7	Congo, Rep.	94
Spain	7	Ukraine	98
United Kingdom	7	Belarus	125
Ireland	8	Uzbekistan	130

Time (hours per year)			
Least		Most	
Maldives	0	Azerbaijan	1,000
United Arab Emirates	12	Vietnam	1,050
Singapore	30	Bolivia	1,080
St. Lucia	41	Taiwan, China	1,104
Oman	52	Armenia	1,120
Dominica	65	Nigeria	1,120
Switzerland	68	Belarus	1,188
New Zealand	70	Cameroon	1,300
Saudi Arabia	75	Ukraine	2,185
Ireland	76	Brazil	2,600

Total tax rate (% of profit)			
Least	%	Most	%
Maldives	9.3	Tajikistan	87.0
Vanuatu	14.4	Mauritania	104.3
Saudi Arabia	14.9	Argentina	116.8
United Arab Emirates	15.0	Uzbekistan	122.3
Oman	20.2	Belarus	186.1
Samoa	22.1	Central African Republic	209.5
Zambia	22.2	Congo, Dem. Rep.	235.4
Cambodia	22.3	Sierra Leone	277.0
Mauritius	24.8	Burundi	286.7
Switzerland	24.9	Gambia	291.4

Source: Doing Business database

Note: Rankings on the ease of paying taxes are the average of the country rankings on the number of payments, time and total tax rate. See the Data notes (Appendix 2) for details.

# Corporate income taxes versus the total tax contribution

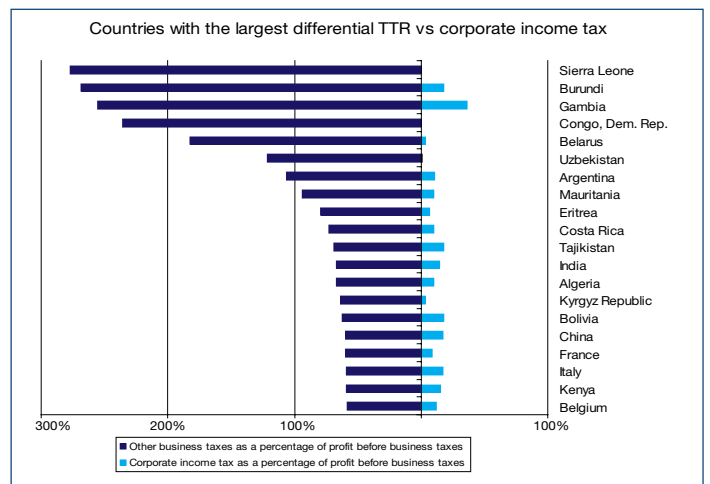
By Susan Symons, PricewaterhouseCoopers LLP

As mentioned in the previous chapter, arguments for business tax reform usually emphasise corporate income tax rates. However, corporate income taxes are only a small share of the total business tax contribution.

Figure 1.2 below illustrates that the differential between the total tax rate and the corporate income tax rate exists for most countries covered by the survey, while Figure 1.3 identifies the 20 countries where this differential is greatest.

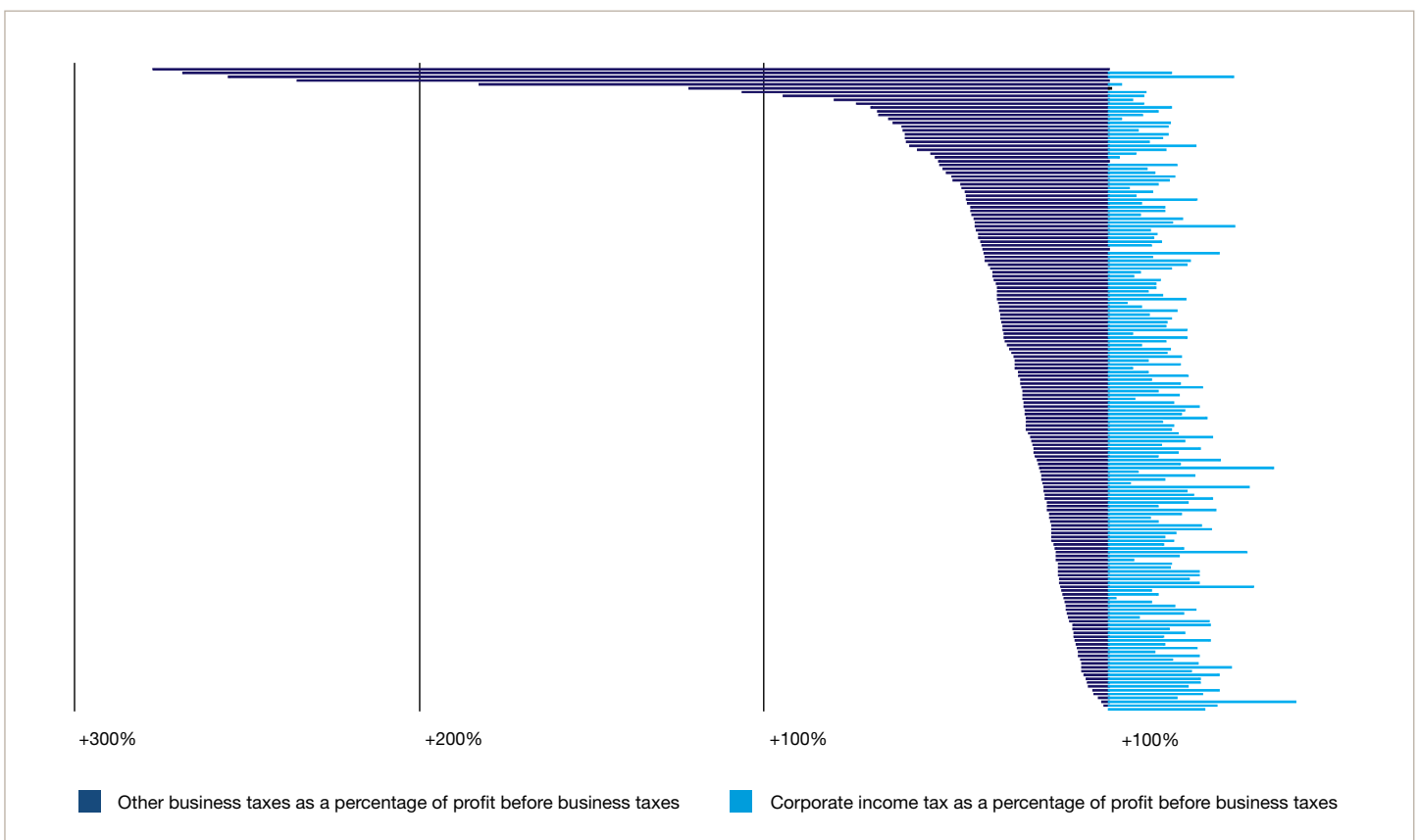
It is interesting to note that while some of the largest differentials can be found in Africa (in countries like Sierra Leone and the Congo Democratic Republic), the biggest examples also extend to other continents in countries like Argentina, India, China and notably in France and Belgium.

Figure 1.3: Countries with the largest differential Total Tax Rate (TTR) versus corporate income tax



Source: Doing Business 2007

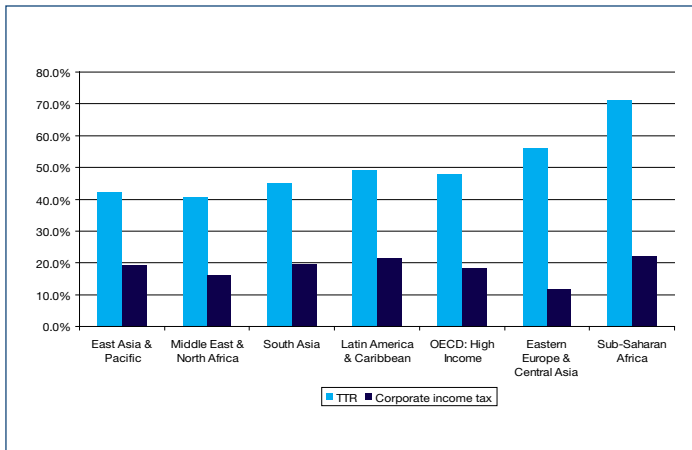
Figure 1.2: Corporate income tax as a percentage of profit before business taxes compared to other business taxes as a percentage of profit before business taxes



Source: Doing Business 2007

Figure 1.4 below analyses the data from a regional perspective, and further demonstrates that this is not just a feature for developing countries but applies similarly to other regions both geographically and economically. The full details by country for this comparison are shown in Figure 1.2 (See also data tables in Appendix 2).

Figure 1.4: TTR versus corporate income tax – the regional perspective



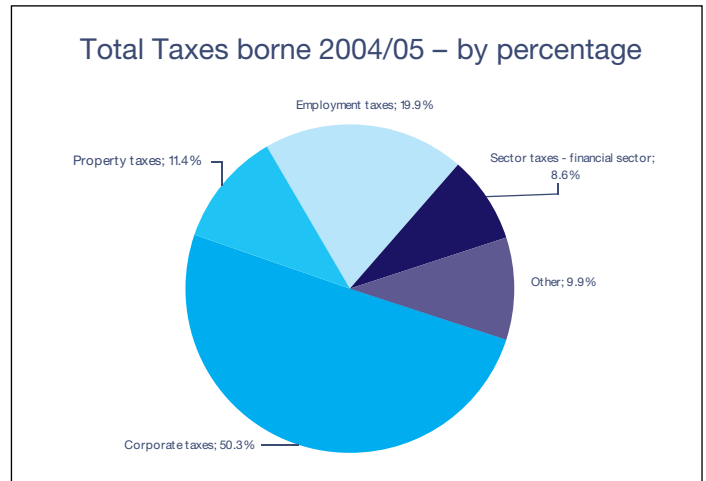
Source: Doing Business 2007

According to the survey data overall, corporate income taxes in fact account on average for only 36% of the total tax rate, 11% of the number of payments made, and 25% of the compliance time.

In this connection it is also interesting to take note of the number of business taxes that there are. For example, according to the survey, companies in Switzerland have 11 business taxes, and Belarus 9, and these numbers are of course limited by the assumptions made for the company used in the model.

Recent independent empirical work conducted by PricewaterhouseCoopers in the UK shows that there are up to 21 UK business taxes that companies may have to bear in addition to corporate income tax, with labour taxes, property taxes and irrecoverable value added tax being the most significant of these as illustrated in Figure 1.5. The other taxes include various sector-specific levies and an increasing number of environmental taxes aimed at behavioural change, including the congestion charge levied in London. The work has shown that on average the largest UK companies each bear 9 business taxes.

Figure 1.5: UK business taxes



Source: PwC survey for the Hundred Group

In Australia PricewaterhouseCoopers studies undertaken show that companies may have to deal with many more business taxes, in some cases more than 50, because of the various taxes each State levies in addition to those operating at Federal level and those applied locally for example the Fire Brigade levy.

In addition countries that appear to be tax havens because of the lack of corporate income tax – ranging from Estonia to the Marshall Islands – usually ensure that businesses contribute significantly to government coffers in other ways, typically high employment taxes (employer contributions) or operating licence fees. The World Bank survey shows a Total Tax Rate of 50.2% for Estonia and 66.6% for the Marshall Islands.

So far, this section has drawn attention to the other business taxes which companies have to bear – the taxes which directly affect their profitability and which therefore contribute to the calculation of the Total Tax Rate. But the taxes which companies collect on behalf of governments should not be forgotten. These are taxes which companies are obliged to collect but which are not ultimately borne by companies but which are instead borne by the consumer. For companies their impact is in relation to administrative and compliance cost, and is also commercial to the extent that they impact on the company's prices. The UK work referred to above found that in the UK there are potentially 13 taxes collected by the largest companies and the experience is that on average 5 have to be complied with.

Among the most prominent examples of such other business taxes are employment taxes (levied on the employee), and indirect (or consumption) taxes such as value added tax (VAT)/goods and services tax (GST), and environmental taxes. These taxes are increasingly being used by governments to collect the revenues that they need to fund public services and the trends indicate specifically that governments are looking towards VAT/GST<sup>5</sup> as the major source of tax revenue for the future. If this trend continues and indirect taxes become the most prominent form of taxation in the next 10 to 20 years, then there is clearly a need for governments to consider these taxes as part of the reform agenda. As a key role for businesses is to collect these taxes on behalf of governments, so the costs of administration and compliance need to be factored into the decision over whether reform is necessary. Consultation with business is essential.

So the evidence clearly suggests that it would be short sighted for the tax reform agenda for government to focus only on corporate income taxes. To do so ignores the fact that there are many other business taxes which together (and often even in isolation) represent significant components of the total tax contribution. Focusing solely

on corporate income tax can lose sight of the value that the country gets from the multiplier effect of the wider tax contribution.

Currently, corporate income taxes are the primary focus of government decisions over reform. This is largely due to the fact that today's corporate reporting standards generally home in on corporate income taxes and, typically, the disclosures in the company accounts are around corporate income taxes paid or provided on business profits. There may also be some disclosure around employers' social security costs. However, until recently there has been little data in the public domain about other business taxes borne or collected by companies. There has certainly been nothing that brings them all together. The risk is therefore that these other business taxes are neglected in the reform debate or at worst, overlooked.

The onus is therefore on businesses to increase transparency around their total tax contribution, including all the taxes they pay and collect, as well as the time taken and cost of administration and compliance. In this way, governments (and other stakeholders) will be able to take on board the full picture when considering reform.

<sup>5</sup>This concept includes VAT and GST but does not cover sales taxes, customs duties or excise type taxes

## Section 2: Is there a need for reform?

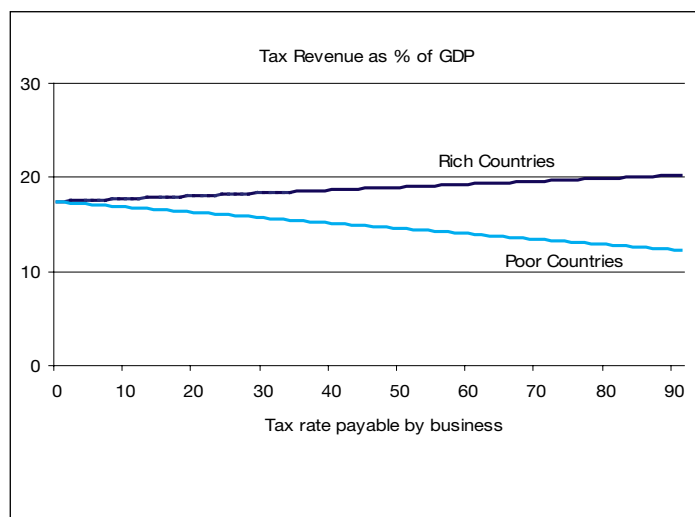
### Why reform tax systems?

