

Taxation in the UK

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***** *Incomplete draft of March 2007: not for quotation******

1. Introduction

This paper provides an assessment of the UK tax system, placing it in historical, international and theoretical contexts. We begin in Section 2 by outlining the evolution of the size and composition of tax revenues in the UK since 1979 and comparing this with developments in other EU and OECD countries. Section 3 describes what has happened to the design of major taxes over the same period and compares this with worldwide trends in tax reform. The economic analysis of these developments is taken up in Section 4, which examines their effect on income distribution and incentives to work, save and invest. Section 5 concludes with a summary of the main issues raised. An Annex describes each of the main taxes in 2006–07.

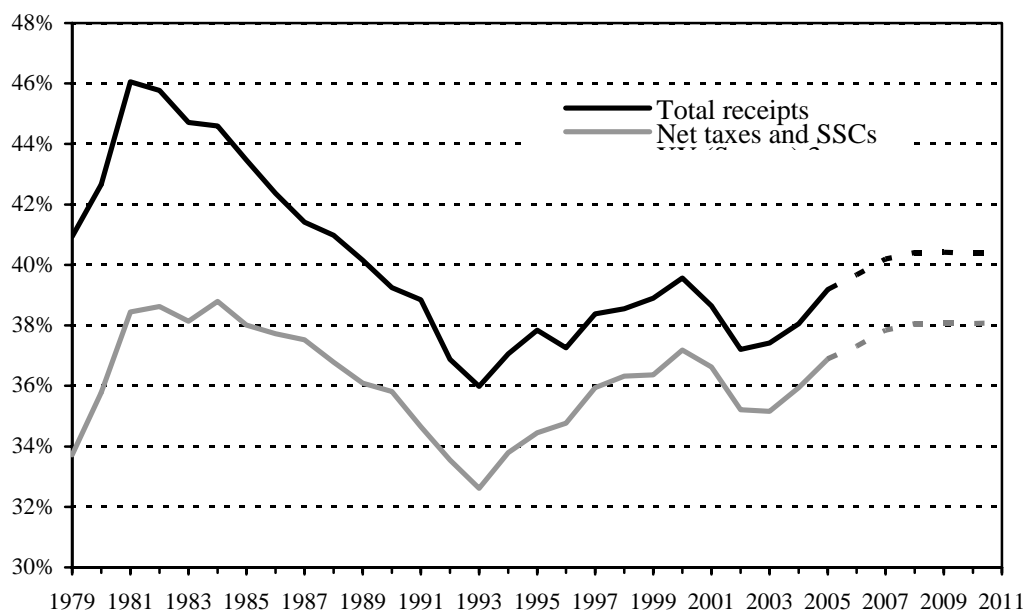
2. The level and composition of revenues

Total UK government receipts are forecast to be £517.9 billion in 2006–07, or 39.7% of UK GDP. This is equivalent to roughly £10,600 for every adult in the UK, or £8,600 per person. Not all of this comes from taxes (or social security (National Insurance) contributions): net taxes and social security contributions are forecast to raise £487.1 billion in 2006–07, with the remainder provided by profits of public-sector industries, rent from state-owned properties and so on.

Figure 1 shows the development in total government revenues and tax revenues since 1979. Receipts rose sharply as a proportion of GDP from 1979 to 1981, fell steadily from the early 1980s until the mid-1990s, but have risen again under the current government and are forecast to continue rising for the next two years before levelling off at 40.4% of GDP from 2008–09 onwards. The share of non-tax revenues fell substantially over the 1980s and 1990s as many public sector industries were privatised, so that, although total receipts are now slightly lower than in 1979 as share of GDP, tax revenues are slightly higher.

¹ Addresses for correspondence: stuart.adam@ifs.org.uk, j.browne@ifs.org.uk, christopher.HEADY@oecd.org. This chapter draws heavily on the IFS's *Survey of the UK Tax System* (www.ifs.org.uk/bns/bn09.pdf), which is updated annually and was itself based on the UK chapter by A. Dilnot and G. Stears in K. Messere (ed.), *The Tax System in Industrialized Countries*, Oxford University Press, Oxford, 1998. The authors would like to thank...

Figure 1. The tax burden, % of GDP

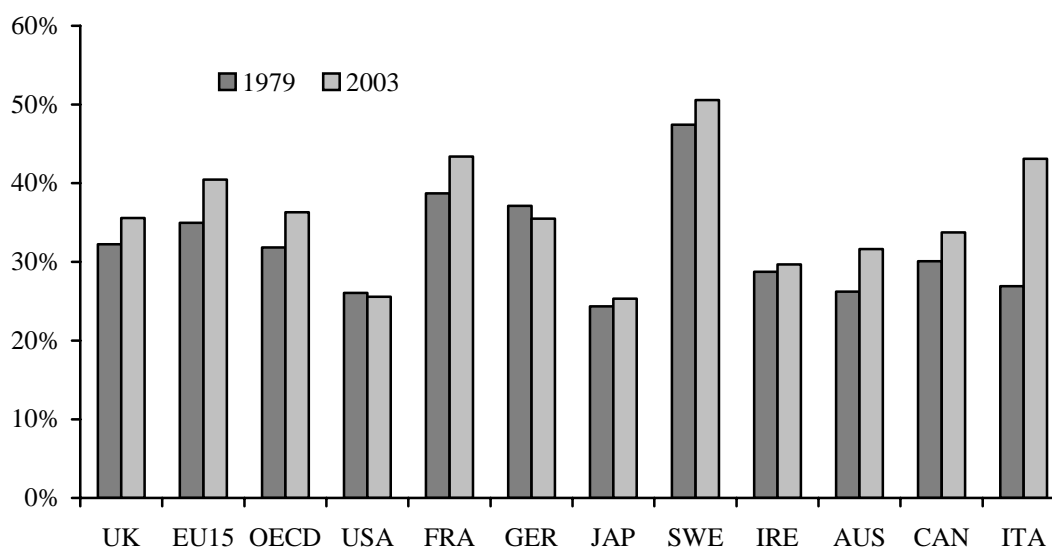


Sources: HMT, ONS

Figure 2 places this increase in tax revenue in an international context. Between 1979 and 2003, most OECD countries experienced an increase in their tax-to-GDP ratios, and the UK's increase was smaller than most. In 1979, the UK's tax-to-GDP ratio was about one percentage point higher than the OECD (unweighted) average but in 2003 was almost equal to it, and significantly below the EU15 (unweighted) average.²

