

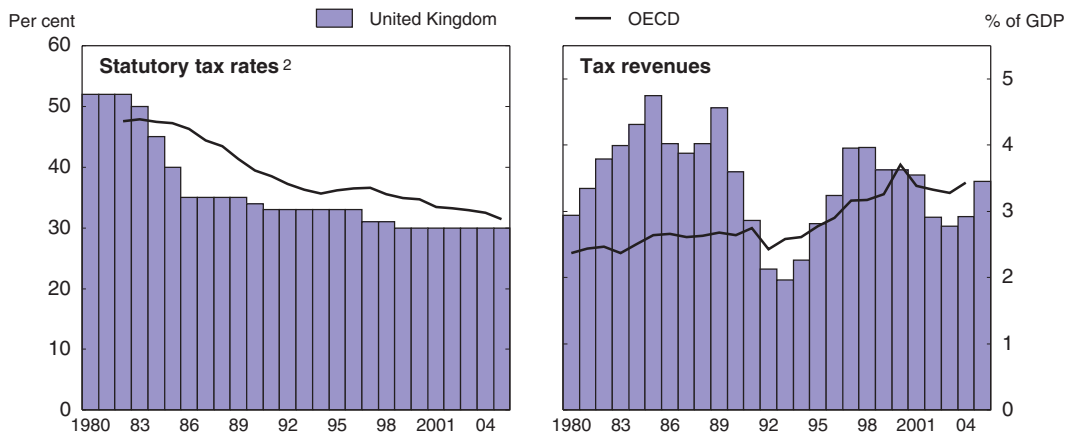
## Chapter 5

# Tax competition: How to remain competitive?

*Statutory corporate tax rates have been lowered in the United Kingdom and elsewhere, while tax bases have been broadened. This has rendered corporate tax systems more efficient. Falling tax rates are not a proof of tax competition, but consistent with it. While the United Kingdom was early in cutting tax rates and had strong tax competitiveness, others have caught up. And some countries now have considerably lower tax rates, even after the recent announcement to cut the UK statutory corporate tax rate from 30% to 28% in 2008. This chapter assesses options to preserve international competitiveness.*

Statutory corporate tax rates in the OECD have shown a remarkable trend decline, from 50% at the beginning of the 1980s to close to 30% today (Figure 5.1). The fall in tax rates was more than offset by a broadening of the tax base and other factors,<sup>1</sup> and revenue from corporate income tax has increased as a share of GDP in the OECD on average. There were two distinct tax rate cut phases: a sharp fall in statutory rates in the mid-1980s, and a new push downwards since the turn of the century, especially in the EU countries. In the United Kingdom, the first major rate-cutting cum base-broadening reform was in the early 1980s, when the rate was slashed from more than 50% to 35%. The rationale for the reform was to reduce distortions, by lowering the dispersion in effective marginal tax rates across different forms of investment and sources of finance. This was probably also the motive for tax reforms in other countries at this time, while tax competition played only a minor role.

Figure 5.1. Corporate tax rates and revenues<sup>1</sup>



1. The OECD aggregate is an unweighted average of available data.

2. Long time series are only available for 19 OECD countries.

Source: Institute for Fiscal Studies (2005), *Corporate Tax Rate Data* – online dataset; Devereux, M.P., R. Griffith and A. Klemm (2002), “Corporate Income Tax Reforms and International Tax Competition”, *Economic Policy*, Vol. 17, No. 35, Blackwell Publishing; OECD (2006), *OECD Tax Statistics: Revenue Statistics 1965-2005* on CD-ROM, Vol. 2006/1.

Tax competition has become a more dominant factor in recent years. International trade and financial market liberalisation and the creation of a single financial market in Europe have raised capital mobility considerably and thereby made the tax base more mobile. Moreover, the recent drop in tax rates in the EU is related to the enlargement of the EU in 2004. The average tax rate in the new member states at 20% in 2006 is substantially lower than in the old member states (29%). With the exception of Ireland and Austria, virtually all the new member states have lower statutory rates than the old ones.<sup>2</sup> The United Kingdom, which had lost tax competitiveness, as the rate had come down only little since the 1980s, recently announced a cut in the corporate tax rate from 30% to 28%, to take effect from April 2008. One motivation was to enhance international competitiveness.

Other objectives for corporate tax reform are: to ensure neutrality, by not favouring some investment at the expense of another, potentially more productive, investment; to provide flexibility by not impeding new types of transactions, nor giving them an unfair advantage; to aim at consistency, by treating transactions that have the same commercial result the same way for tax purposes; and to use the tax system to tackle market failures (HM Treasury and Inland Revenue, 2003). While this chapter focuses on corporate taxation, tax competition issues arise also in the sphere of the personal income tax (Box 5.1).

#### Box 5.1. Tax competition for personal income tax revenues

Tax competition issues also arise in the sphere of personal income taxation. Highly skilled people tend to be mobile, often demanding a specific disposable income after taxes, when they choose among job offers. The employer has to compensate for taxes payable. Compensation thus comprises disposable income, which is the same in all locations, plus the tax arising at the specific location. In terms of the effective average tax rate, the United Kingdom is very competitive in international comparison for single employees, but less so for married couples (Elschner *et al.*, 2006). There is one aspect of the UK tax system that leads to personal income tax shifting: foreign nationals residing but not domiciled in the United Kingdom are only liable for UK tax payments on foreign income and capital gains when these funds are brought into the United Kingdom. This means non-domiciled people can transfer any excess funds they have into a savings account offshore and leave it to accumulate income tax-free for as long as they like.

Employees who are not resident in the United Kingdom are not liable for UK taxes on overseas earnings. Expatriate workers, for example, can have non-resident status in the United Kingdom for up to three years and reduce tax liabilities by declaring part of their income overseas. The same rules apply to those who are resident in the United Kingdom but not domiciled. A person is domiciled in the country in which they have a permanent home and domicile status is decided by the tax administration. Hence, for longer-term residents who remain foreign domiciled it is possible to set up dual contracts for work in the United Kingdom and overseas, where the overseas portion of income is not taxable unless remitted to the United Kingdom. Moreover, capital gains generated outside the United Kingdom are only subject to UK tax once remitted to the country. This system gives wealthy individuals an incentive to settle in the United Kingdom. According to the Treasury, about 105 000 non-domiciled individuals declared £8.9 billion in taxable income in 2003/04. Estimates by the Treasury in 2003 suggest that it could have raised between £1 and £1.5 billion through a reform of the tax rules. The latest information available from HM Revenue and Customs, which takes into account late tax returns, indicates that there were 112 000 individuals claiming non domiciled tax status in 2004/05.

The UK tax system is also attractive for partners in private equity funds since returns, in the form of carried interest, are taxed as a capital gain and not as income. Moreover, capital gains on business assets attract generous tax relief. Private equity partners thus typically pay tax at an effective rate of just 10%, whereas the tax rate for high income earners is 40%. The rationale for the introduction of this relief was to encourage risky business start-ups. However, the taper relief is estimated to have cost about £6 billion in revenue forgone in 2006/07. While the low taxation of partners in private equity funds has recently hit the headlines and is seen as inequitable, there may still be a case for taxing highly mobile professionals at a lower rate so as to prevent them from moving on to greener tax pastures. Indeed, several OECD countries have special tax arrangements for people staying temporarily in the country to work, especially for highly skilled immigrants (OECD, 2005).

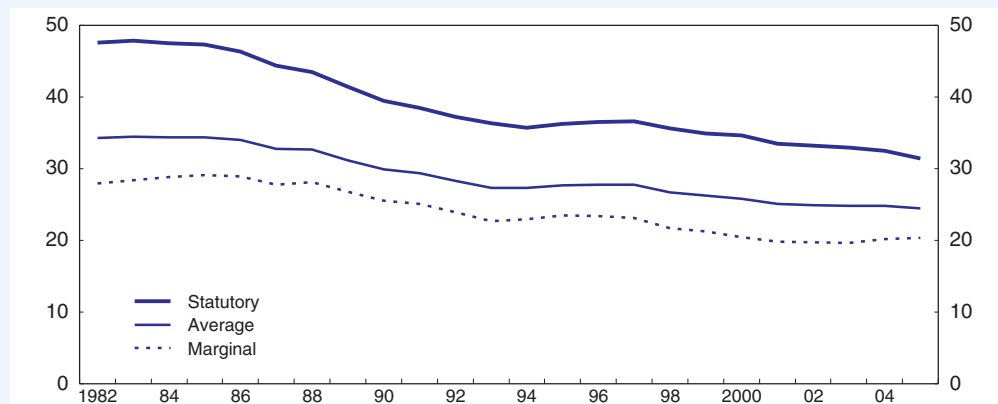
### Box 5.2. Which tax rate matters for what?