By Caralee McLiesh and Rita Ramalho, Doing Business Project, World Bank

Governments impose taxes to finance public services. But taxes must first be collected and high tax rates do not always lead to high tax revenues. Between 1982 and 1999 the average corporate income tax rate worldwide fell from 46% to 33%, while corporate income tax collection rose from 2.1% to 2.4% of national income<sup>6</sup>. This outcome was achieved because more businesses entered the formal economy and because tax exemptions and other tax incentives were reduced or eliminated.

Poorer countries try to levy the highest amount of tax on businesses. Some claim that these high taxes are needed to fund public services and correct fiscal deficits. The evidence suggests otherwise. Higher rates typically do not lead to higher revenues in poor countries (Figure 2.1). Instead they push businesses into the informal economy. As a result the tax base shrinks and less revenue is collected<sup>7</sup>.

Figure 2.1: Taxes and revenue – unrelated in poor countries



Source: Doing Business database, IMF (2005), WDI (2005)

A better way to meet revenue targets is to encourage tax compliance by keeping rates moderate. Russia's large tax cuts in 2001 did exactly that. Corporate tax rates fell from 35% to 24%, and a simplified tax scheme lowered rates for small business. Yet tax revenue increased - by an annual average of 14% over the next three years. One study showed that the new revenue was due to increased compliance<sup>8</sup>.

Reducing tax rates has been a trend in other Eastern European and Central Asian countries. Most reformers – Armenia, Bulgaria, Estonia, Kazakhstan, Slovakia – have

seen tax revenues rise. The larger the share of informal business activity before reform, the higher the revenue growth after.

More recent reformers have shown similar results. Ghana exceeded its mid-year revenue targets despite significant cuts in corporate tax rates in the last two years. Albania's corporate tax revenue rose 21% after the rate was cut, while in Moldova it jumped 28% and in Latvia, 37%. In Romania, budget revenues grew 8% in real terms in the first quarter of 2005 relative to the same period in 2004, despite the new flat tax. Economic growth in these countries is a factor in the increased revenues. But compliance is also up.

Lower rates work best when their administration is simple. They are undermined by exemptions that shrink the tax base. Tax revenue has fallen in Uzbekistan, where the enthusiasm for income tax cuts was not matched by efforts to improve tax administration and expand the tax base.

Businesses are more willing to pay taxes if they see that the money is used to improve public services. Yet many developing countries with high tax rates fail to improve business infrastructure or education and training – two things that employers care about (Figure 2.2). Across countries, higher taxes payable are not associated with better social outcomes, even allowing for country income levels. They do not increase government spending on health and education, raise literacy or life expectancy or lower child mortality, nor are they associated with better infrastructure and other public services<sup>9</sup>.

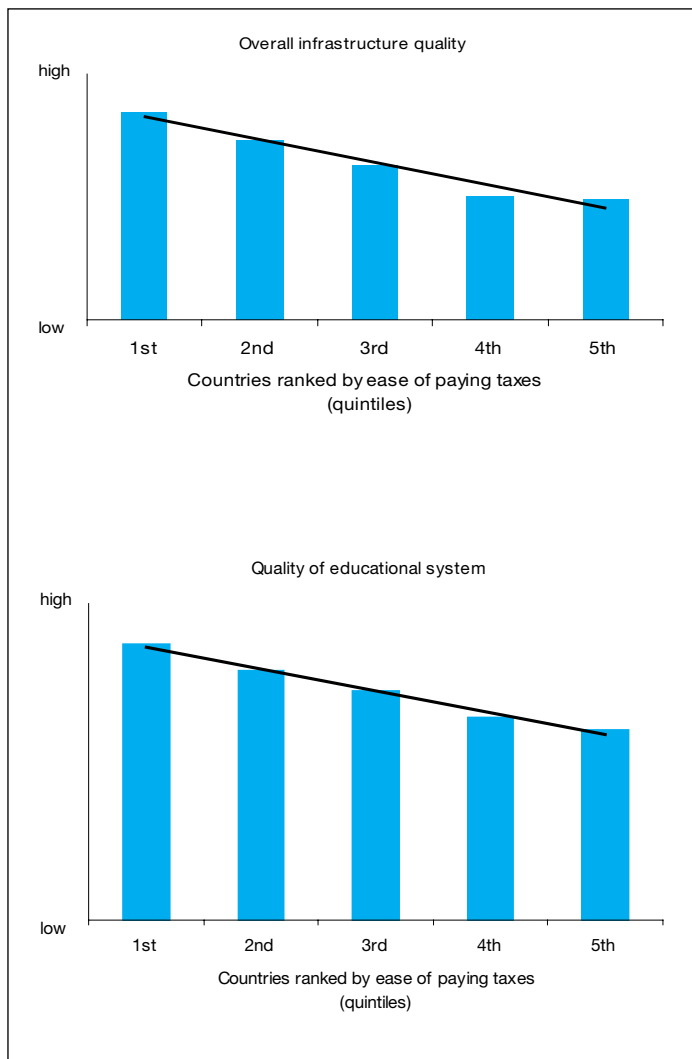
<sup>6</sup>Hines (2005)

<sup>7</sup>A similar result holds between fiscal regulation and economic growth. See Loayza, Oviedo and Serven (2004)

<sup>8</sup>Ivanova, Keen and Klemm (2005)

<sup>9</sup>Based on analysis of *Doing Business* indicators with health, education and infrastructure indicators in the World Bank's World Development Indicators (2005) and Global Competitiveness Report 2004–05 (WEF 2004). The results hold controlling for income per capita

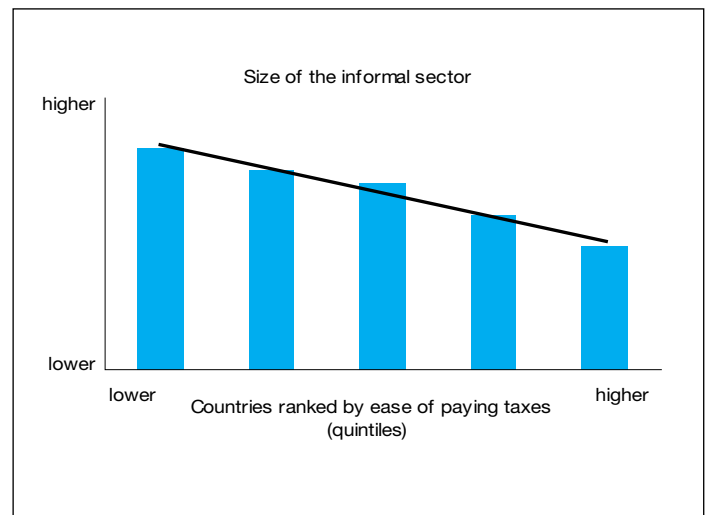
Figure 2.2: Burdensome taxes, and still poor public services



Source: Doing Business database, WEF  
 Note: Relationships are significant at the 1% level and remain significant when controlling for income per capita

Burdensome taxes do however generate other undesirable outcomes. They are associated with more informality, as entrepreneurs often choose to avoid the formal system altogether and operate underground (Figure 2.3). They also breed corruption. Businesses ranking in the bottom 30 countries on ease of paying taxes are twice as likely as those in the top 30 to report that informal payments are a problem. Every point of contact between a bureaucrat and an entrepreneur could present a danger of bribery and confusion on voluminous, often contradictory rules which may create room for discretion.

Figure 2.3: Burdensome taxes are associated with more informality



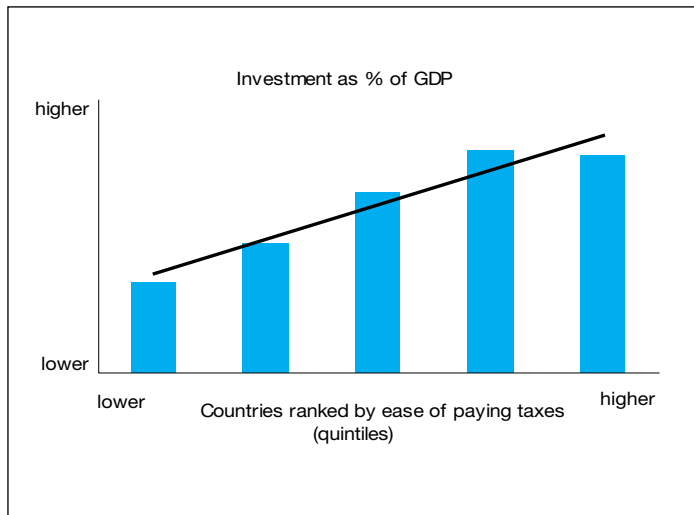
Source: Doing Business database, Schneider (2005)  
 Note: Relationship is significant at the 1% level and remains significant when controlling for income per capita

Simplifying the tax regime by reducing tax rates and eliminating exemptions is the main way to reduce corruption in tax administration. Georgia – which introduced major reductions in tax rates and simplifications to the tax system in 2004 – has seen a drastic fall in perceived corruption of tax officials. In 2005 only 11% of surveyed businesses reported that bribery was frequent, down from 44% in 2002. That was the sharpest drop in perceived corruption among the 27 transition economies<sup>10</sup>. Romania, another major reformer in 2004, and Slovakia, which introduced large tax reforms in 2003, also saw falls in perceived corruption: from 14% to 8% of surveyed businesses and from 11% to 5%, respectively.

Growing evidence shows that tax reform creates more vibrant businesses. A smaller tax burden encourages firms to invest (Figure 2.4). One recent study found that a 10% cut in indirect taxes, such as VAT, may imply a rise in investment of up to 7%<sup>11</sup>. “Businesses are happy with the change and responding by investing more,” says Kenneth, an accountant, about corporate tax reform in Ghana. Moreover, such investment yields higher returns when taxes are streamlined. A study in India estimates that tax reform can increase productivity by up to 60%<sup>12</sup>.

<sup>10</sup>World Bank (2006)  
<sup>11</sup>Desai, Foley and Hines (2004)  
<sup>12</sup>World Bank (2004)

Figure 2.4: Burdensome taxes are associated with less investment



Source: Doing Business database, Schneider (2005)

Note: Relationship is significant at the 1% level and remains significant when controlling for income per capita

It is not just businesses that gain from reform. Streamlining taxes also brings savings for government. A complicated tax system costs a lot of money to run – funds that could be better spent on education, health care and infrastructure. In Denmark, one kroner spent on tax administration generates 113 kroner of tax revenue. In Hungary, one forint produces only 77. In Mexico one peso produces only 33.

Overall growth is also higher with lower taxes and better collection<sup>13</sup>. And with tax incentives aligned to encourage work, more firms and more jobs are created. One study shows a cut of one percentage point in corporate tax rates is associated with up to a 3.7% increase in the number of firms and up to 1.1% higher employment<sup>14</sup>. Tax reforms inspire political debate and can be hotly contested. But both business and government benefit when taxes are simple and fair and set incentives for growth.

<sup>13</sup>Engen and Skinner (1996), Lee and Gordon (2004) and Slemrod (1995)  
<sup>14</sup>Goolsbee (2002)



# The increasing burden of tax administration and compliance

By Peter Cussons, PricewaterhouseCoopers LLP

Tax administration and compliance can be a significant obstacle to businesses and need to be considered as part of the decision on reform.

A recent study by PricewaterhouseCoopers LLP looked at the burden of federal tax administration for the top 20

countries ranked by gross domestic product (GDP). The relative tax administration burden in each country was measured by the number of pages of primary federal tax legislation, as shown in Table 2.1.

Table 2.1: Federal tax administration burden

Country	GDP ranking	GDP \$m	Number of pages of primary tax legislation (ranking)
United States	1	11,711,834	5,100 (5)
Japan	2	4,622,771	7,200 (4)
Germany	3	2,740,551	1,700 (10)
United Kingdom	4	2,124,385	8,300 (2)
France	5	2,046,646	1,300 (13)
China and Hong Kong	6	1,931,710	2,000 (9)
Italy	7	1,677,834	3,500 (7)
Spain	8	1,039,927	530 (17)
Canada	9	977,968	2,440 (8)
India	10	691,163	9,000 (1)
Korea	11	679,674	4,760 (6)
Mexico	12	676,497	1,600 (12)
Australia	13	637,327	7,750 (3)
Brazil	14	603,973	500 (18)
Russia	15	581,447	700 (=15)
Netherlands	16	578,979	1,640 (11)
Switzerland	17	357,542	300 (20)
Belgium	18	352,312	830 (14)
Sweden	19	346,412	700 (=15)
Turkey	20	302,786	350 (19)

Source: PwC study June – July 2006. GDP information is based on 2004 figures taken from World Bank data as at April 2006, for more information visit: <http://www.worldbank.org>

Note: The study does not measure state and local taxes. Countries levy taxes at different political levels, which will affect the relative ranking.

The smaller but significant and growing economies of Ireland and Luxembourg were also surveyed and revealed equally interesting results. Ireland (GDP ranking 30/\$181,523m) had 4,250 pages of primary tax legislation and therefore a ranking of seven if incorporated into the above table. Luxembourg (GDP ranking 67/\$31,864m) had 2,200 pages of primary tax legislation and therefore a ranking of 10 if incorporated into Table 2.1 (on page 16).

A first important finding to note is that the volume of primary federal tax legislation is not directly proportional to economic size. For example, the US, ranked number one in GDP terms, being almost three times the size of the next nearest economy (Japan) has just 5,100 pages of primary federal tax legislation compared with Japan's 7,200 pages. Or India, with a lower GDP ranking of 10 but which has the most pages of primary federal tax legislation at 9,000.

Secondly, the volume of primary federal tax legislation is on the increase i.e. more new legislation is being enacted than repealed. In the UK over the past 10 years, the number of pages has more than doubled from approximately 3,700 to 8,300.

There are a number of reasons for this. In the UK, for example, the Tax Law Rewrite committee has rewritten most of the UK's income tax provisions in more user-friendly language. The necessity for this is perhaps best illustrated by a quote from Section 704, Income and Corporation Taxes Act (ICTA) 1988, as yet unreconstructed: "That in connection with the distribution of profits of a company to which this paragraph applies, the person in question so receives as is mentioned in Paragraph C (1) such a consideration as is therein mentioned." (Paragraph D (1) of the arcane Section 704 "prescribed circumstances" provisions in relation to anti-avoidance regarding transactions in securities). Nonetheless, it is arguable that this process is responsible for a 50% increase in the length of the legislation that is being rewritten, and it should be noted that the Tax Law Rewrite process has as yet probably rewritten under a half of all UK primary tax legislation.