² All international averages in this chapter are unweighted unless otherwise noted. The EU15 countries are members of the EU prior to the 2004 expansion, namely Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden and the UK. The OECD countries included vary over time because OECD membership changed and figures are not always available for all countries.

Figure 2. Tax revenues as a share of GDP



Notes: Taxes and SSCs
Source: OECD

Table 1 shows the composition of UK government revenue. Income tax, National Insurance contributions and VAT are easily the largest sources of revenue for the government, together accounting for 60.1% of total receipts. Figure 3 summarises how the composition of revenues has changed over the last thirty years. The main increases in revenue share have been in VAT, corporation tax and 'other capital taxes' (principally stamp duties and what is now inheritance tax), while there has been a reduction in other indirect taxes (mainly excise duties) and non-tax revenues (other receipts). The move from excise duties to VAT has been particularly dramatic, and follows a worldwide trend. Personal income tax fell over the first fifteen years but has since recovered its share; a similar pattern can be seen for recurrent taxes on buildings, but for different reasons: the replacement of domestic rates by the community charge (poll tax) dramatically reduced revenues from property taxes, but then the replacement in turn of the poll tax by council tax restored property's share.

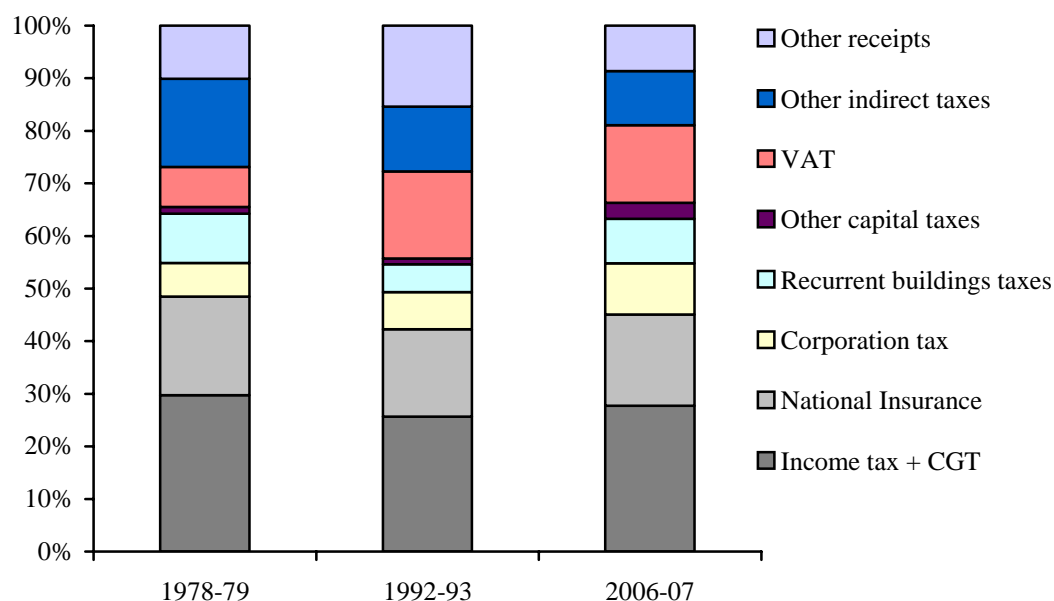
Table 1: Sources of government revenue, 2006–07 forecasts

Source of revenue	Forecast 2006–07 (£bn)	Proportion of total receipts(%)
Income tax (gross of tax credits)	144.0	27.9
National Insurance contributions	89.6	17.4
Value added tax	76.5	14.8
Other indirect taxes		
Fuel duties	24.0	4.6
Tobacco duties	8.0	1.5
Alcohol duties	8.1	1.6
Betting and gaming duties	1.4	0.3
Vehicle excise duty	5.1	1.0
Air passenger duty	1.0	0.2
Insurance premium tax	2.4	0.5
Landfill tax	0.8	0.2
Climate change levy	0.7	0.1
Aggregates levy	0.3	0.1
Customs duties and levies	2.2	0.4
Capital taxes		
Capital gains tax	3.8	0.7
Inheritance tax	3.6	0.7
Stamp duties	12.2	2.4
Company taxes		
Corporation tax	49.0	9.5
Petroleum revenue tax	1.9	0.4
Business rates	21.4	4.1
Council tax (net of council tax benefit)	22.0	4.3
Other taxes and royalties	13.6	2.6
Interest and dividends	5.7	1.1
Gross operating surplus, relevant tax credits, other receipts and adjustments	19.0	3.7
Current receipts	516.4	100.0

Note: Figures may not sum exactly to totals because of rounding.

Source: HM Treasury, *Financial Statement and Budget Report*, 2006 (http://www.hm-treasury.gov.uk/budget/budget_06/bud_bud06_index.cfm).