Taxation differences across countries can lead to the shifting of real economic activity and profits across jurisdictions with subsequent implications for tax revenues. Multinational corporations are able to influence the location of profit either by changing the location of production or by just moving profits between countries. Even though a factory, once set up, is difficult to move and is therefore not mobile in the short run, localisation decisions are an ongoing process. Profit shifting also occurs via the manipulation of the prices of cross-border intra-group transactions. Tax avoidance is particularly easy for intangible assets such as patents, where reference prices do not exist, but can also apply to intermediate goods trade between establishments of the same company. Profit shifting may also be linked to debt-shifting within groups. By placing equity capital in a subsidiary located in a low tax country and by allocating debt to a subsidiary in a high tax country a multinational can offset the interest payments against tax at a high rate, while the equity-using subsidiary pays tax on the return to equity at a low tax rate. This reduces the overall amount of tax the multinational has to pay.

As a basis for the analysis of activity and profit shifting, Devereux (2007) provides a decision tree for multinational companies. The first two levels represent discrete choices: first is the choice of whether to export or produce abroad; second, if the company decides to move production it has to choose the location for the new plant. The impact of taxation on these decisions can be measured by the extent to which the pre-tax profit is reduced by taxation. This is captured by the effective average tax rate – essentially the proportion of the pre-tax income which is taken in tax. The third and fourth levels of the decision tree represent continuous choices: conditional on being present abroad the multinational will choose the optimal level of investment between jurisdictions, and finally, reallocate profits among locations or repatriate them to the parent. Investment will be undertaken until the marginal product of capital equals the cost of capital. The impact of the tax on the cost of capital is measured by the effective marginal tax rate. As companies will take advantage of tax allowances in different jurisdictions in which they operate, the incentive to transfer profits between jurisdictions will depend on differences in the statutory tax rate. The sharp fall in statutory rates supports the notion that competitive pressure has driven down this rate. The effective tax rate – both average and marginal – depends on both the tax rate and the tax base and both have declined by much less (Figure 5.2). This is mainly because the tax base has been broadened by lowering depreciation rates.

Figure 5.2. **Average and marginal effective tax rates**

Unweighted average of 19 OECD countries, per cent



Source: Institute for Fiscal Studies (2005), *Corporate Tax Rate Data* – online dataset and Devereux, M.P., R. Griffith and A. Klemm (2002), “Corporate Income Tax Reforms and International Tax Competition”, *Economic Policy*, Vol. 17, No. 35, Blackwell Publishing.

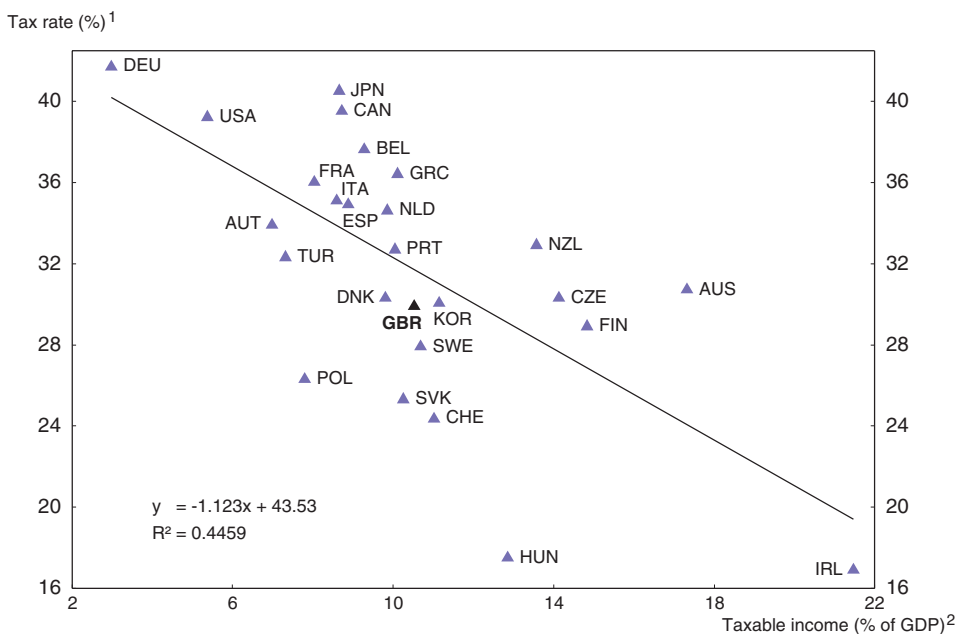
It is often argued that tax competition – a non-cooperative tax setting by governments competing for a mobile tax base – could lead to a “race to the bottom” in tax rates and leave the competing jurisdictions with too little revenue to provide public services at a socially-optimal level.<sup>3</sup> The conclusion that tax competition lowers welfare crucially depends on the assumption that the policymaker is benevolent, and hence aims at maximising the welfare of the whole economy. But governments may also behave as a self-serving “Leviathan” with the objective of maximising the size of the state, resulting in too high tax rates. In this case tax competition will have positive welfare effects since a fall in the tax rate enhances efficiency by constraining a tendency to spend too much and too wastefully (Krogstrup, 2004).

In a literature review, Nicodème (2006) concludes that a race to the bottom has not occurred, mainly because corporate tax revenues have not plunged with falling tax rates. Yet, the belief that countries are competing over corporate tax bases by cutting rates is supported by other empirical evidence. Among others, Devereux *et al.* (2005) find evidence of strategic interaction between countries in setting tax rates, both to attract profits and investment. Moreover, there is empirical work showing that differences in taxation across countries affect flows of capital and profits, in addition to influencing the decision on where to locate production (Nicodème, 2006 and Devereux, 2007). And work by the OECD suggests that while corporate taxation is only one among many factors that shape firms’ location decision, it has a significant impact (Nicoletti *et al.*, 2007; OECD, 2007). Box 5.2 discusses how multinationals might redistribute activity and profits and which tax rates influence their decisions.

Figure 5.3 suggests that the shifting of economic activity and of profits between countries may be important. The figure relates the corporate tax base as a per cent of GDP

Figure 5.3. **Corporate tax rates and taxable corporate income**


Average 2000-04



1. Basic combined central and sub-central (statutory) corporate income tax rate.

2. Calculated by grossing up corporate tax revenue by the tax rate.

Source: OECD (2007), *Tax database*, [www.oecd.org/ctp/taxdatabase](http://www.oecd.org/ctp/taxdatabase) and OECD (2006), *OECD Tax Statistics: Revenue Statistics 1965-2005* on CD-ROM, Vol. 2006/1.

StatLink  <http://dx.doi.org/10.1787/116517601185>

to the statutory tax rate. There is a clear negative relationship between the level of the corporate tax rate and corporate income, indicating that real activity and/or profits are being shifted from high to low tax countries. Ireland, for example, which has the lowest tax rate also has the highest taxable corporate income as share of GDP. Germany, on the other hand, has both the highest tax rate and the lowest profit share of GDP.<sup>4</sup>

In recognition of the impact that globalisation is having on tax rates and the tax base there has been increasing international co-operation among the OECD countries (Box 5.3).

### Box 5.3. OECD work on cross-border issues in corporate taxation

The OECD's Center for Tax Policy and Administration has been at the forefront of developing tax rules that encourage sustainable economic growth while ensuring governments retain their fiscal sovereignty. Moreover, the OECD encourages countries to move towards tax systems with lower tax rates and broader tax bases and supports fair tax competition between countries. Priority areas of work are:

- Working to develop common international tax rules to avoid conflicting practices that distort international trade and investment flows. This work has resulted in important instruments such as the Model Tax Convention on Income and on Capital, and Transfer Pricing Guidelines. The Model Tax Convention serves as the model for the 3 000 bilateral tax agreements now in existence and helps to ensure that returns on cross-border investments are not taxed twice. The Transfer Pricing Guidelines were developed to reflect an international consensus on transfer pricing within multinationals. A large share of trade consists of the transfer of goods, intangibles and services within multinational enterprises. To determine tax liability in each jurisdiction, the right price (arm's length price) has to be applied to allow for the appropriate division of the tax base between the countries in which a multinational enterprise operates.
- Encouraging and facilitating exchange of information between OECD countries. While businesses are increasingly operating at a global level, tax administration is confined to national jurisdictions. The proper exercise of fiscal sovereignty depends upon the development of international co-operation. The OECD's work in this field includes improving access to information, facilitating effective exchange of information while at the same time respecting taxpayer confidentiality, combating corruption, improving co-operation between tax and anti-money laundering authorities, and countering harmful tax practices.
- Providing the mechanisms to resolve tax disputes. In February 2007 the OECD issued recommendations to improve the Mutual Agreement Procedure and for mandatory arbitration so as to encourage countries' competent authorities to resolve disputes in a timely and principled manner.
- Developing best practices in tax administration. Regular exchanges of experiences and approaches to tax administration and the identification of best practices allow for improved administration leading to better services to taxpayers and better compliance. Topics covered include improving tax compliance, the use of modern risk management approaches, improving taxpayer service delivery through the effective use of modern technology and sharing knowledge of the key features of the systems of tax administration in member countries. This work also includes a study of the role of tax intermediaries in compliance and enhancing the relationship between tax administrations and corporate taxpayers.