The Government may consider tax advisers (and perhaps business) as responsible by virtue of tax avoidance for much recent legislation. However, with the extension of the UK Tax Avoidance Disclosure (TAD) rules to all income tax, corporation tax and capital gains tax transactions as well as VAT and stamp duty/stamp duty reserve tax/stamp duty land tax, it is arguable that tinkering with the tax system by introduction of layer upon layer of anti-avoidance is leading to a situation where one transaction (e.g. borrowing in the UK) may require

consideration of up to half a dozen differing blocks of anti-avoidance legislation or case law<sup>15</sup>.

A particularly worrying consequence is that with the sheer volume of tax legislation no one individual can possibly read all of it; and so the days of a tax director being confident of spanning all the relevant parts of the tax code seem to have all but disappeared. Similarly, at least as regards advising large to medium-size corporates, the ability of a single tax adviser to span all the relevant tax legislation is circumscribed, hence the increasing relevance of specialists and sub-specialists. This leads to an at least two tier market – those who can afford the necessary advice, and those for whom such advice may be of only marginal benefit on a cost/benefit analysis.

It is also leading to a situation where the primary tax legislation is being read by fewer and fewer people, and on the HM Revenue & Customs (HMRC) side in the UK, where there are nominated specialists for not only particular areas but nowadays even for a particular section or schedule.

On a brighter note, other countries such as Germany and France with economies that are comparable to (France) or even larger (Germany) than the UK's, appear to manage with considerably fewer pages of primary federal tax legislation. The PricewaterhouseCoopers LLP survey shows Germany with 1,700 pages putting the country in tenth place and France with 1,300 pages and in 13th place.

To conclude, many countries need to reflect on the likely deterrent effect of the ever increasing complexity of their tax legislation and the resulting probable reduction in their international competitiveness. Ultimately, when tax legislation becomes too voluminous, compliance drops more through ignorance than deliberate evasion, as the Paying Taxes survey illustrates.

<sup>15</sup> Section 209 ICTA 1988: whether interest dependant on the results of the business and therefore a distribution; Paragraph 13 Schedule 9A FA 1996: loans for unallowable purposes; Schedule 28AA ICTA 1988: thin capitalisation and transfer pricing; Sections 24 to 31 Finance (No. 2) A 2005 and Schedule 3: anti-arbitrage provisions; Section 349 ICTA 1988 and SI1970/488: treaty clearance from UK 20% withholding tax; Ramsay/Furniss, post BMBF and SPI.

# The effect of the tax system on the economy

By John Hawksworth, PricewaterhouseCoopers LLP

There is extensive research on the relationship between economic growth and tax regimes, with a broad range of findings. At the macroeconomic level, there is no simple relationship between the overall level of taxation (as a % of GDP) and long-term economic growth, although some econometric studies find evidence of a negative influence from high levels of taxation after correcting for other factors. But it remains a controversial area and other studies find little or no evidence of such a relationship. Some studies find that, while the overall level of taxation may not be significant, the composition of taxation does matter, with greater negative impacts on growth from high levels of direct taxation (e.g. income tax and corporate profits tax) than indirect taxation (e.g. VAT and excise duties). But this needs to be weighed against the fact that direct taxation tends to be more progressive than indirect taxation.

It is also important to note what the extra taxes are used to fund: if, for example, they are used for transfer payments, then the net impact on long-term economic growth may be negative. However, the net impact could be positive if they are used to fund improvements in, say, education, transport and energy infrastructure and research and development (although these net impacts may be difficult to quantify if these benefits take a long time to come through). These relationships may also vary with the level of economic development of the countries concerned and, related to this, the quality of governance in these countries.

There is probably a greater consensus in the view that the design of the tax system can have significant microeconomic impacts. In particular, tax regimes with relatively high marginal rates and large numbers of exemptions and allowances tend to be less economically efficient in relation to encouraging work, saving and investment, as well as imposing higher compliance and tax administration costs. Tax regimes may also have particularly significant effects where they relate to internationally mobile physical, human or financial capital. Attempts to impose internationally uncompetitive tax rates on these forms of mobile capital may be particularly damaging to an economy in the long term.

## Employment taxes – scope or scourge?

By John Whiting, PricewaterhouseCoopers LLP

Companies know that they pay many taxes over and above the tax on their profits. In almost every country in the world, those taxes include some form of levy related to their payroll bill – sometimes directly, sometimes linked to the employees. It's questionable whether the extent of these charges is fully appreciated – or fully controlled by either the company that pays them or the government that levies them.

If tax reform is in the air, taxes on employment are usually a part of that mooted reform. Is this an area where there is scope for countries to extract more – or is it an area that damages employment prospects?

### What are human resource taxes?

The employer's tax costs related to the human resource (HR) function are usually threefold:

- (1) Taxes borne – the employer's social security contributions, contribution to pension benefits (for example employer pension contributions in Australia) or payroll taxes.
- (2) Taxes collected – deductions made by the employer from employees' pay in respect of social security and income tax.
- (3) Tax administration – the cost of running all of this effectively on behalf of governments.

There may also be involvement by employers in what are essentially benefits laid down by governments. Some may be funded by governments, imposing only an administrative burden on employers. Some are actual costs and become part of taxes borne. Examples will include areas such as sick and maternity/paternity pay and levies to support particular industries or training schemes. It is arguable how much these represent in taxes in the purest sense of the word – it will come down to whether these are payments to tax authorities which are then used as general revenues. But, however they are regarded, they need to be borne in mind when the burden of employment taxes is considered.

### Pros and cons

There is a lot to be said for taxing employees via the employer – at least from a government's point of view. Employers may be more likely to pay; there is potentially one employer as against many employees; adding to payroll costs emphasises the employer's wider responsibilities and may ensure that the employer puts additional monies into some form of social welfare. Incentives can be given for particular actions – for example, reduced social security contributions for new

employees in Finland. Checking compliance can be via employer visits rather than many individual reviews of employees.

The contra argument has to be one of cost. Imposing extra costs onto employers in respect of their employees will undoubtedly increase the cost of employment. The administrative burden shouldered by employers must not be forgotten either: particularly where returns require copious data, as is normally the case.

### Is this a significant burden?

It is noticeable that some countries with modest (or in the case of Estonia, no) corporate income taxes evidently make up the lost revenues via employment taxes, in particular employer social security charges. But it is not just countries with low rates of corporate income taxes: countries such as France and Belgium impose high employer social security charges. This has led to some employment perceptibly moving to the south east of the UK where services can easily be rendered to France/Belgium while staying out of their social security net. Whether it also contributes to unemployment is an issue for the economists but evidence from businesses makes it clear that these high costs are factors in business planning.

Within a country, sectors can differ. This can result from additional (or reduced) levies for particular industries, depending on the country's attitude to the sectors in question. Even with the same rates on tax, differing employment patterns (and rates of pay) can mean very different impacts on the companies concerned. For example, in the UK Financial Services sector, employers' national insurance contributions (NICs) are one-third of corporate income tax bills, whereas in Industrial Products, the position is reversed – employers NICs are three times the corporate income tax bills<sup>16</sup>.

All this emphasises the need to factor employment taxes into any tax strategy – both at government and company level.

### Cost or benefit?

Many countries will argue that the employer actually benefits from the cash that they deduct and retain from employees' pay. This cash can be managed positively for the period that it is in the company's hands before

<sup>16</sup>Source: PwC Total Tax Contribution survey for The Hundred Group 2005

it is passed on, and can offset, to a greater or lesser extent, the tax administration costs. This may work for larger employers; however the smaller employer will often struggle.

The question then arises as to whether employers are properly focused on managing these significant tax costs. Bear in mind that risks in the tax arena generally come in many guises, and employment tax risks are no different. For example:

- Operational risk – the possibility of processing errors, which because of the volumes involved could lead to significant additional costs;
- Compliance risks – the possibility of late submission, with consequent penalties; and
- Reputational risk – making errors in the employment tax arena is unlikely to lead to adverse external publicity but it could impact on staff relations.

Some might argue that these risks have always been present. However, it is apparent that tax authorities see the employment tax compliance arena as a fruitful area for their efforts.

### A bigger HR bang?

This section does not argue for or against employment taxes, but simply suggests that companies and governments alike need to consider them and make sure that they factor them properly into planning.

Many countries in the developing world may see employment taxes as an attractive route to obtaining additional revenues, particularly for the perceived ease of collection. That can be a very valid argument; the downside can be pricing staff out of the market. A particular factor within this will be whether local staff are to be taxed in the same way as expatriates. After all, expatriates may not draw on social costs in the same way, if that is part of the rationale for employment taxes. But allowing them a discount – which may come via a tax treaty – may cost the country more than it had envisaged.

There is a long way to go before taxes, particularly employment taxes, are harmonised. In the meantime the implication is that it is becoming ever more important to ensure there is transparency around employment taxes and that they are properly managed and reported.

# Section 3: How to reform

## The options for reform?

By Caralee McLiesh and Rita Ramalho, Doing Business Project World Bank

In 2004-06, reducing profit tax rates was by far the most popular change to tax systems (Table 3.1). Corporate income tax cuts swept through Eastern European countries, sealing the region’s rank as the top tax reformer. Western European countries also joined the trend, partly in response to competition from new European Union members. Such reductions are possible when reforms target increasing compliance and the tax base. Here are three ways to start:

- Simplify tax law.
- Ease filing requirements.
- Consolidate taxes.

### Simplify tax law

The boldest reform is to simplify tax law so that every business faces the same tax burden – with no exemptions, tax holidays or special treatment for large or foreign businesses. Many tax laws start that way. But when hard times come and governments need revenue, tax rates are often raised. This is unpopular, and large or well-connected businesses usually obtain special treatment. Soon the tax law becomes riddled with exceptions, generally at the expense of small businesses, which have the least ability to lobby. Often they are pushed into the informal sector.

Few reformers dare eliminate exemptions. Egypt is an exception: since 2005 all businesses have paid a 20% corporate income tax – rather than 32% or

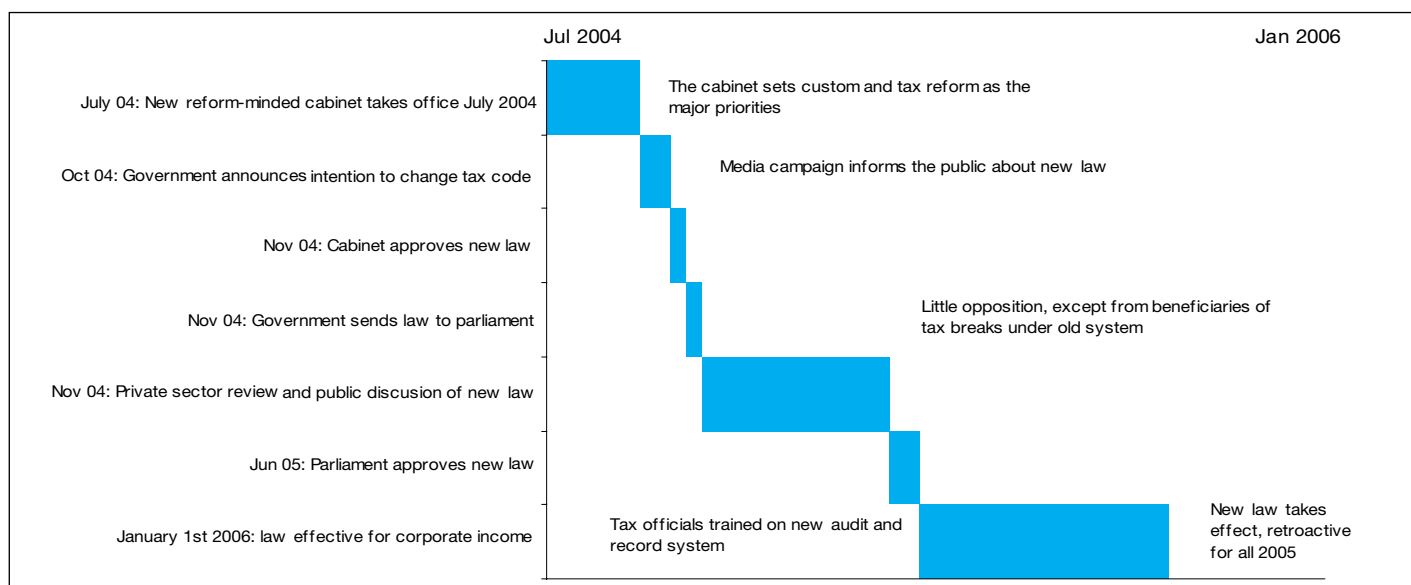
40%, depending on the sector. All sector-, location- or business-specific tax holidays and exemptions were eliminated, about 3,000 in all. Businesses can file and pay taxes electronically. As a result two million Egyptians filed taxes in 2005, double the number in 2004 (Figure 3.1 demonstrates the process undertaken by Egypt).

Table 3.1: Reducing profit tax rates: the most popular reform in 2004-06

Reform	Country
Reduced profit tax rates	Afghanistan, Albania, Algeria, Antigua and Barbuda, Austria, Bulgaria, Czech Republic, Denmark, Egypt, Estonia, Finland, Ghana, Greece, Guinea-Bissau, Hungary, India, Israel, Latvia, Lesotho, Mexico, Moldova, Montenegro, Netherlands, Pakistan, Paraguay, Poland, Rwanda, Senegal, Sierra Leone, Sudan, Switzerland, Turkey, Uzbekistan
Reduced number of taxes	Belarus, Egypt, Ghana, Georgia, Lithuania, Russia, Yemen
Revised tax code	Afghanistan, Albania, Egypt, El Salvador, Georgia, Honduras, Mexico, Morocco, Romania, Spain, Tanzania
Introduced value added tax	Bosnia and Herzegovina, India, Serbia
Introduced electronic filing	Bulgaria, Latvia, Lithuania

Source: Doing Business database

Figure 3.1: How Egypt created a flat profit tax



Source: Doing Business database

Special exemptions erode the tax base. Businesses left in the system end up paying more. The system becomes less transparent and more costly to run. It distorts resource allocation. And incentive schemes create possibilities for rent seeking and arbitrage as businesses seek to minimise their tax with legal ways of manipulating income<sup>17</sup>.

Estonia's 1994 reform replaced its concession-laden system with a single flat tax of 26% offering no exemptions. "We could not afford to maintain a more complex system," said a representative of the Ministry of Finance. The country's tax base broadened, and revenues have not suffered. Its success sparked a rush by other Eastern European countries to do the same. In 2003, Slovakia streamlined its convoluted incentive schemes into a single flat tax, with similar results<sup>18</sup>. In 2004, Romania and Georgia became the latest. Romania introduced a 16% flat tax and cut payroll taxes - though at 33.25%, they are still high. Georgia's new tax code levies a 20% corporate income tax on businesses and a 12% flat tax (down from 20%) on personal income. In addition, social taxes were cut from 31% to 20% and the number of taxes from 21 to nine, and invoices and receipts were simplified.