Figure 3. The composition of revenues



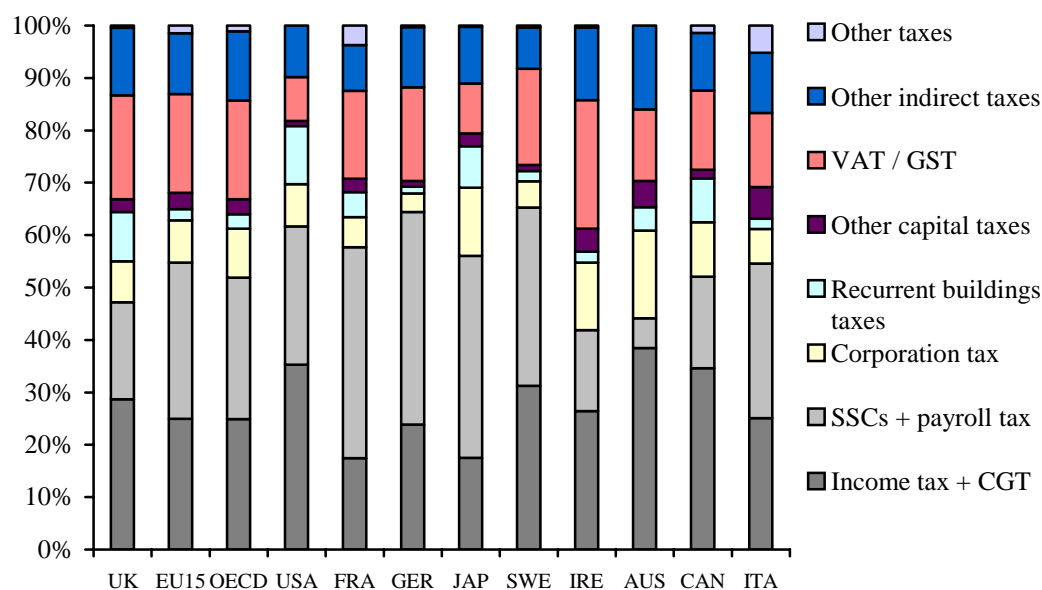
Notes: Current receipts. 2006–07 figures are forecasts. For 1978–79, income tax includes surtax and National Insurance includes National Insurance surcharge.

Sources: HM Treasury, *Financial Statement and Budget Report*, 1979 and 2006 (http://www.hm-treasury.gov.uk/media/20F/42/bud06_chc_247.pdf) and various *Public Sector Finances Databank*.

Figure 4 compares the structure of tax revenues in the UK with that in other OECD countries. The UK particularly stands out with its relatively low (but not lowest) share of social security contributions³ and its relatively high share of recurrent taxes on buildings (although these are also relatively high in the USA, Japan and Canada). It is also somewhat above average in the share of personal income tax, but several countries have even higher shares.

³ This category also includes payroll taxes (which do not give entitlement to contributory benefits) for those few countries have them. The most significant example in this set of countries is Australia, which does not have social security contributions but does levy payroll taxes.

Figure 4. The composition of revenues 2003

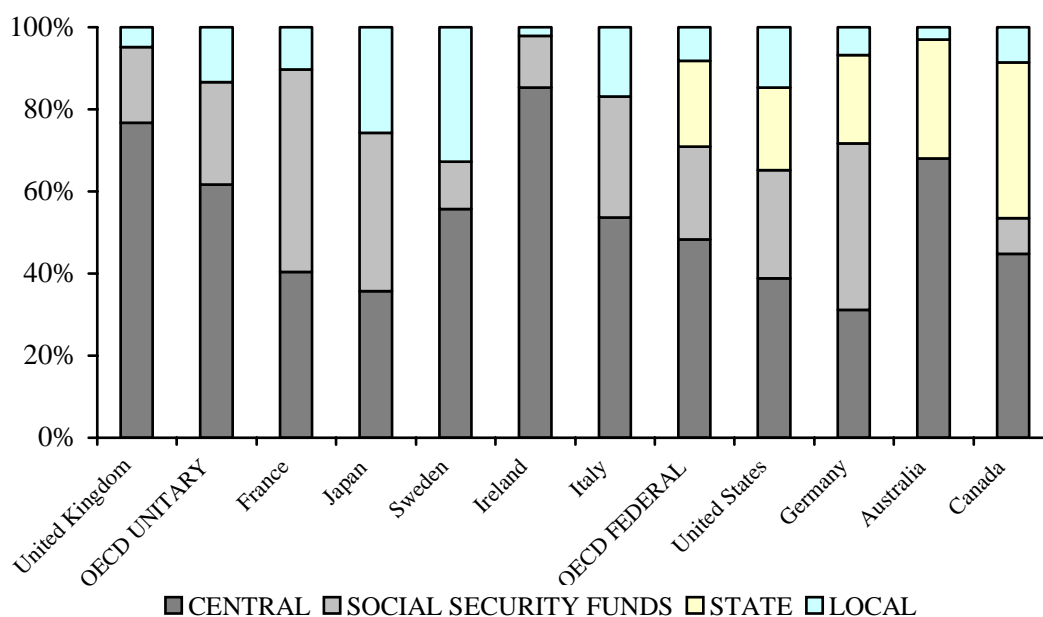


Notes: Taxes and SSCs
Source: OECD

Figure 5 compares the distribution of revenues by levels of government in the UK to the averages of OECD unitary countries and OECD federal countries, and a selection of individual unitary and federal countries.⁴ This comparison shows that the UK has a particularly large share of revenue going to central government, a share that is exceeded only by Ireland. This is reflected in the fact that UK local governments are particularly dependent on grants from central government, rather than tax revenues of their own.

⁴ This Figure attributes revenue to levels of government on the basis of their legal entitlement rather than their control over the tax rate (or base). Thus the state level of government in both Germany and Australia receive a substantial part of their revenues from taxes whose rates are set at national level (although in consultation with state governments).