Source: OECD (2006), *Tax in a Borderless World: The Role of the OECD*.

## The UK corporate tax system in international comparison

The corporate tax system has been subject to two major reforms in the last 25 years: one in 1984 and the second in 1997. In 1984, the main corporate tax rate was cut from 52% to 35% (and further reduced to 33% by 1991/92). At the same time the very generous depreciation allowances were made much less generous. In 1997, the main corporate tax rate was cut to 31% and the small companies' rate from 24% to 19%. The main rate was cut further to 30% in 1998.

In 1999 the advanced corporation tax (ACT) was abolished and the system for corporate tax payments was reformed. ACT was a tax charge that companies faced at the time of paying a dividend and was for most firms credited against corporation tax and thus affected the timing of tax payments only. However, some firms with a small UK corporation tax liability (*i.e.* firms with important foreign operations), were not able to reclaim ACT fully and the ACT might have made the United Kingdom a less attractive place to locate a firm's headquarters.

In 2000 a tax relief on R&D expenditure was introduced for small firms and later, in 2002, extended to large companies. Since then, corporate tax reform has been given almost continuous attention, with three major consultations and a number of smaller more technical ones. The reforms actually implemented, however, have been of relatively minor importance. They have included the introduction of transfer pricing legislation for domestic transactions and changes to the taxation of oil companies on the continental shelf. The introduction of a zero tax rate for companies with less than £10 000 of taxable profit in 2002 was reversed in 2005. Estimates by Hawkins *et al.* (2002) showed that the costs of the zero tax rate potentially could run into billions of pounds as self-employed individuals registered as companies to reduce their tax liabilities. Box 5.4 provides a brief description of the corporate tax system, based on the 2006/07 budget year, and a short summary of the changes announced in the 2007 Budget.

### Box 5.4. The UK's corporate tax system

Corporation tax is charged on the global profits of UK-resident companies, public corporations and unincorporated associations. Firms not resident in the United Kingdom pay corporation tax only on their UK profits. Taxable profit comprises income from trading, investment and capital gains, less various deductions. Trading losses may be carried back for one year to be set against profits earned in that period or carried forward indefinitely.

The standard rate of corporation tax is 30%, with a reduced rate of 19% on profits under £300 000 (the small companies' rate) (Table 5.1). For firms with profits between £300 000 and £1 500 000, a system of relief on the standard rate operates, such that an

Table 5.1. **Corporation tax rates in the United Kingdom**

2006/07

Profits (£ per annum)	Marginal tax rate (%)	Average tax rate (%)
0-300 000	19	19
300 000-1 500 000	32.75	19-30
1 500 000 and above	30	30

Source: HM Revenue and Customs.



#### Box 5.4. The UK's corporate tax system (cont.)

effective marginal rate of 32.75% is levied on profits in excess of £300 000. This increases the average tax rate gradually until it reaches 30%.

Capital allowances provide relief for the consumption or depreciation of capital assets incurred for the purposes of carrying on a trade. Capital allowances may be claimed in the year they accrue, set against future profits, or carried back for up to three years. Different types of assets qualify for different rates of allowances:

- Expenditure on plant and machinery may be written off on a 25% declining basis. Long-life plant and machinery is written off at 6%. A higher, 40%, allowance is available in the first year for expenditure by medium-sized companies; the small companies allowance is 50%.
- Expenditure on industrial buildings and hotels is written down on a straight-line basis of 4% per year.
- Expenditure on commercial buildings may not be written down at all.
- Spending on intangible assets is written down on a straight-line basis at either the accounting depreciation rate or at a rate of 4%, whichever the company prefers.
- Capital expenditure on plant, machinery and buildings for research and development (R&D) is treated more generously: under the R&D allowance, it can all be written off against taxable profits immediately.

Current expenditure on R&D, like current expenditure generally, is fully deductible from taxable profits. Moreover, current R&D expenditure is subject to additional tax relief, if it exceeds a certain limit. For small and medium-sized companies, there is a two-part tax credit. The first part is called R&D tax relief and applies at a rate of 50% (allowing companies to deduct a total of 150% of qualifying expenditure from taxable profits). The second part is a payable tax credit that is only available to loss-making firms, where the firm can give up the right to offset losses equivalent to 150% of their R&D expenditure against future profits, in return for a cash payment of 16% of the losses given up. A R&D credit for larger companies was introduced in 2002. The credit applies at a rate of 25%, allowing 125% of qualifying expenditure to be deducted from taxable profit.

The March 2007 Budget announced a reduction in the corporation tax rate from 30% to 28% to take effect from April 2008. At the same time, the small companies' tax rate will rise in stages from 19% to 22% to reduce incentives for individuals to incorporate to reduce tax payments. Capital allowances will be reformed from 2008, with a new 20% rate (down from 25%) and a new 10% rate for long-lived plant and equipment (up from 6%). Industrial building allowances, hotel allowances and agricultural building allowances are to be phased out. The capital allowance changes will finance the reduction in the main rate. The changes to capital allowances and tax rates do not apply to North Sea oil and gas companies. There will be a new environmental tax credit and the rate of R&D tax credits for small companies will rise to 175% (from 150%); for larger firms they will increase from 125% to 130%. There will also be an annual 100% investment allowance of £50 000.

Source: Adam et al. (2007) and HM Treasury, Budget 2007 (available at: [www.hm-treasury.gov.uk/budget/budget\\_07](http://www.hm-treasury.gov.uk/budget/budget_07)).

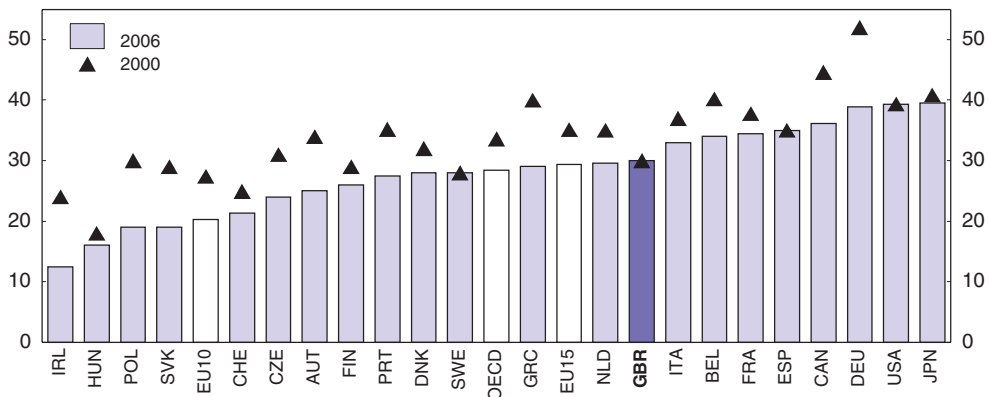
Corporate tax revenues are highly correlated with the business cycle but, unlike in the OECD aggregate, it is difficult to spot a trend in UK revenues as a share of GDP (Figure 5.1). Despite falling statutory rates, revenues have hovered around 3.5% of GDP, mainly because of the broadening of the tax base. Moreover, the importance of the financial sector has



increased, so that the development in corporate revenues has been strongly correlated with financial market developments.

The United Kingdom was among the first countries to lower the statutory corporate tax rate in the OECD (Figure 5.1),<sup>5</sup> and in 1999 it reached 30%. Figure 5.4 shows that the UK's statutory rate is no longer particularly low, neither in the OECD, nor in the European Union, where it is now the 8th highest. On the other hand, it is striking that all the G7 economies have high statutory rates, with the UK rate the lowest among them. Apparently, economies with a large market potential are able to sustain a higher tax rate than smaller countries, without negative repercussions (Krogstrup, 2004).

Figure 5.4. **Statutory corporate tax rates in international comparison**  
Combined rate, per cent<sup>1</sup>



1. Basic combined central and sub-central (statutory) corporate income tax rate. Aggregates are unweighted averages and EU10 covers the new EU member states.

Source: OECD (2007), *Tax Database*, [www.oecd.org/ctp/taxdatabase](http://www.oecd.org/ctp/taxdatabase) and European Commission (2006), *Structures of the Taxation Systems in the European Union*.