If radical changes are not feasible, reforms can be phased in. In 2005, Ghana, Israel, Mexico and Paraguay introduced gradual reforms. For example, Ghana cut its corporate income tax rate by 4.5 percentage points in 2005 and by another three points in 2006. This way the Government can defuse lobbying. But this was learned the hard way: Ghana tried to introduce a VAT in 1995, only to withdraw it two months later after public demonstrations scared reformers. It took four more years for its eventual introduction. Without major overhauls, Colombia, El Salvador, Indonesia, Jamaica and Mexico have eliminated some distortions by cutting ineffective incentive schemes and increased revenues in the process<sup>19</sup>.

### Ease filing requirements

Good reforms also go beyond reducing tax rates. Making electronic filing and payment available to businesses is a start. Businesses can enter financial information online and file it with one click – and no calculations. Errors can be identified instantly, and returns processed quickly. Singapore led the way. In the early 1990s its tax department was plagued by a mounting backlog of unprocessed tax returns and the lowest public satisfaction rating of all public services. In response, a new department – the Internal Revenue Authority of Singapore – was created. In 1998 the department

launched an e-filing system. Filing taxes is now entirely paperless (except for a verification receipt) and takes just a day – and 90% of corporate taxpayers express satisfaction with tax administration<sup>20</sup>.

Another 45 countries have made e-filing possible, and the list is growing. In Madagascar tax declarations were computerised in October 2005. If there is no change in the information submitted previously, a business can file the same declaration again with the click of a mouse. This innovation is especially important for compliance with labour taxes, where the information submitted by small businesses changes less often. As a result the time needed to comply with taxes fell by 17 days.

In 2004, Armenia and Lithuania introduced online filing. Lebanon began automating its payroll tax. Businesses in Slovakia can now email tax returns, with no signature or paper evidence. And South Africa is implementing an e-filing system. Such reforms pay off. In countries with online filing it takes less time to comply with tax regulations: 44 days compared with 58.

Simplifying paper filing is another way to make things easier. Doing so works everywhere but is especially important in poor countries, which may not have the demand or capacity to support e-filing. In many countries return and payment forms are cluttered with information requirements that are never processed. In the 1990s, the monthly Polish VAT form required 105 entries - including 37 just for identification - and 38 calculations<sup>21</sup>. At one point entrepreneurs had to get a stamped VAT certificate for every business lunch. Things have improved, but it still takes two pages for each monthly filing and three days a year to complete VAT filing requirements. In Switzerland it takes one page per quarter and one day a year to deal with VAT paperwork. Brazil still has a long way to go: six forms are needed just to pay income tax. To complete just one of those forms, taxpayers must first read 300 pages of instructions. For the VAT at least three forms are needed.

Eliminating excessive paperwork cuts the time that businesses spend complying with tax laws. To increase compliance, the UK shortened its VAT return to one page. In 2004, Pakistan did the same for its income tax return, significantly shortening the time required to file. Croatia simplified its tax forms in 2005, cutting eight pages of tax

<sup>17</sup>See, for example, Tanzi and Zee (2000)

<sup>18</sup>Moore (2005)

<sup>19</sup>World Bank (1991)

<sup>20</sup>Bird and Oldman (2000) and Tan, Pan and Lim (2005)

<sup>21</sup>Bird (2003)

returns and shortening the time required to comply with tax regulations by five days.

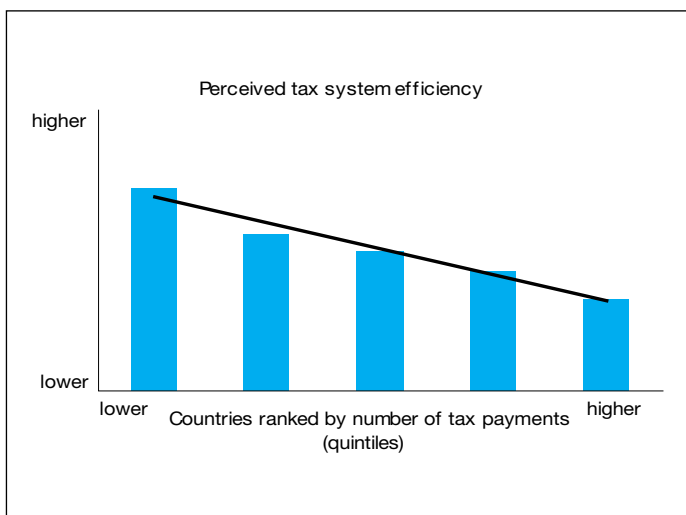
### Consolidate taxes

Consolidating taxes is also a worthwhile reform. For example, most countries have more than one labour tax, yet such taxes are typically based on gross salaries. Why not unify them? Tax offices can then distribute the revenues among government agencies. Slovakia did just that: its single social contribution tax funds health insurance, sickness insurance, old age pensions, disability insurance, unemployment benefits, injury insurance, guarantee insurance and reserve fund contributions. In many countries social security agencies would be reluctant to part with their powers – especially if there is a chance that tax offices won't give them their share of revenues. To gain their trust, an automatic separation of revenues can be introduced so that there is no room for discretion.

“Our system is characterised by a flood of taxes that overload business with administration. The primary taxes are income tax, VAT, import duty, export tax, excise duty and special excise, provincial turnover tax and property tax. There are taxes at different levels of government. There is also the social responsibility levy, debits tax, share transaction levy, economic service charge, financial transactions tax and various stamp duties. And there is a whole host of industry specific taxes. It is way too complicated.” So says Anil, an accountant in Sri Lanka.

Having more types of taxes requires more interaction between businesses and tax agencies. Businesses complain that a higher number of taxes is cumbersome (Figure 3.2). The problem is greatest in poor countries, which rely more on ‘other taxes’ rather than income tax and VAT. In Tanzania, for example, local authorities impose 50 business taxes and fees<sup>22</sup>. But the number of taxes is a burden in some rich countries too. In New York City income taxes are levied at the municipal, state and federal levels<sup>23</sup>. Each is calculated on a different tax base, so businesses must keep three sets of books. Such an approach costs governments more in collection costs as well.

Figure 3.2: More taxes and payments – more hassle



Source: Doing Business database, GCR (2005)

Note: Relationship is significant at the 1% level and remains significant when controlling for income per capita.

Reformers can look to Georgia, which in 2004 cut the number of taxes from 21 to nine. Businesses have praised the new, simpler system<sup>24</sup>. In 2001 Russia consolidated several business taxes, cutting the number of taxes from 20 to 15<sup>25</sup>. And Iran recently merged three taxes into one to ease payment. Improvements were also made in Senegal. Small businesses can now pay one tax that has a lower rate and consolidates four previous taxes. In addition, several exemptions were abolished to widen the tax base. And the company income tax rate fell from 33% to 25%.

Some taxes can be dropped altogether. Reforms should target minor excises and stamp duties - which cost money to administer but do not raise much revenue – or particularly distorting taxes. An example is a turnover tax, which is levied on a firm's inputs and again on its outputs, so tax is paid on tax. The main alternative to a turnover tax – a VAT – levies tax only on the difference between inputs and outputs (the value added), avoiding double taxation. Another alternative, a sales tax, does the same by taxing only outputs, as in the United States. Mozambique abolished its turnover tax in 1999,

<sup>22</sup>Fjeldstad and Rakner (2003)

<sup>23</sup>Not all cities in the United States have a municipal business tax. In addition, in several states the tax base is the same for federal and state income taxes

<sup>24</sup>Georgia Business Council interview

<sup>25</sup>FIAS (2004)



replacing it with a VAT. Georgia eliminated its turnover tax, which was levied on top of a VAT, as a part of its 2004 reform. In 2005, Yemen eliminated its production tax, reducing the total tax that businesses would pay from 170% to 48% of profits. Before the reforms, businesses paid a 10% turnover tax on their sales. The reforms replaced the production tax with a 5% sales tax, levied on final consumers. But another 44 countries maintain a turnover tax, including Argentina, Belarus and Tunisia. Almost all have a VAT or sales tax as well. In 2005, Uzbekistan introduced a 1% tax on turnover, which outweighed reductions in corporate and labour taxes.

Small businesses have a particularly hard time dealing with multiple tax payments. Why not help them by making their interactions with the tax agency simpler? This is what Brazil did. In 2001 it introduced the Simples system, which allows for one monthly tax payment for businesses with annual revenues below \$1.1 million. The payment covers eight taxes, including four federal and state consumption taxes, two profit taxes, one labour tax and one municipal tax. Opinion surveys have found that nearly 90% of businesses think highly of this reform – emboldening the government to plan more ambitious reforms to collect taxes electronically. These are needed – it takes larger businesses 455 days to comply with taxes, the longest in the world.

# VAT/GST: The win:win taxation systems of the future?

By Ine Lejeune, PricewaterhouseCoopers LLP

Actual trends in taxation show that there is a general and increasing shift from direct taxation to indirect taxation. More specifically governments are looking towards VAT/GST<sup>26</sup> as the major source of tax revenue for the future.

However, this shift from direct taxation to VAT/GST needs to be carefully planned to ensure that the system introduced delivers optimum levels of tax revenue with the least possible adverse impact on individuals and businesses.

With VAT/GST systems the consumers are the taxpayers whilst businesses are the 'unpaid' tax collectors of the governments. Therefore, a joint approach between governments and businesses is an essential ingredient in order to achieve a win:win VAT/GST model.

## VAT/GST's contribution to national budgets is increasing

Consumption taxes are growing as a major source of tax revenues for governments across the globe. Tax authorities worldwide are gradually migrating from direct taxation to the less visible indirect taxation, and this reduced visibility reinforces the need for reporting on the total tax contribution.

VAT/GST models have been adopted by more than 130 countries. The United States is the only OECD member country that does not have a VAT/GST. However, 45 of the US states impose a retail sales tax. A variety of consumption tax proposals have been discussed in the United States, primarily as a replacement for income taxes, but a VAT/GST model is not expected in the near future<sup>27</sup>. Hong Kong has also opened a consultation period on a tax reform proposal that includes the introduction of GST<sup>28</sup>.

<sup>26</sup>This concept includes Value Added Taxes and Goods and Services Taxes but does not cover sales taxes, customs duties or excise type taxes.

<sup>27</sup>On August 22 2006, the U.S. Congressional Research Service released a report examining the merits of value-added taxation as a new revenue source for the United States. The document can be found at <http://www.opencrs.com/document/RL33619>

<sup>28</sup>Broadening the Tax Base; Ensuring our Future Prosperity; Tax Reform and Households Consultation document can be found at [www.taxreform.gov.hk/eng/document.htm](http://www.taxreform.gov.hk/eng/document.htm)

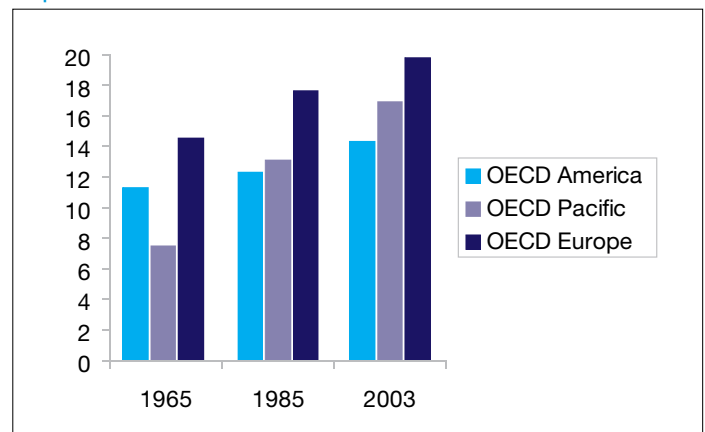
<sup>29</sup>OECD, Consumption Tax Trends, VAT/GST and excise rates, trends and administration issues, 2005 edition, Paris, 2006, p.10.

In 2004, consumption taxes (VAT, GST, Customs duties and excise) on average constituted approximately 30 per cent of total tax revenues<sup>29</sup> in the OECD countries, whilst in some individual countries these taxes constitute over 50 per cent of the total tax revenues collected by governments.

It would appear that this relatively recent growth of consumption taxes is not at an end. It is expected that governments will continue shifting the burden of tax from income tax (including labour tax) to indirect tax.

Figure 3.3: Taxes on general consumption as a percentage of total taxation

## Impact of taxation on GDP



Source: OECD

The reasons for this continued increase in consumption taxes as opposed to direct taxes can be found in the need for governments to be seen to have a tax structure which is conducive to growth and employment and which can also maintain tax revenues. Tax competition between countries to help attract business and investment has usually involved the lowering of direct taxes on income by reducing corporate income tax and other measures such as exempting capital gains, tax deductions for dividends or interest obtained amongst others. As a consequence this reduction in corporate income tax necessitates an increase in other sources of tax revenue for government budgets to be maintained. This has manifested itself in an increase in consumption taxes, so reinforcing the trend followed by governments in recent years.

Tax policy can have important economic effects through its impact on incentives to work, save and invest. In particular, high levels of labour taxes and social

contributions create disincentives to employment by increasing the costs of employing staff and generate the so-called 'tax wedge'. According to the OECD's figures, in 2005, single individuals without children earning the average wage in services and manufacturing industries faced a tax wedge of 51.8% of the cost of their labour to their employers in Germany and 50.5% in Hungary, compared with 17.3% in Korea, 18.2% in Mexico and 20.5% in New Zealand. The average 'tax wedge' for OECD countries was 37.3%<sup>30</sup>.

In light of this, some policy makers consider that a drop in income tax of 1% of GDP together with an increase in consumption taxes of 1% of GDP, would generate extra growth of 1% of GDP<sup>31</sup>.

### Regressive nature of the tax

The main criticism levelled at consumption taxes is that they are regressive in nature (which is inherently contrary to the commonly accepted principle of higher taxation for higher income earners). They also have an effect on inflation where there is an increase in consumption taxes.

There are certain measures which can help to eliminate or mitigate the regressive nature of consumption taxes.

These measures include allocating revenues obtained from consumption taxes to policies which ensure a certain level of welfare for lower income earners<sup>32</sup> and applying reduced rates to goods and services such as food and other basic necessities (like medical supplies and services) that represent the major types of expenditure of lower income earners.

In addition, in order to maintain an individual's purchasing capacity, an increase in VAT or consumption taxes will at least need to be accompanied by some reduction in personal income taxes, although the two types of taxes will not necessarily 'offset' as many lower paid workers do not pay income taxes.

On the other hand, the impact on inflation of VAT or consumption tax increases will generally be as a one-off increase. Such an increase would not necessarily give rise to a permanent increase in future inflation rates where compensating policies are applied, provided it does not feed through into second round effects on wages. This could, however, be a risk for a large increase in VAT that is widely passed on to customers. A credible monetary policy regime would, however, reduce the risk of second round effects since trade unions and employees will be aware that trying to push for higher wages could, in addition to direct negative effects on

employment, also cause the central bank to push up interest rates in response.