Figure 5. Revenues by level of government, 2003



Source: OECD

3. Development of the major taxes since 1979

Table 2 lists some of the most important changes in the UK tax system seen since 1979.⁵ It is clear that the tax system is now very different from the one that existed then. The income tax rate structure has been transformed, the taxation of saving has been repeatedly adjusted, the National Insurance contributions system has been overhauled, the VAT rate has more than doubled, some excise duty rates have risen sharply while others have fallen, the corporate income tax system has been subject to two wholesale reforms and many smaller changes, and local taxation is unrecognisable. Figure 3 and the associated discussion in section 2 show how these changes have been reflected in the composition of aggregate government revenue (although there have been other factors that play a part, such as booming house prices on stamp duties).

⁵For a timeline of the main tax changes introduced in each Budget since 1979, see www.ifs.org.uk/ff/budget_measures.xls.

Table 2: Summary of main reforms, 1979–2005

Income tax	<ul style="list-style-type: none"> Basic rate 33% down to 22% Top rate 98% (unearned income), 83% (earnings) down to 40% Starting rate 25% down to 10% Independent taxation introduced Married couple's allowance abolished Children's tax credit and working families' tax credit introduced, then abolished Child tax credit and working tax credit introduced Mortgage interest tax relief abolished Life assurance premium relief abolished PEP, TESSA and ISA introduced
National Insurance	<ul style="list-style-type: none"> Employee contribution rate increased from 6.5% to 11% Employer contribution rate reduced from 13.5% to 12.8% Ceiling abolished for employer contributions Ceiling for employees raised and contributions extended beyond it 'Entry rate' abolished and floor aligned with income tax allowance Imposition of NI on benefits in kind
VAT	<ul style="list-style-type: none"> Higher rate of 12.5% abolished Standard rate increased from 8% to 17.5% Reduced rate introduced for domestic fuel and a few other goods
Other indirect taxes	<ul style="list-style-type: none"> Large real rise in duties on road fuels Smaller increase in tobacco duties Slight real decrease in duties on beer, larger decline for spirits Small real increase in duties on wine Landfill tax, climate change levy and aggregates levy introduced
Capital taxes	<ul style="list-style-type: none"> Introduction of indexation allowance then taper relief for capital gains Capital gains tax rates aligned with income tax rates Capital transfer tax replaced by inheritance tax Graduated rates of stamp duty on properties abolished then reintroduced Stamp duty on shares and bonds cut from 2% to 0.5%
Corporation tax	<ul style="list-style-type: none"> Main rate cut from 52% to 30% Small companies' rate cut to 19% Lower rate introduced, cut to 0%, then abolished R&D tax credits introduced 100% first-year allowance replaced by 25% writing-down allowance Advance corporation tax and refundable dividend tax credit abolished
Local taxes	<ul style="list-style-type: none"> Domestic rates replaced by council tax (via poll tax) Locally varying business rates replaced by national business rates

PEP = Personal Equity Plan; TESSA = Tax-Exempt Special Savings Account; ISA = Individual Savings Account.

3.1 Personal income taxes

There are two principal personal income taxes in the UK: income tax and National Insurance contributions. Capital gains tax, which has existed as a tax separate from income tax since 1965, can also be thought of as a tax on personal income, but it supplies very little revenue compared with income tax or National Insurance.

Income tax rate structure

The most dramatic change to income tax has been the reform of the rate structure, as illustrated in Table 3. In 1978–79, there was a starting rate of 25%, a basic rate of 33% and higher rates ranging from 40% to 83%. In addition, an investment income surcharge of 15% was applied to those with very high investment income, resulting in a maximum income tax rate of 98%. In its first Budget, in 1979, the Conservative government reduced the basic rate of income tax to 30% and the top rate on earnings to 60%. In 1980, the starting rate was abolished; in 1984, the investment income surcharge was abolished; and through the mid-1980s, the basic rate of tax was reduced. In 1988, the top rate of tax was cut to 40% and the basic rate to 25%, producing a very simple regime with three effective rates – zero up to the personal allowance, 25% over a range that covered almost 95% of taxpayers and 40% for a small group of those with high incomes. The sharp reduction in top rates in 1979 was the start of an international trend, while the continued reductions of the basic are also part of an international trend.

Table 3: Income tax rates on earned income, 1978–79 to 2005–06

Year	Starting rate	Basic rate	Higher rates
1978–79	25	33	40–83
1979–80	25	30	40–60
1980–81 to 1985–86	—	30	40–60
1986–87	—	29	40–60
1987–88	—	27	40–60
1988–89 to 1991–92	—	25	40
1992–93 to 1995–96	20	25	40
1996–97	20	24	40
1997–98 to 1998–99	20	23	40
1999–2000	10	23	40
2000–01 to 2005–06	10	22	40

Notes: Prior to 1984–85, an investment income surcharge of 15% was applied to unearned income over £2,250 (1978–79), £5,000 (1979–80), £5,500 (1980–82), £6,250 (1982–83) and £7,100 (1983–84).