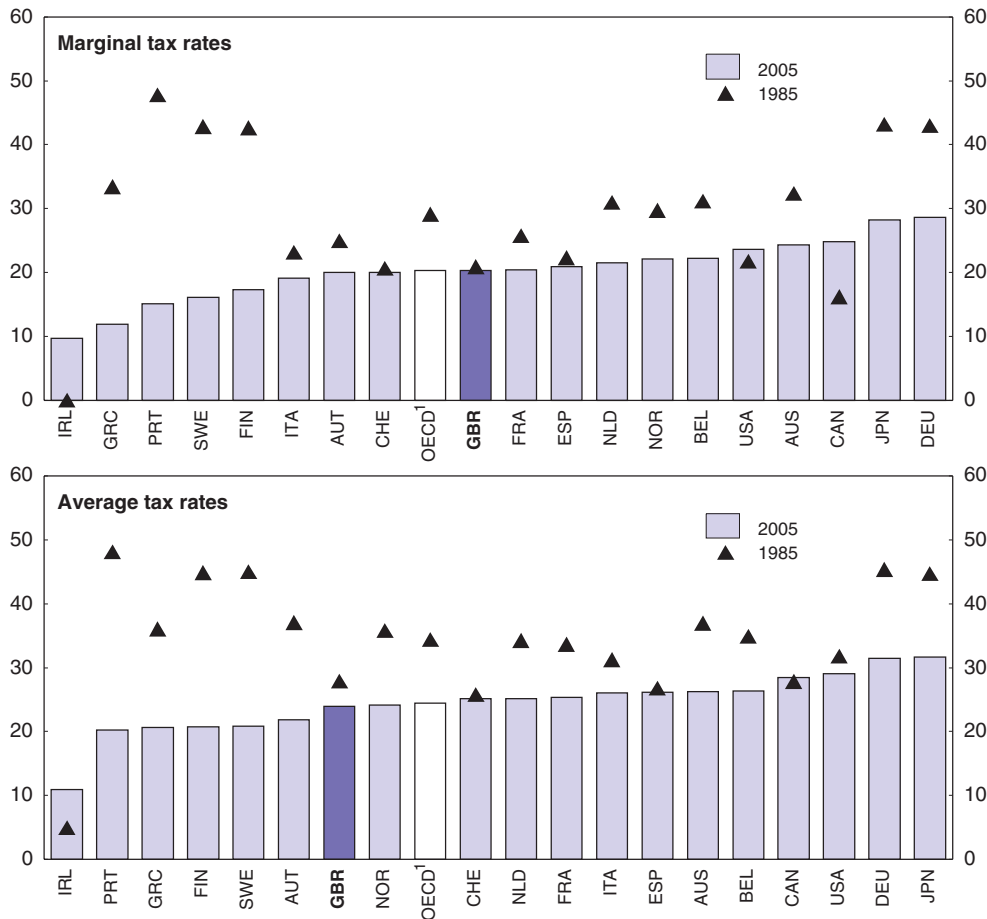
StatLink  <http://dx.doi.org/10.1787/116518186658>

Figure 5.5 shows that both the UK's effective marginal tax rate and the effective average tax rate are close to the OECD average. While the effective average tax rate has come down a little since the mid-1980s, the effective tax rate on a marginal investment has not changed over time, implying that the tax reforms have done little to improve incentives to invest. Given the more recent tax reforms in many other countries, the United Kingdom has lost tax competitiveness, moving from being a low tax country to being close to the OECD average. Taking into account the new EU member countries, which are not included in Figure 5.5, worsens the UK's ranking considerably. The recent lowering of the corporate tax rate in the United Kingdom follows a distinct downward trend in the European Union where 17 out of 25 countries reduced their tax rates between 2002 and 2006 and several plan further cuts (Table 5.2).

The United Kingdom had strong appeal to global investors in Europe. However, the UK's position as the preferred location has been overtaken by Germany (Ernst & Young, 2006). Moreover, while only few headquarters have moved abroad so far, those considering relocating business activities in the future cited their headquarters second only to relocating the financial back office (out of 10 activities) (CBI, 2007). The United Kingdom has also been an attractive location for inward investment. According to Ernst & Young's European Investment Monitor the UK received 31% of foreign investment projects in Europe in 1997.

Figure 5.5. **Effective tax rates**  
Per cent



1. Unweighted average of 19 OECD countries.

Source: Institute for Fiscal Studies (2005), *Corporate Tax Rate Data* – online dataset and Devereux, M.P., R. Griffith and A. Klemm (2002), “Corporate Income Tax Reforms and International Tax Competition”, *Economic Policy*, Vol. 17, No. 35, Blackwell Publishing.

But by 2006 this figure had slipped to 19%. Nonetheless, the United Kingdom still attracted more projects than any other European country, and its declining share is of a rapidly increasing total. The increasing complexity of the tax system is also seen as a threat to competitiveness. In a World Bank report, the United Kingdom emerged as having the second most lengthy tax code out of the 20 largest economies world wide, and the tax code has more than doubled in length over the past ten years (Table 5.3).<sup>6</sup> On the other hand, while businesses complain loudly about tax complexity (CBI, 2007), it is partly they who are to blame as the UK government has reacted forcefully to aggressive tax planning by businesses. Indeed, Slemrod *et al.* (2007) suggest that tax complexity has increased in recent years mainly because a significant volume of anti-avoidance legislation has been added to the tax code.

The complexity of the tax system contributes to low awareness of incentives and tax reliefs, especially among small enterprises. Surveys suggest that 42% of businesses want simplified tax rules and 34% want a lower administrative burden (PWC, 2006). Another implication is that the corporate tax law can no longer be handled by a single tax advisor, as specialists and sub-specialists are needed. This creates a two-tier market where only

Table 5.2. **Reductions in the statutory corporate tax rate in the European Union**<sup>1</sup>  
Per cent

	2002	2006	Change 2002-06	Planned reductions <sup>2</sup>	
				To	By
Germany	38.9	38.9	0	29.8	2008
Spain	35	35	0	30	2008
France	35.4	34.4	-1	-	-
Belgium	40.2	34	-6.2	-	-
Italy	36	33	-3	-	-
Luxembourg	30.4	30.4	0	-	-
<b>United Kingdom</b>	<b>30</b>	<b>30</b>	<b>0</b>	<b>28</b>	<b>2008</b>
Netherlands	34.5	29.6	-4.9	25.5	2007
Greece	35	29	-6	25	2007
Denmark	30	28	-2	25	2007
Sweden	28	28	0	-	-
Portugal	33	27.5	-5.5	-	-
Finland	29	26	-3	-	-
Austria	34	25	-9	-	-
Ireland	16	12.5	-3.5	-	-
<b>Average EU15</b>	<b>32</b>	<b>29</b>	<b>-3</b>	<b>..</b>	<b>..</b>
Malta	35	35	0	-	-
Slovenia	25	25	0	20	2010
Czech Republic	31	24	-7	19	2010
Estonia	26	23	-3	20	2009
Poland	28	19	-9	-	-
Slovak Republic	25	19	-6	-	-
Hungary	18	16	-2	-	-
Romania	..	16	..	-	-
Bulgaria	..	15	..	12	2007
Latvia	22	15	-7	-	-
Lithuania	15	15	0	-	-
Cyprus <sup>3, 4</sup>	28	10	-18	-	-
<b>Average new member states<sup>5</sup></b>	<b>25</b>	<b>20</b>	<b>-5</b>	<b>..</b>	<b>..</b>

1. Basic combined central and sub-central (statutory) corporate income tax.

2. A hyphen indicates that no reduction is planned.

3. Footnote by Turkey: The information in this document under the heading "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Turkey shall preserve its position concerning the "Cyprus" issue.

4. Footnote by all the European Union Member States of the OECD and the European Commission: The Republic of Cyprus is recognised by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.

5. Excluding Bulgaria and Romania.

Source: OECD (2007), *Tax database*, [www.oecd.org/ctp/taxdatabase](http://www.oecd.org/ctp/taxdatabase); European Commission (2006), *Structures of the Taxation Systems in the European Union* and national data sources.

some businesses can afford comprehensive tax advice, while for others the cost of advice is greater than the benefit (PWC and the World Bank, 2006).