### Managing the compliance burden

This shift from labour and income taxes to VAT/GST may trigger new compliance costs for businesses which should not be underrated. These compliance costs include not only human and IT costs for producing VAT documentation (e.g. billing, archiving, proof of exemption when not charging VAT/GST to customers), but also the costs associated with preparing VAT accounts/VAT reports, and preparing and filing VAT returns.

Also errors regarding the application of the rules can trigger penalties, joint and several liability, interest and other costs for businesses and their directors. The latter risks and related costs vary considerably between different countries.

For businesses a pure VAT/GST should not generate any impact in their profit/loss accounts and should not result in any double taxation. The VAT/GST should not generate disproportionate compliance costs or risks which require the input of costly management time when collecting the taxes on behalf of governments<sup>33, 34</sup>.

In reality compliance costs and profit/loss account impacts have been growing jointly with the expansion of VAT/GST, as countries use VAT/GST as a tax raising measure on businesses, e.g. non-deductible VAT on expenditure such as travelling expenses.

An in-depth analysis of VAT compliance costs in companies would challenge this view of VAT as being a 'neutral tax' for businesses. These compliance costs

<sup>30</sup>Taxing Wages, special feature, OECD 2006, document can be obtained in [www.oecdbookshop.org](http://www.oecdbookshop.org).

<sup>31</sup>A European 'Pentathlon', A Community growth strategy for the European economy, Brussels 17 February 2005, as referred to in I. Lejeune, QuoVATis, Where are we going with VAT/GST globally, PricewaterhouseCoopers, 2005

<sup>32</sup>See in this respect e.g. Chapter 6, consultation paper from Hong-Kong tax Authorities, where the measures suggested include also VAT/GST household credits for certain lower-income earners

<sup>33</sup>Some recent studies have been done by the University of Manchester business School – Prof F. Chittenden on this subject where the compliance cost burden varies considerably between large and small business. Excerpts of his studies can be found at [www.mbs.ac.uk](http://www.mbs.ac.uk).

<sup>34</sup>At the EU Commission's request, PricewaterhouseCoopers performed a study making specific recommendations on the means of simplifying and modernising VAT obligations (VAT registration, submission of declarations, payments and refunds, and submission of recapitulative statements). An executive summary of the final report can be found on [ec.europa.eu/taxation\\_customs/resources/documents/final\\_report.pdf](http://ec.europa.eu/taxation_customs/resources/documents/final_report.pdf)

and the risks for economic operators acting in good faith are mainly due to the lack of global ‘common’ VAT/GST principles on the treatment of the globalisation of the trade in goods and services. In addition the growing complexity of VAT/GST often laid down in unclear or ‘outdated’ legislation, as well as the lack of guidance from the tax authorities, leads to uncertainty, thereby increasing compliance costs and risks.

### Global common VAT/GST principles

To create legal certainty, reduce compliance costs and facilitate proper risk management certain measures should be put into place such as the adoption of global common VAT/GST principles, simplifying measures, better use of technology and also clear guidance and open communication between authorities and businesses.

The more advanced VAT and GST systems around the world have, for some time, been looking at ways in which to simplify compliance. The need to simplify VAT for cross-border business in particular is also high on the EU Commission’s agenda. The EU Commission is therefore currently proposing to introduce a raft of new measures including the proposal for an optional centralised EU VAT compliance jurisdiction for taxpayers (the so-called ‘one-stop-shop’)<sup>35</sup> and a reform of the VAT rules regarding the place of taxation of services<sup>36</sup>.

The OECD has also pointed out the need for internationally accepted principles on the consumption tax treatment of cross-border services and intangibles to avoid double taxation or unintentional non-taxation<sup>37</sup>.

### Use of technology

Another way in which tax authorities are attempting to simplify compliance for business is through the better use of technology. Tax authorities across the world are simplifying compliance through the electronic filing of returns. An increasing number of taxpayers are availing themselves of such facilities, a trend which will ensure swift repayment on the investment made by tax authorities through improved administration efficiencies.

Electronic invoicing and archiving offers businesses the opportunity to reduce the cost of doing business at a tangible unit cost level.

Notwithstanding the OECD guidance<sup>38</sup> and a European VAT Directive<sup>39</sup>, the barriers to widespread adoption of administrative simplifications in the area of invoicing have not been removed entirely. To fully reap the benefits offered by digitisation and to achieve adequate returns

on investment in back-end IT systems, more effort is required to increase the confidence of the tax authorities in IT systems and to facilitate the maximum use by economic operators<sup>40</sup>.

Indeed, the digitisation of the VAT compliance of business will enhance the use of electronic auditing techniques by the tax authorities as laid down in OECD guidance<sup>41</sup>, thus reducing the cost of collecting VAT/GST.

### Communication and dialogue

Last but not least, it is in the interest of tax authorities to communicate their vision clearly to business, and to have a simple and efficient communication system for taxpayers. Some are better at doing this than others. The majority of countries have an internet site which offers guidance to taxpayers on topical issues but the quality of the content and the regularity of updates on these sites varies from country to country. On the other hand some countries struggle on this front.

As an example of good practice in this area, the Australian Tax Office has set up an internet portal for tax agents in order to communicate more efficiently with the authorities on taxpayers’ affairs. This portal allows the agent access to client activity statements and account information whilst also providing an effective tool for communicating on topical tax questions. Clearly such tools can only contribute to the efficiency of any tax system, direct or indirect<sup>42</sup>.

There is of course a responsibility here on industry and advisers to constructively express the needs of business. If the views and needs of businesses are not communicated, there is less chance of finding the win:win route to efficient and effective tax policy.

### Conclusions

Consumption taxes are going global. At just over 50 years old, VAT/GST is an adolescent tax; just as big as the more mature taxes, but with a great deal still to learn.

VAT/GST specialists from industry and practice need to take the lead collectively through dialogue with governmental tax policymakers to ensure the implementation of win:win VAT/GST taxation models as the tax matures.

Indirect tax specialists also need to be at the forefront within companies’ tax and finance departments. They should ensure that businesses understand that consumption taxes are no longer minor taxes but are

important, complex and sometimes cumbersome. The amounts at stake, and hence the risks, are high, and proactive management is essential.

A VAT/GST model should meet some generally accepted criteria in order to achieve the key results expected (see Table 3.2).

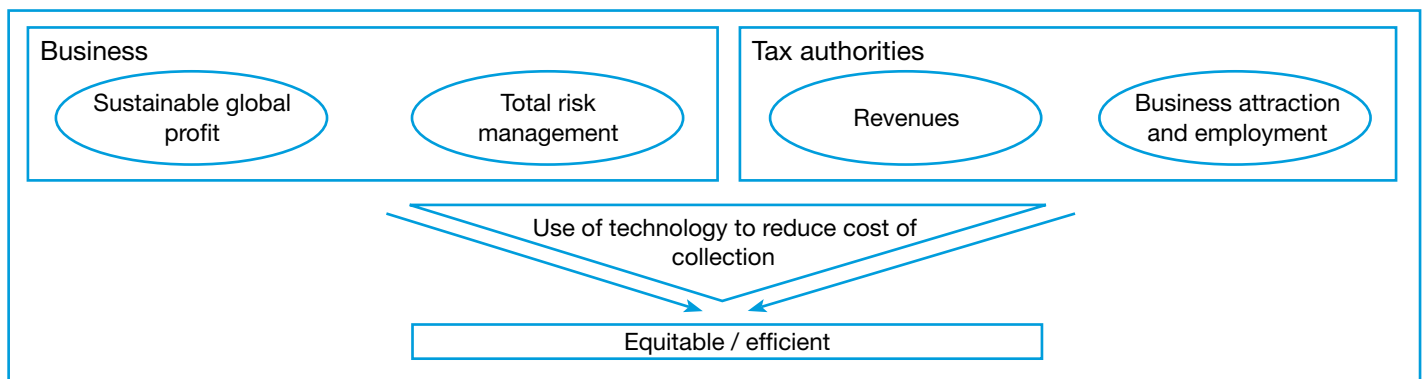
In the end, there is an opportunity for the ‘perfect’ VAT/GST to become a win:win taxation model for businesses, governments and citizens, with the ability for governments to achieve its dual goal of obtaining tax revenues and facilitating economic and employment growth and welfare without challenging the ability of companies to make profits and the imposition of unnecessary additional compliance costs. This model can be achieved by clear legislation, common global VAT/GST principles, the better use of technology and an open and continued dialogue between authorities and businesses.

Table 3.2: VAT/GST model criteria

Criterion	Key results for both the business community and the tax authorities (government)
Simplicity	Easy to implement and to apply
Efficiency	Low compliance costs – high collections
Certainty	Limited need for litigation – high voluntary compliance
Broad-based	Limited special systems and exceptions
Proportionality	Taxable amount not to exceed consideration actually paid
	Appropriate exemptions
Non-distortionary	Neutrality in competition between the states and industries

Source: Chapter 1 of OECD VAT/GST Guidelines

Figure 3.4: VAT/GST systems as ‘Win:win Taxation Models’



Source: I. Lejeune, QuoVatis, Where are we going with VAT/GST globally, PricewaterhouseCoopers, 2005

<sup>35</sup>Proposal of the EU Commission of 29 October 2004, COM(2004)728final (<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2004:0728:FIN:EN:PDF>); I. Lejeune, ‘Simplifying Value-Added Tax Obligations in the EU’, in X., Revenue Matters, A Guide to Achieving High Performance under Taxing Circumstances, Volume 1; I. Lejeune, B. MESDOM, ‘New EU Proposal Aims to Simplify VAT Obligations’ in Tax Planning International Indirect Taxes, Volume 2, number 12, December 2004.

<sup>36</sup>Proposal of the EU Commission of 20 July 2005, COM(2005)334 amending Directive 77/388/EEC as regards the place of supply of services ([http://eur-lex.europa.eu/LexUriServ/site/en/com/2005/com2005\\_0334en01.pdf](http://eur-lex.europa.eu/LexUriServ/site/en/com/2005/com2005_0334en01.pdf)).

<sup>37</sup>The application of Consumption Taxes to the Trade in International Services and Intangibles, OECD 14 July, 2004 and OECD, Consumption Tax Trends, VAT/GST and excise rates, trends and administration issues, 2006 edition, Paris, 2006.

<sup>38</sup>OECD Tax Guidance Series: Record Keeping, 5 May 2004 and OECD Tax Guidance Series: Transaction information, 5 May 2004.

<sup>39</sup>EU Council Directive 2001/115/EC amending Directive 77/388/EEC

with a view to simplifying, modernising and harmonising the conditions laid down for invoicing in respect of Value-Added Tax (required for implementation in Member States’ national law since 1 January 2004 and 1 May 2004 for the at that time joining Member States: Cyprus, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Czech Republic, Slovakia and Slovenia. As of 1 January 2007 the Directive also needs to be implemented in the new joining Member States Romania and Bulgaria. ).

<sup>40</sup>M.Joostens, I. Lejeune, P. Breyne, D. Evrard . Global (E-)Invoicing & (E-) Archiving, Increasing Efficiency en Reducing Costs Including VAT/ GST rules in 41 countries worldwide. PricewaterhouseCoopers, 2006.

<sup>41</sup>OECD Guidance for the Standard Audit File-Tax, May 2005 and OECD Guidance on Tax Compliance for Business and Accounting Software, May 2005. Documents can be found at [www.oecd.org/dataoecd/51/33/34422641.pdf](http://www.oecd.org/dataoecd/51/33/34422641.pdf) and [www.oecd.org/dataoecd/13/45/34910263.pdf](http://www.oecd.org/dataoecd/13/45/34910263.pdf) respectively;

<sup>42</sup>I. Lejeune, QuoVatis, Where are we going with VAT/GST globally, PricewaterhouseCoopers, 2005. Australian Tax Portal is on <https://tap.ato.gov.au/>

# Section 4: The way forward

## Understanding the total tax contribution

Key actions for governments and tax authorities:

- Consider the need for tax reform through a thorough assessment of the total tax contribution, which takes into account all taxes borne and collected by businesses as well as the cost of tax compliance.
- Increase their accountability and communicate clearly with businesses and taxpayers as to how taxes are spent.
- Consider clear tax education campaigns to explain the taxes, how to pay them, and the benefits to all stakeholders.
- Consider how simplification of tax legislation, the easing of the compliance burden, and the consolidation of taxes might generate benefits for both governments and businesses.
- Most importantly, consult with businesses when developing ideas for tax changes.

Key actions for businesses:

- Gather information on the total tax contribution including all taxes borne and collected, as well as the cost of tax compliance. PricewaterhouseCoopers LLP has developed a methodology and framework which can help with this (see Appendix 1).
- Ensure that information around the total tax contribution is made accessible to governments and tax authorities to help inform their decisions over reform.
- Communicate the total tax contribution to the wider stakeholder group (including employees, investors, the media and society at large) to demonstrate the extent to which they are supporting public finances through taxes.
- Engage in regular dialogue with governments and tax authorities over the need for reform and specific areas of concern.

### Informing the debate and evolving the model

Appreciation of the Total Tax concept is gaining momentum and it is becoming more widely accepted as a robust measure of taxes contributed by companies to national treasuries. Work undertaken by PricewaterhouseCoopers LLP in the UK with the Hundred Group (membership comprises the FTSE 100 companies)

has been positively received by all external stakeholders, and it can be expected that projects with similar groups of companies will be undertaken in other countries around the world.

The World Bank Doing Business in 2007 survey and the amendments made to align the Total Tax Rate calculation with the PricewaterhouseCoopers LLP Total Tax Contribution framework methodology represents a good way forward. It generates some useful tax indicators, which enable countries to see how their tax regimes, for a standard modest-sized company, compare in 175 countries around the world. However, the development of a model to make such comparisons is a dynamic process with a constant need for improvement. It is expected that further adjustment will be necessary as the analysis continues. There is also potential to extend the assumptions made in the model to include more taxes. For example, with the ongoing debate on climate change, environmental taxes are ripe for inclusion in some way.

The measures undertaken to estimate the time to comply with administrative requirements of tax systems are recognised as being somewhat subjective. It is intended that measures of administration and compliance will be further developed to be more representative of the effort that is required to comply with the tax legislation in force. Additional questions on tax administration and the process of tax collection will be included in future rounds of the survey.

Additional issues may also be worthy of consideration around the wider implications for society of taxes paid by business. Corporate responsibility has been around as an issue for some time in relation to the environment and other ethical issues, but tax is increasingly important in this arena and the reporting of total tax will be an important step forward.