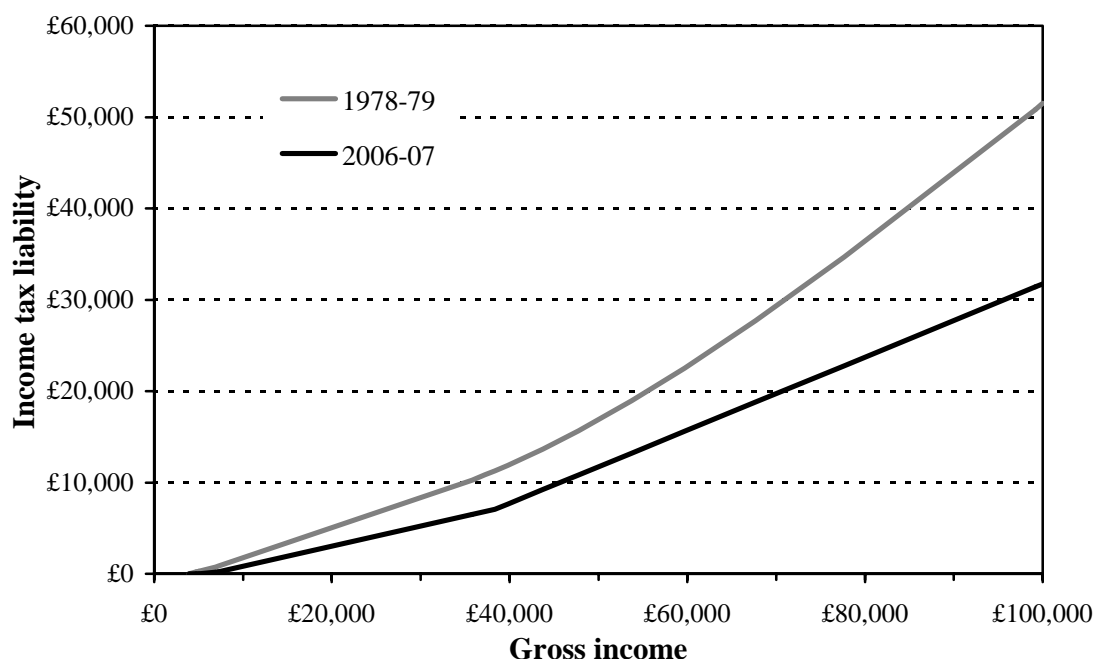
Different tax rates have applied to dividends since 1993–4 and to savings income since 1996–97. The basic rate of tax on savings income has been 20% since 1996–7. The basic rate of tax on dividends was 20% from 1993–94 to 1998–99 and 10% since 1999–2000, when the higher rate of tax on dividends became 32.5%. However, an offsetting dividend tax credit means that the effective tax rates on dividends have been constant at zero (basic rate) and 25% (higher rate) since 1993–94.

Sources: *Tolley's Income Tax*, various years.

This very simple rate structure was complicated by the reintroduction of a 20% starting rate of tax in 1992 (in a pre-election Budget), cut to 10% in 1999 (fulfilling a pre-election promise made by the Labour Party).

The income levels to which these various tax rates apply have changed significantly. Over the period as a whole, the basic-rate limit, beyond which higher-rate tax becomes due, has failed to keep pace with price inflation, whilst the personal allowance has risen in real terms. The overall effect of rate, allowance and threshold changes on the shape of the income tax schedule is shown in Figure 6, with 1978–79 values expressed in 2006 prices for ease of comparison.

Figure 6. Income tax schedule for earned income, 1978–79 and 2006–07



Notes: 1978–79 thresholds have been updated to April 2006 prices using the retail price index.

Assumes ...

Sources: HM Treasury, *Financial Statement and Budget Report*, various years; *Tolley's Income Tax*, various years; National Statistics, www.statistics.gov.uk.

Table 4 gives the numbers of people affected by the different tax rates. In 2006–07, out of an adult population in the UK of 49.0 million, an estimated 29.5 million individuals will be liable for income tax. This is a reminder that attempts to use income tax reductions to help the poorest in the country are likely to fail, since only three-fifths of the adult population have high enough incomes to pay income tax at all.⁶ The total number of income taxpayers has increased slowly over the years, while the number of higher-rate taxpayers has grown much more quickly, from less than 3% of the taxpaying population in 1979–80 to more than 11% in 2006–07. Some of this growth reflects periods when the threshold above which higher-rate tax is due has not been raised in line with price inflation, some reflects the fact that incomes on average have grown more quickly than prices, and some the fact that the dispersion of incomes has grown, with especially rapid increases in the incomes of those already towards the top of the income distribution, pushing more of them into higher-rate income tax liability.

⁶We might be more interested in the proportion of adults that live in a family containing a taxpayer. Authors' calculations using the IFS tax and benefit model, TAXBEN, run on data from the Family Resources Survey, suggest that this figure stood at 77% for Britain in 2004–05 (the latest year for which data are available): most non-taxpaying adults do not have taxpayers in the family.

Table 4: Numbers liable for income tax (thousands)

Year	Number of individuals paying tax	Number of starting-rate taxpayers ^a	Number of basic-rate taxpayers	Number of higher-rate taxpayers
1979–80	25,900	— ^b	25,226 ^b	674
1984–85	23,800	—	22,870	930
1989–90	25,600	—	24,040	1,560
1994–95	25,300	5,180	18,200	2,000
2000–01	29,300	3,830	22,600	2,880
2001–02	28,600	3,890	21,700	3,000
2002–03	28,900	3,830	22,000	3,040
2003–04	28,500	3,950	21,600	2,960
2004–05 ^c	28,900	4,070	21,800	3,100
2005–06 ^c	29,200	4,150	21,900	3,190
2006–07 ^c	29,500	4,210	22,000	3,290

^aIncludes those whose only income above the starting-rate limit is from either savings or dividends.

^bFigure for 1979–80 covers both starting-rate and basic-rate taxpayers.

^cProjected.

Sources: HM Revenue and Customs, http://www.hmrc.gov.uk/stats/income_tax/table2_1.pdf and table 2.1 in *Inland Revenue Statistics 1994*.