While the United Kingdom performs badly on the length of tax legislation, its ranking on other measures of tax complexity is much better (Table 5.3). For example, measured by the number of tax payments a business has to make each year the United Kingdom ranks 7th with only seven payments a year. Also the number of hours spent complying with the tax requirements is relatively low compared with the other large economies. On average a business spends 105 hours per year on tax filings, which is the 24th lowest out of 175 countries covered. In 2006, HM Revenue and Customs set up an Administrative Burden Advisory Board

Table 5.3. **Tax complexity**

	Length of the tax code <sup>1</sup> (number of pages)	Tax payments <sup>2</sup> (number per year)	Time spent to comply <sup>2</sup> (hours per year)
India	9 000	59	264
<b>United Kingdom</b>	<b>8 300</b>	<b>7</b>	<b>105</b>
Japan	7 200	15	350
United States	5 100	10	325
Italy	3 500	15	360
Canada	2 440	10	119
China <sup>3</sup>	2 000	44	872
Germany	1 700	32	105
Netherlands	1 640	22	250
France	1 300	33	128
Sweden	700	5	122

1. Federal tax legislation only, state and local taxes are excluded.

2. Taxes covered are corporate income tax, value added tax and social security contributions.

3. Includes Hong Kong, China for the length of the tax code.

Source: PricewaterhouseCoopers and the World Bank (2006), *Paying Taxes: The Global Picture*.

with representatives from the business community to assist it in its project to reduce the administrative burden of the tax system. It specified two targets to cut the administrative burden of its forms and returns (to be reduced by 10%) and its audits and inspections (to be reduced by 15%) for businesses by 2010/11. Budget 2007 announced some further reductions in these areas, and also reductions in wider administrative burdens on business.

## How to stay competitive and still raise revenue?

The extent to which globalisation might erode the ability to tax corporate income remains unclear. To date, the share of corporate revenues as a proportion of GDP have held up well, both in the United Kingdom and in other OECD countries (Figure 5.1). However, the pressures on the tax base could intensify. This section considers some of the options that could be taken if this risk were to materialise.

### **Simplify the tax code**

The complexity of the UK system creates two divisions of corporate taxpayers: those who can afford tax lawyers and thereby manage to minimize their tax payments and those who cannot and thereby lose competitiveness. Complexity can also influence firms' decisions on where to locate investment and profits. Tax planning can lead to inefficiencies and may contribute to counter-action by the government leading to greater complexity. Drafting of new tax legislation requires thorough preparation and broad political agreement, so that the probability of later changes is reduced. One model for reform may be the Nordic countries who have changed their corporate tax systems, putting emphasis on simplicity, transparency and tax neutrality. The Swedish tax code is less than a tenth of the UK code in terms of length.

### **Continue cutting the statutory rate while further broadening the base**

There is probably still room to broaden the tax base and lower the rate. HMRC (2007) estimate the overall cost of corporation tax expenditure and relief to be £23 billion in 2006/07,<sup>7</sup> as compared to a tax take of £53 billion. But as corporate tax rates in all countries fall, raising revenue might become harder. Moreover, with much lower corporate tax rates, the self-employed will have increasing incentives to incorporate their businesses thereby

lowering overall tax revenues. The implications of globalisation on corporate tax revenues and the need to design a corporate tax system that can serve as a backstop to the personal income tax have led economists to suggest options for more fundamental corporate tax reform. At the same time the tax reform agenda continues to focus on ensuring tax neutrality and minimising distortions to corporate investment and financing decisions.

The design of corporate tax systems affect firms' decisions in three major ways: the government might want to reduce the average effective tax rate to attract and retain companies; the marginal effective tax rate to encourage investment; or the statutory rate to reduce profit shifting. With three objectives, but only two instruments – the rate and the base – designing a better corporate tax system is hard. The challenge is boosted by the need to keep reforms revenue neutral.

### **Consider options for more fundamental reform**

Given the many considerations in designing tax systems, most notably concerning neutrality and equity, there is no consensus on the way forward and the pros and cons of the various options for tax reform need to be assessed.<sup>8</sup> Most choices involve some unpleasant trade-offs or have serious drawbacks:<sup>9</sup>

- Given that it is ultimately individuals who pay tax, a basic question is why corporations should be taxed at all. In principle, it would be better for all taxes to be levied at the individual level.<sup>10</sup> But in a globalised world it is not feasible to fully monitor all cross-border income flows. Taxes on corporations can thus play a useful role, as they provide an easier point of tax collection and can be seen as a withholding tax for final payment by individuals. Corporate taxation may, for instance, be the only way of taxing foreign shareholders of domestic corporations. In principle, rents (pure profits) should be taxed, and in a closed economy, a tax on rents is non-distortionary. But in an open economy, a large fraction of rents may be internationally mobile.
- The United Kingdom is among the handful of OECD countries that tax company profits on a worldwide basis, though double taxation is largely avoided by giving credit for source-based taxation paid. The downside of worldwide taxation is that it provides an incentive for firms to relocate or it may prevent local multinational firms from materialising in the first place. Moreover, firms on the verge of expanding internationally may be discouraged from doing so by the tax costs they would incur. Most other OECD countries operate a dividend exemption system, which exempts foreign source dividend income from domestic tax. While a dividend exemption system would reduce relocation incentives, its drawback is that it encourages the shifting of profits abroad, which would then be allowed to re-enter the country tax free. The government has recently published a paper to consult on this issue (HM Treasury and HMRC, 2007).
- An Allowance for Corporate Equity system provides companies with a deduction of an imputed normal return on their equity from the corporate income tax base, parallel to the deduction for interest on debt. The advantage of this approach is that it avoids tax distortions to real investment and ensures neutrality between debt and equity finance. Moreover, because of the symmetric treatment of debt and equity it eliminates the need for thin capitalisation rules to protect the domestic tax base. With the deduction of an imputed normal return, this tax is a tax on pure profits, thus raising incentives to invest. But the imputed rate of return would need to be set at the right level, while the tax rate

would need to be higher, because the tax base is smaller. This may have adverse implications for location decisions and encourage profit shifting. Belgium introduced such a tax in 2006 and Croatia has experimented with it.

- The Comprehensive Business Income Tax, examined by the US Treasury would also ensure neutrality between equity and debt, but it would do so by eliminating the deductibility of interest payments. The ensuing broadening of the tax base would allow a lower corporate tax rate. The lower rate would encourage inward investment and lower incentives for profit shifting through transfer pricing and thin capitalisation. However, such a reform would introduce an interest income tax at source and could lead to a significant increase in the cost of debt finance, which would act as a deterrent to debt-financed inward investment.
- Probably the most radical solution would be to abolish corporate income taxation, while changing the value added tax (VAT) regime and labour taxation in a revenue-neutral manner. Since value added consists of profits and compensation of labour, a tax switch

#### Box 5.5. The VAT carousel fraud

The value added tax (VAT) is often considered self-enforcing, because the tax is collected gradually throughout the chain of production and distribution, with refunds of VAT on intermediate inputs provided. However, opportunities for fraud exist, especially for zero-rated goods, such as exports, as businesses can be entitled to net refunds of VAT.

Missing trader intra-community fraud exploits the refund of VAT to exporters as well as the deferred payment of VAT on acquisitions from other EU member states. VAT in the acquiring country is not levied at the border but due at the time of the acquirer's period VAT return, which can lead to a considerable time lag. Goods can thus be exported and imported several times, with VAT refunds claimed repeatedly, while acquisition tax liabilities accumulate but are not paid as the acquiring company disappears before the VAT payment is due. The impact on receipts from missing trader intra-community fraud in 2005/06 was estimated at between £2 billion and £3 billion. The scale of the fraud can also be gleaned from the trade statistics, where the ONS provides adjustments to published trade data. These show a sharp rise in the trade flows associated with fraudulent activity, from £2.4 billion to a staggering £24.8 billion in the first half of 2006. Since then, it has dropped considerably.

The sharp drop in fraud is due mainly to more vigorous investigation principally through targeted pre-repayment verification of suspect VAT repayment claims. But audits and investigations are likely to face limits, because the essence of the fraud is that money is made quickly. Once the money has disappeared into a complex web of transactions, tracing and recovering unjustified VAT refunds becomes time-consuming and costly. Tighter checks on firms seeking to register for VAT or establishing better and quicker information between national tax authorities has also helped, but raises administrative burdens. Another avenue that has been pursued is "reverse charging", by which liability in a business-to-business transaction is placed on the buyer rather than the seller. This eliminates the need for outright refunds. The European authorities allowed reverse charging for mobile phones and computer chips in April 2007. The danger is that fraud will be perpetrated with other goods, not covered by reverse charging. Moreover, reverse charging, by eliminating the gradual accumulation of VAT payments, moves the system closer to a single-stage retail sales tax, raising the risk of revenue losses due to unreported sales to final consumers. Other administrative solutions have been proposed, but all either create other opportunities for fraud or would increase compliance costs. A durable long-term solution may require a fundamental redesign of the VAT treatment of intra-community transactions. Ending VAT zero-rating for trade between EU member states would sharply reduce the scale of refunds (40% of gross VAT receipts are refunded in the United Kingdom) and eliminate some of the most tempting opportunities for missing trader fraud. But such a reform would need agreement by all 27 EU member countries.