The issues discussed will be further addressed as survey data is updated and evolves in subsequent years. In the meantime, the data now available is useful in informing the debate around business taxation globally. Knowledge of the Total Tax Contribution, the Total Tax Rate and the costs of administration and compliance are key components in facilitating constructive dialogue with governments and other stakeholders and to ensure that there is better information available for tax management internally, and for governments to take decisions on the basis of the full tax picture of taxes in their countries.

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# Appendix 1

## PwC Total Tax Contribution framework

The fact that there is usually little or no information on the business taxes which appear ‘above the line’ in the financial accounts disclosure prompted PricewaterhouseCoopers LLP to design its Total Tax Contribution (TTC) framework ([www.pwc.com/uk/ttc](http://www.pwc.com/uk/ttc)). The intention was to establish a methodology which would enable companies to collect and report total tax information in a consistent manner, meeting the needs of their various stakeholders and improving transparency. These stakeholders include governments, and the total tax information generated by the framework is proving to be something that governments want to hear about. It is data that they currently do not have easy access to, and it is data that can potentially help them by informing the process for determining appropriate future fiscal policy. It is also considered to be something which is helpful in facilitating a constructive dialogue between government and industry. So to list the drivers for Total Tax:

- It is essential to provide a broad and consistent framework which can be used to calculate the total tax contribution anywhere in the world. This facilitates a true and robust comparison of the tax system in various countries.
- There is a need for more transparency so that all relevant stakeholders, governments, employees, shareholders and investors, the media, and society at large can see the contribution companies are making to their local economies and help them to communicate their positive economic impact.
- Better information on all of the business taxes being paid, not just corporate income taxes, will help companies improve tax risk management and controls, and for governments to make better informed policy decisions.
- To promote corporate transparency and disclosure in all states and territories. It complements and is consistent with the guidelines set by the Global Reporting Initiative and the Extractive Industries Transparency Initiative, helping to achieve the same goals of dealing with poor governance, corruption and poverty.
- To establish a good link between tax policy formulation, the management of taxes by industry and corporate responsibility.
- Appreciation of the TTC encourages a more balanced view of tax contributions. As mentioned, the information most readily available in the public domain

are disclosures made in company annual accounts with a focus on corporate income tax and the statutory rates paid for this tax.

- As regimes are changed and reformed, a standard approach to the measurement of total taxes will enable a more thorough understanding of the issues through trend analysis rather than just relying on a snapshot of data at a particular point in time, particularly for multinational companies.
- Total tax provides an ability to engage and respond to the needs of all of the various key stakeholders.
- Generation of a total tax analysis gives the potential for reputation benefits for countries and companies alike.

### What are the Total Tax principles?

The challenge has been to develop a standard, acceptable methodology for reporting such information, in order to ensure that a useful calculation for comparisons and benchmarking in a global context can be made. The Paying Taxes survey, that is now published in The World Bank’s Doing Business in 2007 report, is updated so that it is aligned with the principles set out in the PricewaterhouseCoopers LLP framework with regard to the calculation of the Total Tax Rate.

### What is Total Tax Contribution?

In its most comprehensive form, the PricewaterhouseCoopers LLP TTC framework defines five areas which are required to establish a complete appreciation of a company’s overall economic contribution. These are:

- Business taxes borne.
- Business taxes collected.
- Tax compliance costs.
- Other payments to and from government.
- Indirect economic impacts.

There is an interesting question here as to whether this reporting should be for a company or group of companies as a whole, or by each country in which the company operates. Ideally the analysis is by country, to demonstrate the contributions made to each government – after all, there is no overall global government or tax authority.

It is also important here to emphasise that the framework is not an economic model. From an



From an economics perspective it can be argued that companies bear no tax and that all tax is passed through to the ultimate consumer. But companies are essential to the process of tax collection and to the economies of all countries around the world. The TTC framework enables that economic impact to be measured on a consistent basis.

Of the five components, business taxes borne and collected have been where industry has focused most of its attention so far. In this respect it is important to note that for the purpose of calculating the Total Tax Rate (TTR) for a company (which is used by the World Bank in its report), it is only taxes borne which are used. Combining corporate income tax with other relevant business taxes is a significant step in the right direction. The TTR/TTC can be considered as a better measure of the economic contribution made in taxes to public finances than merely focusing on the corporate tax, which is often all that is disclosed in the annual accounts.

#### Total Tax Contribution (TTC) and Total Tax Rate (TTR)

As already mentioned, there are many other business taxes to be considered in addition to corporate income taxes, and there are several key issues to address in deciding how reasonably to calculate a TTC.

- What is a tax?

Something that is paid to government (by businesses or individuals) to fund government expenditure, so excluding payments where there is a specific return of value (e.g. rents and licence fees).

- The need to distinguish between taxes borne and taxes collected.

What is the ultimate incidence of the taxes which a company pays? Are they borne by the company or are they passed on and borne by customers or employees? To determine whether a tax is borne or merely collected we need to distinguish between the taxes that affect the business, in two ways:

- Taxes borne, i.e. those that impact the profit and loss (for example, corporate profits tax and employer's social security contributions).
- Taxes collected and paid over, i.e. those which do not impact on the profit and loss (for example, withholdings from employees' pay).

VAT/GST is clearly a tax collected, unless any of it is irrecoverable, in which case that component would be a tax borne. A sales tax, i.e. one that is charged only at point of sale to the consumer, is also only a tax collected. So neither of these taxes – apart from the irrecoverable VAT/GST – impact on profits. Therefore they would not be included in the calculation of the TTR percentage.

Excise duties on petrol which are used to power a company's vehicles are considered to be borne by a company, as even if the company adjusts its prices to make sure it recovers the cost, it is a cost borne by the company and is one which appears as a cost in the profit and loss account. Turnover taxes, and cascade-style sales taxes which add extra tax at each stage of the commercial process seem also to be taxes borne for the same reasons, but further consideration of these needs to be undertaken to ensure variations on this theme are fully understood.

- What is the point of reference for the rate calculation?

In calculating corporate income tax rates, the statistic generated is usually calculated by comparing corporate tax with the profits before deducting corporate tax. Similarly for the TTR, it is calculated to reflect the fact that it is a percentage of profit before all business taxes. To accord with this principle, the numerator in this calculation includes all of the business taxes borne, and the denominator is the profit before all of these business taxes.

# Appendix 2

## Data notes and tables

The data reported in the following tables record the tax that a standard modest-sized company must pay or withhold in a given year, as well as measures of the administrative burden in paying taxes. Taxes are measured at all levels of government and include the profit or corporate income tax, social security contributions and labour taxes paid by the employer, property taxes, property transfer taxes, the dividend tax, the capital gains tax, the financial transactions tax, waste collection taxes and vehicle and road taxes.

To measure the tax paid by a standardised business and the complexity of a country's tax law, a case study is prepared with a set of financial statements and assumptions about transactions made over the year. Tax advisers from PricewaterhouseCoopers LLP in each country compute the taxes owed in their jurisdiction based on the standardised case facts. Information on the frequency of filing, audits and other costs of compliance is also compiled.

To make the data comparable across countries, several assumptions about the business and the taxes are used.

### 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 country, the limited liability form most popular among domestic firms is chosen. Incorporation lawyers or the statistical office report the most popular form.
- Started operations on January 1, 2004. At that time the company purchased all the assets shown in its balance sheet and hired all its workers.
- Operates in the country's most populous city.
- Is 100% domestically owned and has five owners, all of whom are natural persons.
- Has a start-up capital of 102 times income per capita at the end of 2004.
- 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, alcohol or tobacco.
- Owns two plots of land, one building, machinery, office equipment, computers and one truck and leases another truck.
- Does not qualify for investment incentives or any special benefits apart from those related to the age or size of the company.

- Has 60 employees - four managers, eight assistants and 48 workers. All are nationals, and one of the managers is also an owner.
- Has a turnover of 1,050 times income per capita.
- Makes a loss in the first year of operation.
- Has the same gross margin (pre-tax) across all economies.
- Distributes 50% of its profits as dividends to the owners at the end of the second year.
- Sells one of its plots of land at a profit during the second year.
- Is subject to a series of detailed assumptions on expenses and transactions to further standardise the case.

### Assumptions about the taxes

- All the taxes paid or withheld in the second year of operation are recorded. A tax is considered distinct if it has a different name or is collected by a different agency. Taxes with the same name and agency, but charged at different rates depending on the business, are counted as the same tax.
- The number of times the company pays or withholds taxes in a year is the number of different taxes 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 paid, the method of payment, the frequency of payment and the number of agencies involved for this standardised case during the second year of operation. It includes payments made by the company on consumption taxes, such as sales tax or value added tax. These taxes are traditionally withheld on behalf of the consumer. The number of payments takes into account electronic filing. Where full electronic filing is allowed, the tax is counted as paid once a year even if the payment is more frequent.

### 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: the 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 must be made for tax purposes – the time associated with these processes is included. Filing time includes the time to complete all necessary tax forms and make all necessary calculations. Payment time is the hours needed to make the payment online or at the tax office. When taxes are paid in person, the time includes delays while waiting.

### Total tax rate

The total tax rate measures the amount of taxes payable by the business in the second year of operation, expressed as a share of commercial profits. The indicators in this publication report tax rates for fiscal year 2005. The total amount of taxes is the sum of all the different taxes payable after accounting for deductions and exemptions. The taxes withheld (such as sales tax or value added tax) but not paid by the company are excluded. The taxes included can be divided into five categories: profit or corporate income tax, social security contributions and other Labour taxes paid by the employer, property taxes, turnover taxes and other small

taxes (such as municipal fees and vehicle and fuel taxes). Commercial profits are defined as sales minus cost of goods sold, minus gross salaries, minus administrative expenses, minus other deductible expenses, minus deductible 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.

The methodology is consistent with the Total Tax Contribution framework applied by PricewaterhouseCoopers LLP.

The methodology was developed in cooperation with PricewaterhouseCoopers LLP and in 'Tax Burdens around the World,' an ongoing research project by Simeon Djankov, Caralee McLiesh, Rita Ramalho and Andrei Shleifer.

# 35 Tax Payments (number per year)

Tax Payments (number per year)				
Economy	Total tax payments	Corporate income tax payments	Labour tax payments	Other tax payments
Afghanistan	2	1	0	1
Albania	42	13	12	17
Algeria	61	4	25	32
Angola	42	4	12	26
Antigua and Barbuda	44	13	24	7
Argentina	34	1	1	32
Armenia	50	13	12	25
Australia	11	1	3	7
Austria	20	1	4	15
Azerbaijan	36	4	12	20
Bangladesh	17	2	0	15
Belarus	125	24	36	65
Belgium	10	1	2	7
Belize	40	12	12	16
Benin	72	5	24	43
Bhutan	19	2	12	5
Bolivia	41	13	12	16
Bosnia and Herzegovina	73	12	36	25
Botswana	24	11	0	13
Brazil	23	2	2	19
Bulgaria	27	4	12	11

Tax Payments (number per year)				
Economy	Total tax payments	Corporate income tax payments	Labour tax payments	Other tax payments
Burkina Faso	45	4	16	25
Burundi	40	1	24	15
Cambodia	27	12	0	15
Cameroon	39	13	12	14
Canada	10	2	3	5
Cape Verde	49	4	13	32
Central African Republic	54	4	24	26
Chad	65	12	36	17
Chile	10	1	1	8
China	44	2	12	30
Colombia	68	2	48	18
Comoros	20	2	0	18
Congo, Dem. Rep.	34	3	16	15
Congo, Rep.	94	5	37	52
Costa Rica	41	4	12	25
Côte d'Ivoire	71	3	24	44
Croatia	39	1	24	14
Czech Republic	14	1	4	9
Denmark	18	1	2	15
Djibouti	36	6	12	18
Dominica	30	1	12	17

Tax Payments (number per year)				
Economy	Total tax payments	Corporate income tax payments	Labour tax payments	Other tax payments
Dominican Republic	87	12	48	27
Ecuador	8	2	1	5
Egypt	41	1	12	28
El Salvador	66	13	36	17
Equatorial Guinea	48	2	25	21
Eritrea	18	2	0	16
Estonia	11	1	1	9
Ethiopia	20	2	0	18
Fiji	34	5	14	15
Finland	19	13	2	4
France	33	1	24	8
Gabon	27	2	12	13
Gambia	47	4	25	18
Georgia	35	4	12	19
Germany	32	15	3	14
Ghana	35	9	12	14
Greece	33	1	12	20
Grenada	30	1	12	17
Guatemala	50	5	12	33
Guinea	55	2	36	17
Guinea-Bissau	47	5	12	30

Tax Payments (number per year)				
Economy	Total tax payments	Corporate income tax payments	Labour tax payments	Other tax payments
Guyana	45	2	12	31
Haiti	53	2	36	15
Honduras	48	5	13	30
Hong Kong, China	4	1	1	2
Hungary	24	1	8	15
Iceland	18	1	1	16
India	59	4	24	31
Indonesia	52	2	24	26
Iran	28	1	12	15
Iraq	13	1	12	0
Ireland	8	1	1	6
Israel	33	2	12	19
Italy	15	2	1	12
Jamaica	72	4	48	20
Japan	15	3	2	10
Jordan	26	2	12	12
Kazakhstan	34	12	4	18
Kenya	17	1	3	13
Kiribati	16	4	12	0
Korea	27	1	15	11
Kuwait	14	2	12	0

# 37 Tax Payments (number per year)

Tax Payments (number per year)				
Economy	Total tax payments	Corporate income tax payments	Labour tax payments	Other tax payments
Kyrgyz Republic	89	12	30	47
Lao PDR	31	4	12	15
Latvia	8	1	2	5
Lebanon	33	2	12	19
Lesotho	21	5	0	16
Lithuania	13	1	2	10
Macedonia, FYR	54	12	24	18
Madagascar	25	2	8	15
Malawi	29	2	12	15
Malaysia	35	2	24	9
Maldives	1	0	0	1
Mali	60	3	36	21
Marshall Islands	20	0	16	4
Mauritania	61	3	24	34
Mauritius	7	1	1	5
Mexico	49	12	18	19
Micronesia	9	0	4	5
Moldova	44	4	28	12
Mongolia	42	13	12	17
Montenegro	75	12	48	15
Morocco	28	1	12	15
Mozambique	36	7	12	17
Namibia	34	2	12	20
Nepal	35	6	12	17

Tax Payments (number per year)				
Economy	Total tax payments	Corporate income tax payments	Labour tax payments	Other tax payments
Netherlands	22	1	12	9
New Zealand	9	1	2	6
Nicaragua	64	14	24	26
Niger	44	3	13	28
Nigeria	35	3	14	18
Norway	3	1	1	1
Oman	14	1	12	1
Pakistan	47	5	25	17
Palau	18	0	12	6
Panama	59	1	24	34
Papua New Guinea	44	1	13	30
Paraguay	33	5	12	16
Peru	53	12	24	17
Philippines	59	1	36	22
Poland	43	12	3	28
Portugal	7	2	1	4
Puerto Rico	17	1	12	4
Romania	89	4	60	25
Russia	23	1	14	8
Rwanda	43	2	24	17
Samoa	36	5	24	7
São Tomé and Príncipe	42	1	12	29
Saudi Arabia	14	1	12	1
Senegal	59	3	36	20