Although only 11% of income taxpayers face the higher rate, that group pays a very large share of the total amount of income tax that is paid. Table 5 shows that the top 10% of income taxpayers now pay over half of all the income tax paid, and the top 1% pay 21% of all that is paid. These shares have risen substantially since 1978–79, despite reductions in the higher rates.

Table 5: Shares of total income tax liability (%)

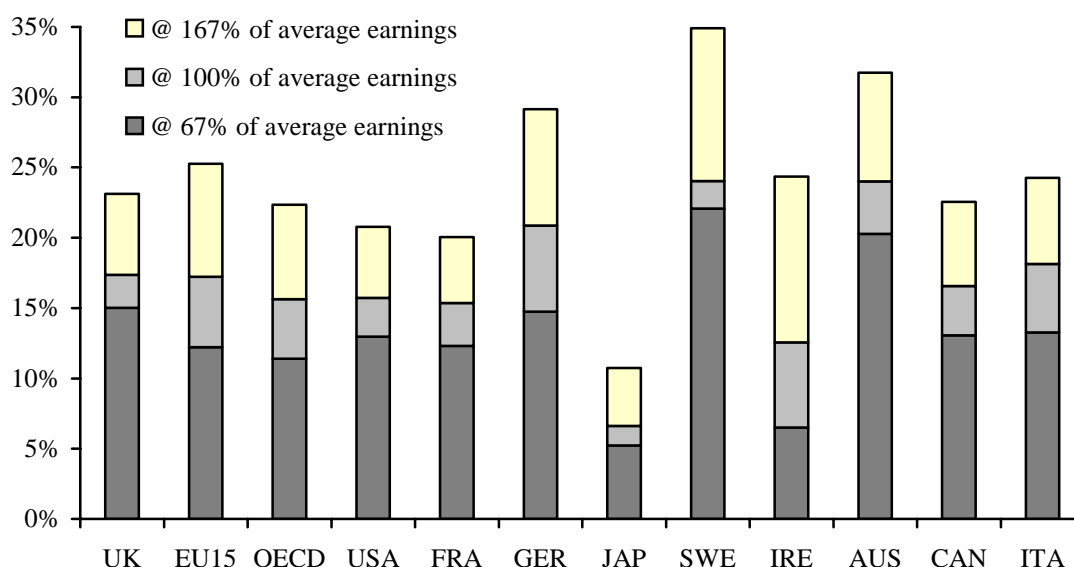
Year	Top 1% of income taxpayers	Top 10% of income taxpayers	Top 50% of income taxpayers
1978–79	11	35	82
1981–82	11	35	81
1986–87	14	39	84
1990–91	15	42	85
1993–94	16	44	87
1996–97	20	48	88
1998–99	21	49	88
2000–01	22	52	89
2001–02	22	52	89
2002–03	21	52	89
2003–04	21	51	89
2004–05 ^a	21	51	89
2005–06 ^a	21	51	89
2006–07 ^a	21	52	89

^aProjected.

Sources: HM Revenue and Customs: http://www.hmrc.gov.uk/stats/income_tax/table2_4.pdf and various *Inland Revenue Statistics*.

Figure 7 shows the 2005 income tax burden on single workers at 67%, 100% and 167% of average full-time earnings in the UK in comparison with other OECD countries. This shows that the UK applied relatively high income tax to low-paid workers, substantially higher than both the EU15 and OECD averages. Also, the progressivity of the income tax system – as shown by the increase in the burden on average and above-average earners – was less than average. Thus, the income tax burden on a single worker at 167% of average earnings is markedly less than the EU15 average and very similar to the OECD average.

Figure 7. The income tax burden for a single worker



Notes: [Assumes....]
Source: OECD

The treatment of families

Prior to 1990, married couples were treated as a single unit for income tax purposes. The 1970 Income and Corporation Taxes Act (in)famously announced that, for the purposes of income tax, ‘a woman’s income chargeable to tax shall ... be deemed to be her husband’s income and not her income’. Reflecting the ‘responsibilities’ taken on at marriage, the tax system also included a married man’s allowance (MMA). The system was widely felt to be unpalatable and a consensus emerged that a new system, neutral in its treatment of men and women, should be introduced. The new system introduced in 1990 was based on the principle of independent taxation of husbands and wives, but included a married couple’s allowance (MCA), which was available to either husband or wife. This established equal treatment of men and women, but not of married and unmarried people. In fact, married and unmarried people with children had been treated equally since 1973 through the additional personal allowance (APA), an allowance for unmarried people with children which was set equal to the MMA and then the MCA; but unequal treatment persisted for those without children.

Between 1993 and 2000, the MCA and APA were reduced in value, and they were eventually abolished in April 2000 (except the MCA for people aged 65 or over at

that date). A year later, children's tax credit was introduced, reducing the tax liability of those with children by a flat-rate amount (tapered away for higher-rate taxpayers) but making no distinction between married and unmarried people. Meanwhile, in-work support for low-paid families with children was brought within the tax system when working families' tax credit (WFTC) replaced family credit from October 1999.⁷ Children's tax credit and WFTC (along with parts of some state benefits) were replaced in April 2003 by child tax credit and working tax credit. Child tax credit provides support for low-income families with children irrespective of work status, while working tax credit provides support for low-income families in work whether or not they have children; but neither depends on marriage. In short, over the past 15 years, the UK income tax has moved away from providing support for marriage and towards providing support for children.