Source: Smith (2007) and Bank of England (2006).

could be implemented by increasing the VAT rate and making an offsetting reduction in the taxation of labour income. If the corporate income tax rate were to be abolished, rather than just reduced, several benefits could be achieved. The new tax system would not affect the level of investment, it would be neutral to the sources of finance, and it would not be susceptible to profit shifting nor location choice. But there are also drawbacks: financial services are VAT exempt and their contribution to the corporate tax take has risen, while profits on goods that are exported would be exempt. Moreover, there would be a strong incentive to incorporate. Most importantly perhaps, the VAT rate would have to increase considerably, raising incentives to pursue VAT fraud (Box 5.5).

## Summing up

Globalisation and the desire of governments to render the corporate income tax system more efficient have driven down statutory corporate tax rates. As this has been accompanied by base broadening, corporate tax revenue as a share of GDP has not shrunk so far. The United Kingdom was early in this game, but has lost in tax competitiveness as others have moved ahead. Several countries are now planning further tax cuts, suggesting that pressure to reduce statutory tax rates will continue. It will thus be important to continue with a strategy of broadening the base, while cutting the rate. However, there are likely to be limits, because tax competition also plays out on the base. Given the detrimental effect of worldwide taxation on the location of headquarters, there may be merit in moving to a dividend exemption system. And there seems to be considerable room to simplify the tax system.

The degree to which globalisation might undermine the ability to tax corporate income remains uncertain. The location of production is determined by many factors, among which the corporate tax regime is not necessarily the most important. To the extent that globalisation makes it harder to tax mobile factors, there may be room to shift taxation to immobile ones. Property taxation is already high by international standards. Another option would be to raise VAT. The standard VAT rate is relatively low (by European standards) and includes many exemptions and zero and reduced rates. A rough indicator of the tax yield is the ratio of the share of VAT revenues to consumption, divided by the standard rate. This ratio (46.4% in 2003) is below the OECD average (52.9%) and way below that in New Zealand (96.4%) (OECD, 2006). There is thus room to broaden the base; although this would have distributional implications, these would be best addressed through other policies. Once the base has been broadened there may be room to raise the rate later on. A one percentage point increase in the standard VAT rate yields about £4.5 billion in tax revenues. Policy-makers should continue to explore the potential for the more radical reform options discussed above, all of which have merits and drawbacks and have been little tested in other countries.

### Box 5.6. Options for reforming corporate taxation

- Continue to cut the statutory corporate tax rate and broaden the base.
- Shift taxation to less mobile sources and reduce the corporate tax rate. The VAT base could be broadened and the rate is relatively low.
- Look into the merit of moving to a dividend exemption system.
- Reduce the complexity of the tax code.
- Mull over more radical reform options. All options have advantages and drawbacks and their relative merits would need to be assessed carefully.



## Notes

1. Devereux *et al.* (2004) and de Mooij and Nicodème (2007) find that higher profitability and increased size of the corporate sector have also played an important role. There may also be tax base shifting towards corporate taxation, if corporate taxation is lower than personal taxation. It is therefore important to view the tax system as a whole.
2. An exception is Malta which has a statutory rate of 35%, the third highest in the Union.
3. See Zodrow and Mieszkowski (1986) and Wilson (1986).
4. It is possible that firms are more likely to opt to incorporate where the corporate tax is lower. For example, Germany and the United States might have low corporate profits partly because many firms choose other organisational forms that are not subject to corporate taxes (in Germany partnerships and in the US S-corporations).
5. In Figure 5.1 only 19 OECD countries are included and of these 13 are in the EU15 (not including Denmark and Luxembourg). The average statutory rate for the EU13 and the OECD19 is very close.
6. The number on the length of the tax code covers all taxes, not only corporate income tax, but the length of the code is of importance as 84% of all tax payments are remitted by businesses.
7. This is an estimate and consists of £0.5 billion in R&D tax credits, £4.5 billion for the small companies reduced tax rate, £0.3 billion in exemptions for gains on substantial shareholdings, £1.3 billion in structural reliefs for life companies, £6 billion in taper relief and £10 billion in double taxation relief. The latter could, of course, not be removed without putting UK companies at an enormous disadvantage.
8. Moving to a common corporate tax base at the EU level is under scrutiny, while rulings by the European Court of Justice have the potential to undermine tax revenue. As they have an EU-wide dimension they are not discussed here.
9. The options discussed are based on Devereux and Sørensen (2006); Griffith *et al.* (2007); Auerbach *et al.* (2007) and chapter 5 of CESifo (2007).
10. A tax on the income from domestic and foreign capital owned by residents would not affect the location of companies. It would be a tax on savings that would ensure capital export neutrality as the tax treatment of domestic and outbound foreign investment is the same.

## References

- Adam, S., J. Browne and C. Heady (2007), "Taxation in the UK", draft paper prepared for the IFS Conference on "Reforming the Tax System for the 21st Century: The Mirrlees Review", Cambridge, 12 April, available at: [www.ifs.org.uk/mirrleesreview/publications.php](http://www.ifs.org.uk/mirrleesreview/publications.php).
- Auerbach, A., M. Devereux and H. Simpson (2007), "Taxing Corporate Income", draft paper prepared for the IFS Conference on "Reforming the Tax System for the 21st Century: The Mirrlees Review", Cambridge, 12 April, available at: [www.ifs.org.uk/mirrleesreview/publications.php](http://www.ifs.org.uk/mirrleesreview/publications.php).
- Bank of England, (2006), *Inflation Report*, Bank of England, London, August.
- CBI (Confederation of British Industry) (2007), "Recommendations for the 2007 Budget", Report by the Confederation of British Industry, March, available at: [www.cbi.org.uk/pdf/budgetrecommendations2007.pdf](http://www.cbi.org.uk/pdf/budgetrecommendations2007.pdf).
- CESifo (2007), *The EEAG Report on the European Economy 2007*, European Economic Advisory Group at CESifo, Munich.
- Devereux, M., R. Griffith and A. Klemm (2004), "How has the UK Corporation Tax Raised so much Revenue", *IFS Working Paper*, No. W04/04, Institute for Fiscal Studies, London.
- Devereux, M., B. Lockwood and M. Redoano (2005), "Do Countries Compete over Corporate Tax Rates?", *Working Paper*, Oxford University Centre for Business Taxation.
- Devereux, M. and P.B. Sørensen (2006), "The Corporate Income Tax: International Trends and Options for Fundamental Reform", *European Economy – Economic Papers*, No. 264, European Commission, Brussels.
- Devereux, M. (2007), "The Impact of Taxation on the Location of Capital, Firms and Profit: A Survey of Empirical Evidence", *Working Papers*, No. WP07/02, Oxford University Centre for Business Taxation.