Tax Payments (number per year)				
Economy	Total tax payments	Corporate income tax payments	Labour tax payments	Other tax payments
Serbia	41	12	12	17
Seychelles	15	1	12	2
Sierra Leone	20	5	12	3
Singapore	16	1	12	3
Slovak Republic	30	1	12	17
Slovenia	34	1	24	9
Solomon Islands	33	5	12	16
South Africa	23	2	4	17
Spain	7	1	1	5
Sri Lanka	61	5	24	32
St. Kitts and Nevis	23	4	12	7
St. Lucia	16	1	12	3
St. Vincent and the Grenadines	21	4	12	5
Sudan	66	2	36	28
Suriname	17	4	0	13
Swaziland	34	2	13	19
Sweden	5	1	2	2
Switzerland	13	2	4	7
Syria	21	2	12	7
Taiwan, China	15	2	2	11
Tajikistan	55	12	12	31
Tanzania	48	5	24	19
Thailand	46	3	13	30

Tax Payments (number per year)				
Economy	Total tax payments	Corporate income tax payments	Labour tax payments	Other tax payments
Timor-Leste	15	1	0	14
Togo	51	4	24	23
Tonga	22	1	0	21
Trinidad and Tobago	28	4	12	12
Tunisia	45	1	6	38
Turkey	18	2	2	14
Uganda	31	3	12	16
Ukraine	98	5	60	33
United Arab Emirates	15	0	12	3
United Kingdom	7	1	1	5
United States	10	2	3	5
Uruguay	41	1	12	28
Uzbekistan	130	24	12	94
Vanuatu	32	0	12	20
Venezuela	68	1	40	27
Vietnam	32	6	12	14
West Bank and Gaza	50	1	36	13
Yemen	32	1	12	19
Zambia	36	4	13	19
Zimbabwe	59	4	26	29

Time to comply (hours per year)				
Economy	Total	Corporate income tax	Labour tax	Consumption tax
Afghanistan	275	155	120	0
Albania	240	120	96	24
Algeria	504	120	192	192
Angola	272	80	96	96
Antigua and Barbuda	528	48	480	0
Argentina	615	135	240	240
Armenia	1,120	160	480	480
Australia	107	35	18	54
Austria	272	80	96	96
Azerbaijan	1,000	250	150	600
Bangladesh	400	160	0	240
Belarus	1,188	960	180	48
Belgium	160	24	40	96
Belize	108	36	36	36
Benin	270	30	120	120
Bhutan	274	250	24	0
Bolivia	1,080	120	480	480
Bosnia and Herzegovina	100	25	40	35
Botswana	140	40	40	60
Brazil	2,600	736	491	1,374
Bulgaria	616	40	288	288
Burkina Faso	270	30	120	120
Burundi	140	80	48	12

Time to comply (hours per year)				
Economy	Total	Corporate income tax	Labour tax	Consumption tax
Cambodia	121	25	36	60
Cameroon	1,300	500	600	200
Canada	119	47	36	36
Cape Verde	100	16	36	48
Central African Republic	504	24	240	240
Chad	122	50	36	36
Chile	432	48	192	192
China	872	200	288	384
Colombia	456	104	200	152
Comoros	100	4	48	48
Congo, Dem. Rep.	312	120	96	96
Congo, Rep.	576	288	96	192
Costa Rica	402	18	192	192
Côte d'Ivoire	270	30	120	120
Croatia	196	60	96	40
Czech Republic	930	150	420	360
Denmark	135	25	70	40
Djibouti	114	30	36	48
Dominica	65	5	36	24
Dominican Republic	178	20	86	72
Ecuador	600	60	300	240
Egypt	536	56	192	288
El Salvador	224	32	96	96



Time to comply (hours per year)				
Economy	Total	Corporate income tax	Labour tax	Consumption tax
Equatorial Guinea	212	80	96	36
Eritrea	216	24	96	96
Estonia	104	20	36	48
Ethiopia	212	164	24	24
Fiji	145	25	60	60
Finland	264	16	200	48
France	128	24	80	24
Gabon	272	80	96	96
Gambia	376	40	96	240
Georgia	423	144	67	212
Germany	105	30	35	40
Ghana	304	16	96	192
Greece	204	12	48	144
Grenada	140	8	96	36
Guatemala	294	44	144	106
Guinea	416	32	192	192
Guinea-Bissau	208	160	24	24
Guyana	288	48	48	192
Haiti	160	40	72	48
Honduras	424	40	192	192
Hong Kong, China	80	50	30	0
Hungary	304	16	192	96
Iceland	140	40	60	40

Time to comply (hours per year)				
Economy	Total	Corporate income tax	Labour tax	Consumption tax
India	264	40	96	128
Indonesia	576	176	200	200
Iran	292	16	240	36
Iraq	312	24	288	0
Ireland	76	10	36	30
Israel	225	105	60	60
Italy	360	24	320	16
Jamaica	414	30	336	48
Japan	350	175	140	35
Jordan	101	5	60	36
Kazakhstan	156	60	64	32
Kenya	432	60	72	300
Kiribati	120	24	96	0
Korea	290	120	120	50
Kuwait	118	70	48	0
Kyrgyz Republic	204	60	72	72
Lao PDR	180	36	72	72
Latvia	320	32	192	96
Lebanon	208	80	64	64
Lesotho	352	16	144	192
Lithuania	162	28	76	58
Macedonia, FYR	96	30	36	30
Madagascar	304	16	96	192

# 41 Time to comply (hours per year)

Time to comply (hours per year)				
Economy	Total	Corporate income tax	Labour tax	Consumption tax
Malawi	878	350	240	288
Malaysia	190	50	116	24
Maldives	0	0	0	0
Mali	270	30	120	120
Marshall Islands	128	32	96	0
Mauritania	696	120	96	480
Mauritius	158	10	100	48
Mexico	552	264	96	192
Micronesia	128	32	96	0
Moldova	250	100	100	50
Mongolia	204	60	72	72
Montenegro	208	16	96	96
Morocco	468	70	48	350
Mozambique	230	50	60	120
Namibia	.	.	.	.
Nepal	408	120	96	192
Netherlands	250	40	150	60
New Zealand	70	25	30	15
Nicaragua	240	80	80	80
Niger	270	30	120	120
Nigeria	1,120	480	480	160
Norway	87	24	15	48
Oman	52	40	12	0

Time to comply (hours per year)				
Economy	Total	Corporate income tax	Labour tax	Consumption tax
Pakistan	560	40	40	480
Palau	128	32	96	0
Panama	560	80	192	288
Papua New Guinea	198	150	6	42
Paraguay	328	40	144	144
Peru	424	40	192	192
Philippines	94	16	14	64
Poland	175	50	100	25
Portugal	328	40	192	96
Puerto Rico	140	80	60	0
Romania	198	42	96	60
Russia	256	64	96	96
Rwanda	168	24	48	96
Samoa	224	80	96	48
São Tomé and Príncipe	424	40	192	192
Saudi Arabia	75	15	60	0
Senegal	696	120	96	480
Serbia	168	48	60	60
Seychelles	76	40	36	0
Sierra Leone	399	15	192	192
Singapore	30	10	10	10
Slovak Republic	344	80	120	144
Slovenia	272	80	96	96

Time to comply (hours per year)				
Economy	Total	Corporate income tax	Labour tax	Consumption tax
Solomon Islands	80	8	30	42
South Africa	350	150	150	50
Spain	602	26	288	288
Sri Lanka	256	16	96	144
St. Kitts and Nevis	368	48	320	0
St. Lucia	41	5	36	0
St. Vincent and the Grenadines	208	16	192	0
Sudan	180	70	70	40
Suriname	199	127	24	48
Swaziland	104	8	48	48
Sweden	122	50	36	36
Switzerland	68	20	40	8
Syria	336	300	36	0
Taiwan, China	1,104	240	480	384
Tajikistan	224	80	48	96
Tanzania	248	56	96	96
Thailand	104	32	36	36
Timor-Leste	640	480	160	0
Togo	270	30	120	120
Tonga	164	8	12	144
Trinidad and Tobago	114	30	60	24
Tunisia	268	136	36	96

Time to comply (hours per year)				
Economy	Total	Corporate income tax	Labour tax	Consumption tax
Turkey	254	50	84	120
Uganda	237	45	96	96
Ukraine	2,185	425	800	960
United Arab Emirates	12	0	12	0
United Kingdom	105	35	45	25
United States	325	200	100	25
Uruguay	300	100	100	100
Uzbekistan	152	32	48	72
Vanuatu	120	0	24	96
Venezuela	864	120	360	384
Vietnam	1,050	350	400	300
West Bank and Gaza	154	10	96	48
Yemen	248	56	72	120
Zambia	132	48	24	60
Zimbabwe	216	50	96	70

For the countries with no corporate income tax we used the major business tax for obtaining a time estimate

For the countries with no Labour taxes paid by employer only the personal income tax was included in the time measure

# 43 Tax rate (% of commercial profits)

Tax rate (% of commercial profits)					
Economy	Total tax rate	Corporate income tax	Labour tax	Other taxes	Statutory corporate income tax rate
Afghanistan	36.3%	0.0%	0.0%	36.3%	20%
Albania	55.8%	16.1%	35.6%	4.0%	23%
Algeria	76.4%	9.9%	29.6%	36.9%	30%
Angola	64.4%	19.2%	9.3%	35.8%	35%
Antigua and Barbuda	48.5%	31.1%	9.8%	7.6%	30%
Argentina	116.8%	10.7%	30.2%	75.9%	35%
Armenia	42.5%	18.7%	22.6%	1.2%	20%
Australia	52.2%	27.1%	23.5%	1.6%	30%
Austria	56.1%	16.2%	36.3%	3.5%	25%
Azerbaijan	44.9%	16.9%	25.5%	2.4%	24%
Bangladesh	40.3%	29.2%	0.0%	11.1%	37.5%
Belarus	186.1%	4.2%	45.3%	136.5%	24% on profits before taxes (corporate income tax) + 4% on profits after taxes (transport duty)
Belgium	70.1%	11.7%	57.3%	1.1%	34%
Belize	31.7%	22.0%	6.8%	3.0%	25% on profits or 1.75% on turnover (whichever is higher)
Benin	68.5%	19.7%	33.6%	15.3%	38%
Bhutan	43.0%	35.5%	1.3%	6.3%	30%
Bolivia	80.3%	62.7%	15.9%	1.7%	25% on profits or 3% on turnover (whichever is higher)
Bosnia and Herzegovina	50.4%	26.2%	17.7%	6.5%	30%
Botswana	53.3%	10.9%	0.0%	42.4%	5% (corporate income tax) +10% (ACT)
Brazil	71.7%	22.4%	42.1%	7.2%	15%+10% (surcharge applies on annual taxable income exceeding R\$ 240 thousand) +9% (CSLL)
Bulgaria	40.7%	7.4%	31.4%	1.9%	15%
Burkina Faso	51.1%	19.8%	23.2%	8.2%	35%
Burundi	286.7%	18.2%	8.0%	260.5%	35%
Cambodia	22.3%	19.6%	0.0%	2.7%	20% on profits or 1% on turnover (whichever is higher)
Cameroon	46.2%	22.1%	18.8%	5.3%	38.5% on profits or 1.1% on turnover (whichever is higher)
Canada	43.0%	20.3%	12.9%	9.8%	13.12% on 1st \$250k, 22.12% on remaining income +14% (provincial tax)

Tax rate (% of commercial profits)					
Economy	Total tax rate	Corporate income tax	Labour tax	Other taxes	Statutory corporate income tax rate
Cape Verde	54.4%	22.8%	17.7%	13.9%	30.6% on profits before tax + 2% on profit tax
Central African Republic	209.5%	181.7%	8.3%	19.4%	30% on profits or 10% on turnover (whichever is higher)
Chad	68.2%	32.2%	24.6%	11.5%	40% on profits or 1.5% on turnover (whichever is higher)
Chile	26.3%	18.4%	3.9%	4.0%	17%
China	77.1%	17.7%	51.0%	8.3%	33%
Colombia	82.8%	25.2%	31.7%	25.9%	38.5%
Comoros	47.5%	22.8%	0.0%	24.8%	30% (different rates depending on income)
Congo, Dem. Rep.	235.4%	0.0%	7.0%	228.4%	40%
Congo, Rep.	57.3%	22.8%	34.1%	0.5%	38%
Costa Rica	83.0%	10.0%	30.1%	42.8%	30%
Côte d'Ivoire	45.7%	13.6%	20.6%	11.4%	35% on profits or 5% on turnover (whichever is higher)
Croatia	37.1%	15.4%	20.3%	1.3%	20%
Czech Republic	49.0%	0.0%	40.6%	8.4%	26%
Denmark	31.5%	27.4%	2.2%	2.0%	28%
Djibouti	41.7%	18.7%	18.2%	4.8%	25% on profits or 1% on turnover (whichever is higher)
Dominica	34.8%	26.4%	8.1%	0.3%	30%
Dominican Republic	67.9%	48.0%	16.4%	3.5%	25%
Ecuador	34.9%	19.3%	14.1%	1.6%	25%
Egypt	50.4%	12.9%	28.9%	8.6%	20%
El Salvador	27.4%	15.0%	11.6%	0.9%	25%
Equatorial Guinea	62.4%	17.5%	26.1%	18.8%	35%
Eritrea	86.3%	7.8%	0.0%	78.5%	30% (corporate income tax) + 4% (municipal tax)
Estonia	50.2%	9.6%	39.7%	0.9%	24/76 on distributed dividends
Ethiopia	32.8%	27.2%	0.0%	5.6%	15%
Fiji	40.1%	29.4%	10.4%	0.3%	31%
Finland	47.9%	17.1%	29.6%	1.2%	26%
France	68.2%	8.6%	54.9%	4.7%	34.9%