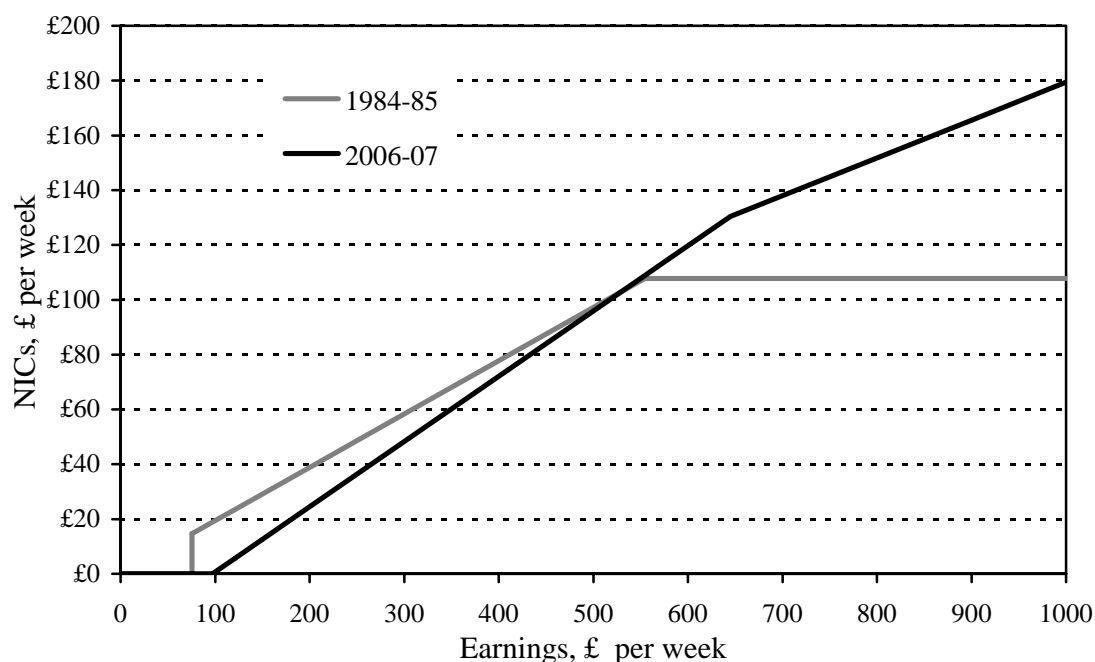
National Insurance contributions

National Insurance (social security) contributions originated as (typically) weekly lump-sum payments by employers and employees to cover the cost of certain social security benefits – in particular, the flat-rate pension, unemployment benefits and sickness benefits. Since 1961, however, National Insurance (NI) has steadily moved towards being simply another income tax. The link between the amount contributed and benefit entitlement, which was once close, has now almost entirely gone, and substantial progress has been made in aligning the NI rate structure and tax base with those of income tax. Most of this has occurred in the last 25 years.

Figure 8 shows the structure of the combined employee and employer NI system before the important 1985 reforms and as it stands in 2006–07, all expressed in 2006 prices.

⁷For more information on these two programmes, see A. Dilnot and J. McCrae, *Family Credit and the Working Families' Tax Credit*, IFS Briefing Note 3, 1999 (www.ifs.org.uk/bns/bn3.pdf).

Figure 8. National Insurance contributions schedule, 1984–85 and 2006–07



Notes: Previous years' thresholds have been updated to April 2006 prices using the retail price index. Assumes employee contracted into State Earnings-Related Pension Scheme (SERPS) or State Second Pension (S2P). The 1984–85 schedule excludes the 1% National Insurance surcharge abolished in September 1984.

Sources: HM Treasury, *Financial Statement and Budget Report*, various years; *Tolley's National Insurance Contributions*, various years; National Statistics, www.statistics.gov.uk.

In 1984–85, no NI was due for those earning less than the lower earnings limit (LEL). For those earning at least this amount, employees paid contributions of 9% and employers 10.45% of total employee earnings, including earnings below the LEL. This meant a jump in contributions at the LEL, and it is not surprising that this discontinuity led to significant bunching of earnings just below the LEL. The 1985 reform reduced the jump in NI at the LEL, introducing a number of graduated steps instead. The 5% 'entry rate' was later cut to 2% for employers, and the post-1997 Labour government has removed the entry rate altogether so that the earnings threshold in NI now operates in a similar way to the income tax personal allowance, essentially being discounted from taxable income. Furthermore, since April 2001, the earnings threshold for both employers and employees has been set at the same level as the income tax personal allowance.

The NI treatment of high earners has also come to resemble their treatment under income tax more, in that there is no longer a limit on payments. In 1984–85, no NI was payable on earnings above the upper earnings limit (UEL). The 1985 reform abolished the UEL for employers. The UEL is still in place for employees, but no longer acts as a cap on contributions: the one percentage point rise in NI rates in April 2003 extended employee NI to earnings above the UEL.

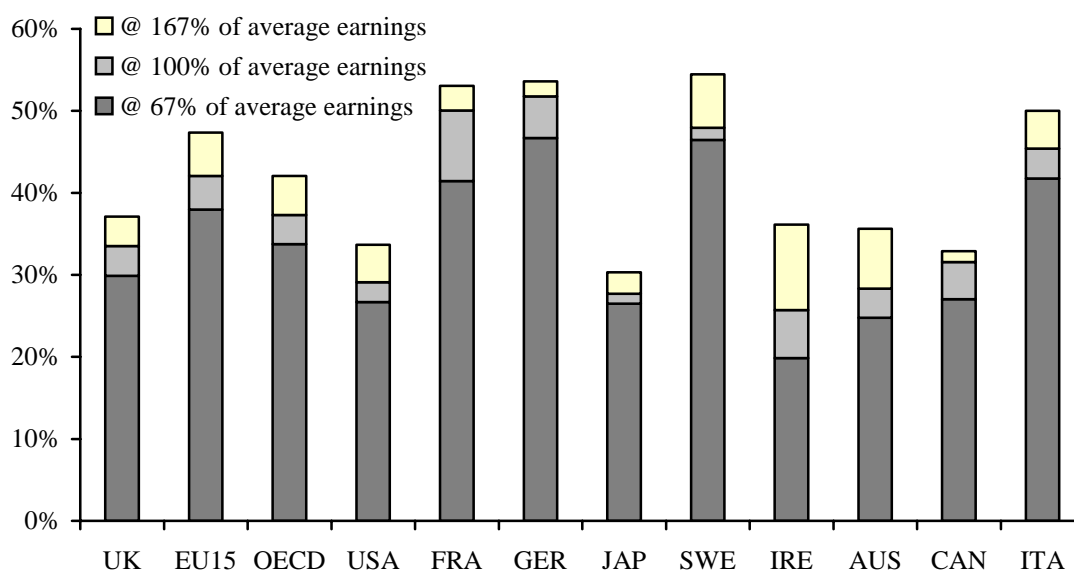
The abolition of the entry rate, the alignment of the earnings threshold with the income tax personal allowance, and the abolition of the cap on contributions have made NI look more like income tax. Important differences remain: in particular, the self-employed face a very different, and much less onerous, NI system (see the Annex). NI also has a different tax base: it is a tax on earnings only, whereas income