- Elschner, C. et al. (2006), "The Effective Tax Burden on Companies and of Highly Skilled Manpower: Tax Policy Strategies in a Globalised Economy", *Fiscal Studies*, Vol. 27, No. 4, Blackwell Publishing.
- Ernst & Young (2006), "European Attractiveness Survey: Team Europe Defends its Goals", available at: [www.ey.com/global/Content.nsf/International/Press\\_Release\\_-\\_European\\_Attractiveness\\_Survey\\_2006](http://www.ey.com/global/Content.nsf/International/Press_Release_-_European_Attractiveness_Survey_2006).
- Griffith, R., J. Hines and P.B. Sørensen (2007), "International Capital Taxation", draft paper prepared for the IFS Conference on "Reforming the Tax System for the 21st Century: The Mirrlees Review", Cambridge, 12 April, available at: [www.ifs.org.uk/mirrleesreview/publications.php](http://www.ifs.org.uk/mirrleesreview/publications.php).
- Hawkins, M. et al. (2002), "Budget 2002: Business Taxation Measures", *IFS Briefing Notes*, No. BN24, Institute for Fiscal Studies, London.
- HM Treasury and Inland Revenue (2003), "Corporation Tax Reform. A Consultation Document", August, available at: [www.hm-treasury.gov](http://www.hm-treasury.gov).
- HM Treasury and HMRC (2007), "Taxation of Companies' Foreign Profits: Discussion Document", June, available at: [www.hm-treasury.gov](http://www.hm-treasury.gov).
- HMRC (HM Revenue and Customs) (2007), "Estimated Costs of the Principal Tax Expenditures and Structural Reliefs", HM Revenue and Customs, April, available at: [www.hmrc.gov.uk/stats/tax\\_expenditures/table1-5.pdf](http://www.hmrc.gov.uk/stats/tax_expenditures/table1-5.pdf).
- Krogstrup, S. (2004), "A Synthesis of Recent Development in the Theory of Capital Tax Competition", *EPRU Working Paper Series*, No. 04-02, Economic Policy Research Unit, University of Copenhagen.
- de Mooij, R.A. and G. Nicodème (2007), "Corporate Tax Policy, Entrepreneurship and Incorporation in the EU", *European Economy – Economic Papers*, No. 269, European Commission, Brussels.
- Nicodème, G. (2006), "Corporate Tax Competition and Coordination in the European Union: What Do We Know? Where Do We Stand?", *European Economy – Economic Papers*, No. 250, European Commission, Brussels.
- Nicoletti, G. et al. (2007), "Taxation, Business Environment and FDI Location in OECD Countries", *OECD Economic Studies*, No. 43, Vol. 2006/2, OECD, Paris.
- OECD (2005), *Trends in International Migration*, OECD, Paris.
- OECD (2006), *Consumption Tax Trends*, OECD, Paris.
- OECD (2007), "Tax Effects on Foreign Direct Investment", *OECD Tax Policy Studies*, No. 17, OECD, Paris, forthcoming.
- PWC (PricewaterhouseCoopers) (2006), "Enterprise in the UK: Impact of the UK Tax Regime for Private Companies. A PricewaterhouseCoopers Survey", PricewaterhouseCoopers, July.
- PWC and the World Bank (2006), "The Increasing Burden of Tax Administration and Compliance", *Paying Taxes: The Global Picture*, PricewaterhouseCoopers.
- Slemrod, J., J. Whiting and J. Shaw (2007), "Tax Implementation Issues in the United Kingdom", draft paper prepared for the IFS Conference on "Reforming the Tax System for the 21st Century: The Mirrlees Review", Cambridge, 12 April, available at: [www.ifs.org.uk/mirrleesreview/publications.php](http://www.ifs.org.uk/mirrleesreview/publications.php).
- Smith, S. (2007), "VAT Fraud and Evasion", *The IFS Green Budget*, Institute for Fiscal Studies and Morgan Stanley, London.
- Wilson, J.D. (1986), "A Theory of Interregional Tax Competition", *Journal of Urban Economics*, Vol. 19, No. 3, Elsevier BV.
- Zodrow, G.R. and P. Mieszkowski (1986), "Pigou, Tiebout, Property Taxation, and the Underprovision of Local Public Goods", *Journal of Urban Economics*, Vol. 19, No. 3, Elsevier BV.

## Glossary

<b>A8</b>	Eight countries that joined the EU in 2004 (Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovak Republic, Slovenia)
<b>ACT</b>	Advanced corporation tax
<b>AEN</b>	Additional educational needs
<b>AETR</b>	Average effective tax rate
<b>AR</b>	Average of relatives
<b>CPI</b>	Consumer price index
<b>CVA</b>	Contextual value added
<b>DEL</b>	Departmental expenditure limit
<b>DfES</b>	Department for Education and Skills
<b>DSG</b>	Dedicated schools grant
<b>DTI</b>	Department of Trade and Industry
<b>DWP</b>	Department for Work and Pensions
<b>EMA</b>	Education maintenance allowance
<b>ESA</b>	Employment and support allowance
<b>EU</b>	European Union
<b>EU15</b>	European Union, first 15 member states
<b>FDI</b>	Foreign direct investment
<b>FSM</b>	Free school meals
<b>G7</b>	Group of 7 countries (Canada, France, Germany, Italy, Japan, United Kingdom and United States)
<b>GCSE</b>	General Certificate of Secondary Education
<b>GDP</b>	Gross domestic product
<b>GM</b>	Geometric mean
<b>HICP</b>	Harmonised index of consumer prices
<b>HMRC</b>	HM Revenue and Customs
<b>IALS</b>	International adult literacy survey
<b>ICT</b>	Information and communication technology
<b>IPS</b>	International passenger survey
<b>LA</b>	Local authorities
<b>LFS</b>	Labour force survey
<b>LHA</b>	Local housing allowance
<b>METR</b>	Marginal effective tax rate
<b>MFG</b>	Minimum funding guarantee
<b>MFP</b>	Multifactor productivity
<b>MNE</b>	Multinational enterprise
<b>NAO</b>	National Audit Office
<b>NHS</b>	National Health Service

<b>NINo</b>	National insurance number
<b>OFSTED</b>	Office for Standards in Education
<b>ONS</b>	Office for National Statistics
<b>PCA</b>	Personal capability assessment
<b>PFI</b>	Private Finance Initiative
<b>PIAAC</b>	Programme for international assessment of adult competences
<b>PIRLS</b>	Progress in international reading literacy study
<b>PISA</b>	Programme for international student assessment
<b>R&amp;D</b>	Research and development
<b>RA</b>	Ratio of averages
<b>RPI</b>	Retail price index
<b>RPIX</b>	Retail price index excluding mortgage interest payments
<b>RSCA</b>	Revealed symmetric comparative advantage
<b>SEN</b>	Special educational needs
<b>SME</b>	Small and medium-sized enterprises
<b>TFP</b>	Total factor productivity
<b>TIMSS</b>	Trends in international mathematics and science study
<b>VAT</b>	Value added tax
<b>UK</b>	United Kingdom
<b>US</b>	United States
<b>WRS</b>	Worker registration scheme

## Table of contents

<b>Executive summary</b> .....	8
<b>Assessment and recommendations</b> .....	9
<b>Chapter 1. Making the most of globalisation</b> .....	17
Recent macroeconomic performance and outlook .....	18
Fiscal policy .....	23
Globalisation has contributed to strong productivity growth .....	30
Significant challenges remain .....	46
Notes .....	50
References .....	52
Annex 1.A1. Progress in structural reform .....	54
<b>Chapter 2. Raising education achievement within a tighter budget constraint</b> .....	57
Globalisation is raising the level of skills demanded in advanced economies .....	58
Education participation rates are low but picking up .....	59
Education is an important tool for spreading the gains from globalisation .....	62
Government policy initiatives have focused on sharpening incentives and higher overall spending .....	65
Higher spending on education does not automatically improve outcomes .....	70
The government has made an effort to increase spending where the return is greatest .....	70
Local authorities have flattened the distribution of education spending .....	73
Other analysis also suggests room to improve education spending efficiency .....	77
Notes .....	79
References .....	81
<b>Chapter 3. Improving work prospects for the least skilled</b> .....	83
Recent labour market developments .....	85
Policies to improve labour market outcomes for the least skilled .....	91
Active labour market policies .....	101
Notes .....	104
References .....	105
Annex 3.A1. Migration data .....	108
<b>Chapter 4. Addressing the productivity gap</b> .....	113
Labour productivity growth has slowed down slightly .....	114
Restrictive planning regulations hinder productivity growth by limiting new firm entry .....	116
Low overall product market restrictions but growing tax complexities and red tape .....	121

Is investment in R&D and adult learning too low? . . . . .	122
Notes . . . . .	131
References . . . . .	132
<b>Chapter 5. Tax competition: How to remain competitive?</b> . . . . .	135
The UK corporate tax system in international comparison . . . . .	141
How to stay competitive and still raise revenue? . . . . .	146
Summing up . . . . .	149
Notes . . . . .	150
References . . . . .	150
<b>Glossary</b> . . . . .	153
<b>Boxes</b>	
1.1. The case for a new inflation index . . . . .	21
1.2. Recent changes to the State Pension System . . . . .	26
1.3. Improving the fiscal rules . . . . .	27
1.4. The City: How safe is the cluster? . . . . .	40
1.5. Globalisation and monetary policy . . . . .	43
2.1. Raising education participation: Coercion or compulsion? . . . . .	61
2.2. Sophisticated benchmarking to assess school performance . . . . .	66
2.3. Funding formulas <i>versus</i> flexibility: The allocation of education spending in England . . . . .	75
2.4. Summary of recommendations on education . . . . .	78
3.1. Take-home pay for minimum wage earners . . . . .	92
3.2. The Working Tax Credit and other means-tested benefits . . . . .	95
3.3. Pathways to Work . . . . .	101
3.4. Labour market recommendations . . . . .	103
4.1. The Barker Review of Land Use Planning . . . . .	120
4.2. Recommendations on enhancing productivity . . . . .	130
5.1. Tax competition for personal income tax revenues . . . . .	137
5.2. Which tax rate matters for what? . . . . .	138
5.3. OECD work on cross-border issues in corporate taxation . . . . .	140
5.4. The UK's corporate tax system . . . . .	141
5.5. The VAT carousel fraud . . . . .	148
5.6. Options for reforming corporate taxation . . . . .	149
<b>Tables</b>	
1.1. Estimated value of various future public sector obligations . . . . .	25
2.1. Average PISA scores by percentile ranking: Top seven performers <i>versus</i> the United Kingdom . . . . .	64
2.2. Proportion of pupils attaining GCSE benchmarks . . . . .	65
3.1. Wage dispersion in the United Kingdom . . . . .	86
3.2. Growth in real median wages in selected OECD countries . . . . .	87
3.3. Changes in disposable income shares by quintile . . . . .	88
3.4. Working Tax Credit elements . . . . .	95
3.5. Marginal effective tax rates for different earnings transitions . . . . .	97
3.6. Marginal effective tax rates for part-time employees . . . . .	98
3.A1.1. Number of registrations in the worker registration scheme . . . . .	110