# 45 Tax rate (% of commercial profits)

Tax rate (% of commercial profits)					
Economy	Total tax rate	Corporate income tax	Labour tax	Other taxes	Statutory corporate income tax rate
Gabon	48.3%	25.0%	23.3%	0.0%	35%
Gambia	291.4%	36.3%	13.3%	241.7%	35% on profits or 2% on turnover (whichever is higher)
Georgia	37.8%	12.4%	23.2%	2.2%	20%
Germany	57.1%	24.7%	22.3%	10.1%	25% (corporate income tax) + 14% to 20% (trade tax) both on profit before tax + 5.5% on corporate income tax
Ghana	32.3%	17.5%	14.5%	0.3%	28% (corporate income tax) + 1.5% (national reconstruction levy)
Greece	60.2%	21.4%	36.2%	2.6%	32%
Grenada	42.8%	24.6%	5.8%	12.4%	30%
Guatemala	40.9%	2.7%	14.7%	23.4%	31% on profits or 5% on turnover (whichever is lower)
Guinea	49.4%	22.7%	16.7%	10.1%	35% (corporate income tax) + 3% (minimum forfaitaire tax)
Guinea-Bissau	47.5%	15.5%	25.5%	6.5%	25%
Guyana	44.2%	26.0%	9.0%	9.1%	35%
Haiti	40.5%	23.5%	12.8%	4.3%	30%
Honduras	51.4%	17.7%	11.0%	22.7%	25% + 5% (solidarity tax)
Hong Kong, China	28.8%	23.0%	5.4%	0.4%	17.5%
Hungary	59.3%	7.8%	42.9%	8.6%	16%
Iceland	27.9%	8.5%	13.7%	5.6%	18%
India	81.1%	14.3%	19.4%	47.4%	33.7%
Indonesia	37.2%	25.2%	11.3%	0.6%	10-30%
Iran	46.4%	16.7%	26.7%	3.1%	25%
Iraq	38.7%	9.4%	29.2%	0.0%	15%
Ireland	25.8%	12.4%	12.5%	0.9%	12.5%
Israel	39.1%	30.8%	6.9%	1.4%	34%
Italy	76.0%	26.9%	48.2%	1.0%	33% on profits before tax + 4.25% on profits before tax plus wages and interest
Jamaica	52.3%	28.5%	13.3%	10.5%	33.3%
Japan	52.8%	33.4%	14.4%	5.0%	30% (Corporate income tax) + 7.56% (Enterprise tax) both on profit before tax + 6.21% on profit before tax plus 530,000 Yen (Inhabitants tax)

Tax rate (% of commercial profits)					
Economy	Total tax rate	Corporate income tax	Labour tax	Other taxes	Statutory corporate income tax rate
Jordan	31.9%	15.3%	12.8%	3.9%	15%
Kazakhstan	45.0%	21.2%	21.1%	2.7%	30%
Kenya	74.2%	15.5%	7.6%	51.0%	30%
Kiribati	34.4%	25.7%	8.7%	0.0%	20-35%
Korea	30.9%	14.2%	12.6%	4.1%	14.3%, 27.5%
Kuwait	55.7%	44.7%	11.0%	0.0%	0 to 57% (Corporate income tax) + 2.5% (KFAS)
Kyrgyz Republic	67.4%	3.6%	27.2%	36.5%	20%
Lao PDR	32.5%	26.7%	5.8%	0.0%	35%
Latvia	42.6%	9.1%	28.0%	5.5%	15%
Lebanon	37.3%	11.9%	24.9%	0.5%	15%
Lesotho	25.6%	21.8%	0.0%	3.8%	53.84% on dividends (ACT) + 15% on profits before tax (if above ACT)
Lithuania	48.4%	5.9%	36.2%	6.3%	15%
Macedonia, FYR	43.5%	11.5%	30.0%	2.0%	15%
Madagascar	43.2%	20.7%	20.5%	2.0%	30% on profits or 0.5% on turnover (whichever is higher)
Malawi	32.6%	31.5%	1.2%	0.0%	30%
Malaysia	35.2%	17.7%	15.8%	1.6%	20% on first RM500,000 and 28% on the balance
Maldives	9.3%	0.0%	0.0%	9.3%	
Mali	50.0%	12.0%	31.2%	6.9%	35%
Marshall Islands	66.6%	0.0%	12.2%	54.4%	
Mauritania	104.3%	72.7%	18.1%	13.5%	25% on profits or 4% on turnover (whichever is higher)
Mauritius	24.8%	12.4%	4.6%	7.9%	15%
Mexico	37.1%	5.3%	30.2%	1.6%	30%
Micronesia	61.3%	0.0%	7.0%	54.4%	
Moldova	48.8%	12.3%	33.8%	2.8%	18%
Mongolia	32.2%	7.8%	23.2%	1.2%	15% and 30%
Montenegro	33.9%	7.1%	19.8%	7.0%	9%

# 47 Tax rate (% of commercial profits)

Tax rate (% of commercial profits)					
Economy	Total tax rate	Corporate income tax	Labour tax	Other taxes	Statutory corporate income tax rate
Morocco	52.7%	30.3%	20.5%	1.9%	35%
Mozambique	39.2%	32.2%	4.6%	2.4%	32%
Namibia	25.6%	16.4%	0.0%	9.2%	35%
Nepal	32.8%	19.7%	11.6%	1.5%	20% (corporate income tax) + 1.5% (special duty)
Netherlands	48.1%	26.6%	17.8%	3.7%	31.5%
New Zealand	36.5%	32.0%	2.0%	2.5%	33%
Nicaragua	66.4%	27.0%	19.7%	19.7%	30%
Niger	46.0%	14.5%	20.1%	11.4%	35%
Nigeria	31.4%	20.4%	10.1%	0.8%	30% (corporate income tax) + 2% (education tax)
Norway	46.1%	29.8%	16.3%	0.0%	28%
Oman	20.2%	8.8%	11.3%	0.1%	12%
Pakistan	43.4%	27.0%	14.6%	1.8%	37%
Palau	74.6%	0.0%	6.8%	67.8%	
Panama	52.4%	18.2%	21.5%	12.6%	30%
Papua New Guinea	44.3%	22.1%	11.2%	10.9%	30%
Paraguay	43.2%	20.1%	16.6%	6.6%	20%
Peru	40.8%	26.4%	12.5%	2.0%	30%
Philippines	53.0%	22.7%	10.6%	19.7%	32.5%
Poland	38.4%	11.5%	25.0%	1.8%	19%
Portugal	47.0%	17.8%	27.5%	1.7%	27.5% on profits before tax + 10% on corporate income tax (municipal tax)
Puerto Rico	40.9%	9.5%	8.9%	22.5%	19%
Romania	48.9%	9.3%	38.6%	1.1%	16%
Russia	54.2%	12.7%	35.9%	5.5%	24%
Rwanda	41.1%	22.6%	5.8%	12.6%	35%
Samoa	22.1%	15.1%	7.0%	0.0%	29%
São Tomé and Príncipe	55.2%	40.1%	7.0%	8.2%	30-45%
Saudi Arabia	14.9%	2.1%	12.8%	0.0%	2.5%



Tax rate (% of commercial profits)					
Economy	Total tax rate	Corporate income tax	Labour tax	Other taxes	Statutory corporate income tax rate
Senegal	47.7%	14.9%	24.8%	8.1%	25%
Serbia	38.9%	14.2%	20.8%	3.9%	12.3%
Seychelles	48.8%	22.9%	25.4%	0.5%	0% to 40%
Sierra Leone	277.0%	0.0%	11.6%	265.4%	30%
Singapore	28.8%	12.0%	14.8%	2.0%	20%
Slovak Republic	48.9%	7.7%	40.8%	0.4%	19%
Slovenia	39.4%	15.6%	19.3%	4.5%	25%
Solomon Islands	33.6%	21.9%	8.7%	3.0%	30%
South Africa	38.3%	25.0%	2.3%	11.0%	29%
Spain	59.1%	23.6%	34.9%	0.7%	35%
Sri Lanka	74.9%	36.8%	17.4%	20.8%	32.5% (corporate income tax) + 0.25% (social responsibility levy)
St. Kitts and Nevis	52.7%	32.3%	11.6%	8.8%	35%
St. Lucia	31.5%	24.1%	5.8%	1.6%	30%
St. Vincent and the Grenadines	33.6%	26.1%	4.1%	3.5%	30%
Sudan	37.1%	7.6%	29.0%	0.6%	10%
Suriname	27.8%	27.8%	0.0%	0.0%	36%
Swaziland	39.5%	29.4%	5.8%	4.4%	30%
Sweden	57.0%	18.5%	38.0%	0.6%	28%
Switzerland	24.9%	9.9%	11.5%	3.5%	21.3%
Syria	35.5%	14.8%	19.8%	0.8%	10-23% on profits before tax + 4% on corporate income tax (municipal duties)
Taiwan, China	35.8%	21.7%	10.6%	3.6%	25%
Tajikistan	87.0%	18.2%	29.0%	39.9%	25% on profits or 1% on turnover (whichever is higher)
Tanzania	45.0%	20.5%	18.6%	6.0%	30%
Thailand	40.2%	29.2%	6.0%	5.0%	30% (corporate income tax) + 3.3% (business specific tax)
Timor-Leste	59.2%	40.6%	0.0%	18.5%	10-30%
Togo	48.3%	12.7%	29.1%	6.5%	37%

# 49 Tax rate (% of commercial profits)

Tax rate (% of commercial profits)					
Economy	Total tax rate	Corporate income tax	Labour tax	Other taxes	Statutory corporate income tax rate
Tonga	56.2%	54.3%	0.0%	1.9%	15, 30%
Trinidad and Tobago	37.2%	23.2%	6.5%	7.5%	30%
Tunisia	58.8%	11.1%	25.3%	22.5%	35%
Turkey	46.3%	17.8%	25.0%	3.4%	30%
Uganda	32.2%	17.8%	11.6%	2.9%	30%
Ukraine	60.3%	13.5%	45.4%	1.4%	25%
United Arab Emirates	15.0%	0.0%	14.5%	0.5%	
United Kingdom	35.4%	20.5%	10.5%	4.4%	30%
United States	46.0%	26.6%	10.0%	9.4%	34% (federal tax) + 7.5% (NY state tax) + 8.85% (NY city tax)
Uruguay	27.6%	17.6%	7.2%	2.9%	30%
Uzbekistan	122.3%	1.3%	35.9%	85.0%	15% on profit before tax + 8% on profit after tax (infrastructure development tax)
Vanuatu	14.4%	0.0%	4.6%	9.8%	
Venezuela	51.9%	15.2%	18.2%	18.6%	34% (progressive scale)
Vietnam	41.6%	21.6%	19.7%	0.2%	28%
West Bank and Gaza	31.5%	15.9%	15.1%	0.5%	16%
Yemen	48.0%	30.0%	10.4%	7.6%	35%
Zambia	22.2%	7.4%	12.3%	2.5%	35%
Zimbabwe	37.0%	21.8%	4.8%	10.4%	30.9%

A missing value in this column means that the country does not have a tax on profits

## References

- Bird, Richard. 2003. "Administrative Dimensions of Tax Reform." Draft module prepared for course on Practical Issues of Tax Policy in Developing Countries, World Bank, Washington, D.C., April 28–May 1.
- Bird, Richard, and Oliver Oldman. 2000. "Improving Taxpayer Service and Facilitating Compliance in Singapore." PREM Note 48. World Bank, Poverty Reduction and Economic Management Network, Washington, D.C. <http://www1.worldbank.org/prem/PREMNotes/premnote48.pdf>.
- Desai, Mihir A., C. Fritz Foley and James R. Hines Jr. 2004. "Foreign Direct Investment in a World of Multiple Taxes." *Journal of Public Economics* 88: 2727–44.
- Engelschalk, Michael. 2004. "Creating a Favorable Tax Environment for Small Business." In James Alm, Jorge Martinez-Vazquez and Sally Wallace, eds., *Taxing the Hard to Tax: Lessons from Theory and Practice*. Boston: Elsevier.
- Engen, Eric, and Jonathan Skinner. 1996. "Taxation and Economic Growth." *National Tax Journal* 49 (4): 617–42.
- FIAS (Foreign Investment Advisory Service). 2004. *Administrative Barriers to Investment in the Russian Federation*. Washington, D.C.: World Bank.
- Fjeldstad, Odd-Helge, and Lise Rakner. 2003. *Taxation and Tax Reforms in Developing Countries: Illustrations from Sub-Saharan Africa*. CMI Report R 2003: 6. Bergen, Norway: Chr. Michelsen Institute.
- Goolsbee, Austan. 2002. *The Impact and Inefficiency of the Corporate Income Tax: Evidence from State Organizational Form Data*. NBER Working Paper 9141. Cambridge, Mass.: National Bureau of Economic Research.
- Hines, James R., Jr. 2005. "Corporate Taxation and International Competition." University of Michigan, Ross School of Business, Department of Accounting, Ann Arbor.
- Ivanova, Anna, Michael Keen and Alexander Klemm. 2005. "The Russian Flat Tax Reform." IMF Working Paper WP/05/16. International Monetary Fund, Washington, D.C.
- John Whiting, Susan Symons, Jennifer Woodward, Andrew Boucher, Janet Kerr - Total Tax Contribution Framework - What is your company's overall tax contribution, April 2005.
- Lee, Young, and Roger Gordon. 2004. "Tax Structure and Economic Growth." University of California at San Diego, Department of Economics. <http://www.econ.ucsd.edu/%7Erogordon/papers.html>.
- Loayza, Norman, Ana Maria Oviedo and Luis Servén. 2004. "Regulation and Macroeconomic Performance." Policy Research Working Paper 3469. World Bank, Washington, D.C.
- Moore, David. 2005. "Slovakia's 2004 Tax and Welfare Reforms." IMF Working Paper WP/05/133. International Monetary Fund, Washington, D.C.
- Slemrod, Joel. 1995. "What Do Cross-Country Studies Teach about Government Involvement, Prosperity, and Economic Growth?" *Brookings Papers on Economic Activity*, no. 2: 373–431.
- Susan Symons, Neville Howlett, Janet Kerr - Total Tax Contribution, PricewaterhouseCoopers LLP survey for The Hundred Group, March 2006.
- Tan Chee-Wee, Pan Shan-Ling, and Eric T. K. Lim. 2005. "Towards the Restoration of Public Trust in Electronic Governments: A Case Study of the E-Filing System in Singapore." In *Proceedings of the 38th Hawaii International Conference on System Sciences*. <http://csdl2.computer.org/comp/proceedings/hicss/2005/2268/05/22680126c.pdf>.
- Tanzi, Vito, and Howell Zee. 2000. "Tax Policy for Emerging Markets: Developing Countries." IMF Working Paper WP/00/35. International Monetary Fund, Washington, D.C.
- World Bank. 1991. *Lessons of Tax Reform*. Washington, D.C.
- World Bank. 2004. *Improving Enterprise Performance and Growth in Tanzania*. Washington, D.C.
- World Bank. 2005. *World Development Indicators 2005*. Washington, D.C.
- World Bank. 2006. *Anticorruption in Transition 3: Who Is Succeeding and Why*. Washington, D.C.
- WEF (World Economic Forum). 2004. *Global Competitiveness Report 2004/2005*. Geneva. Engelschalk (2004).

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