3.A1.2. National insurance number registrations . . . . .	110
4.1. Output and productivity growth and the components of output growth. . . . .	115
4.2. Proportion of R&D performed by multinational enterprises . . . . .	125
5.1. Corporation tax rates in the United Kingdom . . . . .	141
5.2. Reductions in the statutory corporate tax rate in the European Union . . . . .	145
5.3. Tax complexity . . . . .	146

## Figures

1.1. Key indicators in long-term and international perspective . . . . .	19
1.2. Wage inflation more stable than CPI inflation . . . . .	20
1.3. Alternative measures of inflation. . . . .	22
1.4. Successive budget forecasts have had a similar end-point . . . . .	24
1.5. Government expenditure and revenue . . . . .	28
1.6. Trade indicators . . . . .	31
1.7. Foreign direct investment in the G7 – flows and stocks . . . . .	32
1.8. The resource shift from manufacturing to services can be seen in value added shares and in employment. . . . .	33
1.9. Trade data also illustrate the UK’s comparative advantage in services. . . . .	34
1.10. RSCA correlations between selected OECD countries and the dynamic Asian economies . . . . .	35
1.11. The sectoral composition of output . . . . .	37
1.12. The labour productivity advantage of foreign affiliates . . . . .	39
1.13. Many traded goods prices have fallen by more in the United Kingdom than in the euro area . . . . .	41
1.14. Goods prices inflation <i>versus</i> services . . . . .	42
1.15. The United Kingdom has benefited from a gain in the terms of trade. . . . .	44
1.16. Command GDP adjustment to annual average GDP growth rate . . . . .	44
1.17. Labour share of income . . . . .	45
1.18. Recent unemployment trends. . . . .	48
1.19. There is still a substantial productivity gap with the United States . . . . .	49
1.20. Tax revenue by source . . . . .	49
2.1. Employment share by job quality decile . . . . .	58
2.2. Educational attainment by age group and PISA performance . . . . .	60
2.3. Intergenerational earnings elasticity – estimates from various studies. . . . .	63
2.4. The best performing countries have the most homogenous outcomes. . . . .	64
2.5. Attainment gaps across schools by deprivation level . . . . .	69
2.6. Higher spending does not automatically translate into higher attainment . . . . .	71
2.7. Education resources in the United Kingdom are not high but they are rising . . . . .	72
2.8. Real expenditure growth has increased across all levels of education. . . . .	73
2.9. Measures of education productivity. . . . .	77
3.1. Indicators of labour mobility. . . . .	85
3.2. Trends in earnings inequality . . . . .	86
3.3. Earnings growth by income percentiles. . . . .	87
3.4. Employment rate for low-skilled workers. . . . .	89
3.5. Share of working-age population receiving disability benefits . . . . .	90
3.6. Comparison of minimum wages and median earnings . . . . .	91
3.7. Take-home pay for a minimum wage earner: selected OECD countries . . . . .	92
3.8. Tenth percentile earnings premium over the minimum wage . . . . .	93



3.9.	Contributions to marginal effective tax rates . . . . .	97
3.10.	Implicit tax on returning to work . . . . .	100
3.11.	Pathways to Work increases the off-flow from incapacity benefit . . . . .	102
4.1.	Labour productivity . . . . .	116
4.2.	Productivity gap relative to the United States . . . . .	117
4.3.	Firm turnover and labour productivity . . . . .	118
4.4.	Procedures for a business in the construction industry . . . . .	119
4.5.	Product market regulation and labour productivity . . . . .	122
4.6.	ICT investment in OECD countries . . . . .	123
4.7.	Share of research and development financed from abroad . . . . .	125
4.8.	Transport infrastructure spending . . . . .	128
4.9.	Time spent on professional training . . . . .	129
5.1.	Corporate tax rates and revenues . . . . .	136
5.2.	Average and marginal effective tax rates . . . . .	138
5.3.	Corporate tax rates and taxable corporate income . . . . .	139
5.4.	Statutory corporate tax rates in international comparison . . . . .	143
5.5.	Effective tax rates . . . . .	144

*This Survey is published on the responsibility of the Economic and Development Review Committee of the OECD, which is charged with the examination of the economic situation of member countries.*

*The economic situation and policies of the United Kingdom were reviewed by the Committee on 5 September 2007. The draft report was then revised in the light of the discussions and given final approval as the agreed report of the whole Committee on 14 September 2007.*

*The Secretariat's draft report was prepared for the Committee by Anne-Marie Brook, Åsa Johansson, Petar Vujanovic and Marte Sollie under the supervision of Peter Hoeller. Research assistance was provided by Desney Erb.*

*The previous Survey of the United Kingdom was issued in November 2005.*

**This book has...**



**StatLinks** 

**A service that delivers Excel® files  
from the printed page!**

Look for the *StatLinks* at the bottom right-hand corner of the tables or graphs in this book. To download the matching Excel® spreadsheet, just type the link into your Internet browser, starting with the <http://dx.doi.org> prefix.

If you're reading the PDF e-book edition, and your PC is connected to the Internet, simply click on the link. You'll find *StatLinks* appearing in more OECD books.

## BASIC STATISTICS OF THE UNITED KINGDOM (2006)

### THE LAND

Area (2005, 1 000 km <sup>2</sup> )		Major cities (2005, thousand inhabitants)	
Total	242	Greater London	7 518
Agricultural	185	Birmingham	1 001
		Leeds	723
		Glasgow (local government district)	579

### THE PEOPLE

Thousands		Total labour force (thousands)	30 630
Population	60 587	Civilian employment (% of total)	
Net increase (annual average 2001-05)	274	Agriculture, forestry and fishing	1.3
Number of inhabitants per km <sup>2</sup>	250	Industry and construction	22.0
		Services	76.4

### PRODUCTION

Gross domestic product		Gross fixed capital investment	
In £ billion	1 300	In % of GDP	18.1
Per head (\$)	39 519	Per head (\$)	7 138

### THE GOVERNMENT

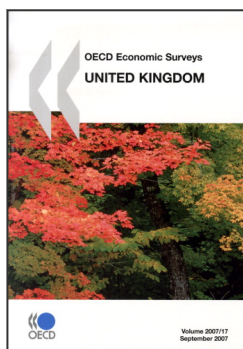
Public consumption (% of GDP)	22.1	Composition of House of Commons (seats)	
General government (% of GDP)		Labour	351
Current and capital expenditure	44.6	Conservatives	195
Current revenue	41.6	Liberal Democrat	63
Net debt	39.5	Other	37
Last general elections: 5 May 2005		Total	646

### FOREIGN TRADE

Exports of goods and services (% of GDP)	28.4	Imports of goods and services (% of GDP)	32.6
Main commodity exports (% of total)		Main commodity imports (% of total)	
Electrical machinery	22.7	Manufactured goods and articles	25.2
Manufactured goods and articles	22.0	Electrical machinery	25.0
Chemicals	15.2	Road vehicles	10.0
Mechanical machinery	11.6	Fuels	9.8

### THE CURRENCY

Monetary unit: Pound sterling		August 2007, monthly average of spot rate	
		£ per \$	0.497
		£ per €	0.677



**From:**  
**OECD Economic Surveys: United Kingdom 2007**

**Access the complete publication at:**  
[https://doi.org/10.1787/eco\\_surveys-gbr-2007-en](https://doi.org/10.1787/eco_surveys-gbr-2007-en)

**Please cite this chapter as:**

OECD (2007), "Tax competition: How to remain competitive?", in *OECD Economic Surveys: United Kingdom 2007*, OECD Publishing, Paris.

DOI: [https://doi.org/10.1787/eco\\_surveys-gbr-2007-7-en](https://doi.org/10.1787/eco_surveys-gbr-2007-7-en)

This work is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of OECD member countries.

This document and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

You can copy, download or print OECD content for your own use, and you can include excerpts from OECD publications, databases and multimedia products in your own documents, presentations, blogs, websites and teaching materials, provided that suitable acknowledgment of OECD as source and copyright owner is given. All requests for public or commercial use and translation rights should be submitted to [rights@oecd.org](mailto:rights@oecd.org). Requests for permission to photocopy portions of this material for public or commercial use shall be addressed directly to the Copyright Clearance Center (CCC) at [info@copyright.com](mailto:info@copyright.com) or the Centre français d'exploitation du droit de copie (CFC) at [contact@cfcopies.com](mailto:contact@cfcopies.com).