tax is paid on a broader definition of income. However, the NI base has expanded to match the income tax base more closely; this can be seen, for example, in the extension of the NI system to cover benefits in kind.

Economically, there is little rationale for having separate income tax and NI systems in the UK given how weak the link is between the amount contributed and the benefits received. Disney (2004) estimates that the ‘tax component’ of NI contributions in the UK is amongst the highest in OECD countries. There is a strong argument for either merging income tax and National Insurance into a single system (as in Australia and New Zealand) or strengthening the link between contributions and benefits (as in many other countries). The latter option would make National Insurance less redistributive, but would lessen the disincentives to work it creates.

Figure 9 shows that the addition of social security contributions to income taxes has a considerable effect on the UK’s relative tax burden on labour. In contrast to Figure 7, which showed income tax alone, the UK now appears as a relatively low tax country for all three levels of earnings. However, the progressivity of the tax plus NI system is still rather low, especially in terms of the comparison between workers on 100% and 167% of average earnings. These comparisons should be treated with caution, however, as the ‘tax component’ in the social security contributions of many countries is smaller than that in the UK. Thus, a higher level of tax plus social security contribution does not necessarily imply a greater disincentive to work.

Figure 9. The burden of income tax and SSCs for a single worker



Notes: [Assumes...]
Source: OECD

3.2 Taxation of saving and wealth

The income tax treatment of saving has changed significantly over the last 30 years. The radical reforms to the rate structure of income tax, reducing the top marginal rate on savings income from 98% to 40%, are discussed above. But there have also been

major changes to the tax treatment of different savings vehicles, with some forms of savings becoming more generously treated and some less so.

The two most significant changes widening the base of income tax have been the abolition of life assurance premium relief in 1984, which had given income tax relief on saving in the form of life assurance, and the steady reduction and final abolition of mortgage interest tax relief (MITR). Until 1974, MITR had been available on any size of loan, but in that year a ceiling of £25,000 was imposed. In 1983, this ceiling was increased to £30,000, which was not enough to account for general price inflation and much too little to account for house price inflation. From 1983, the ceiling remained constant, steadily reducing its real value. From 1991, this erosion of the real value of MITR was accelerated by restricting the tax rate at which relief could be claimed, to the basic rate of tax in 1991 (25%), 20% in 1994, 15% in 1995 and 10% in 1998, with the eventual abolition of the relief in April 2000.

The main extension of relatively tax-favoured saving came in 1988 with the introduction of personal pensions, which allowed the same tax treatment for individual-based pensions as had been available for employer-based occupational pensions (tax relief on contributions, no tax on fund income, tax on withdrawals apart from a lump sum not exceeding 25% of the accumulated fund). The other main extensions were the Personal Equity Plan (PEP) and the Tax-Exempt Special Savings Account (TESSA), introduced in 1987 and 1991 respectively. The PEP was originally a vehicle for direct holding of equities, but it was reformed to allow holdings of pooled investments such as unit trusts. The TESSA was a vehicle for holding interest-bearing savings accounts. Both PEP and TESSA benefited from almost the reverse tax treatment to that of pensions: saving into a PEP or TESSA was not given any tax relief, there was no tax on income or gains within the fund and there was no tax on withdrawals. The PEP and TESSA have now been superseded by the Individual Savings Account (ISA), which is similar in most important respects.

For those (very few) who can and wish to save more than £7,000 per annum (the current ISA limit) in addition to any housing or pension saving, capital gains tax (CGT) is potentially relevant. Prior to 1982, CGT was charged at a flat rate of 30% on capital gains taking no account of inflation. Indexation for inflation was introduced in 1982 and amended in 1985, and then in 1988 the flat rate of tax of 30% was replaced by the individual's marginal income tax rate. The 1998 Budget reformed the CGT system, removing indexation and introducing a taper system, with the declared objective of encouraging longer-term holding of assets.

Savings are taxed not only directly by taxes levied on investment income and capital gains, but also by stamp duty on transactions of securities and properties, and by inheritance tax on bequests.⁸ The current form of inheritance tax was introduced in 1986 to replace capital transfer tax.⁹ When capital transfer tax had replaced estate duty eleven years earlier, gifts made during the donor's lifetime had become taxable in the same way as bequests. But differences in treatment were soon introduced and then widened, until finally the new inheritance tax once again exempted lifetime gifts except in the seven years before death, for which a sliding scale was introduced (see

⁸ Corporation tax is also relevant for savings invested in companies, and council tax for savings invested in housing. These taxes are discussed in sections 3.3 and 3.5 respectively.

⁹ Note that, despite the name, inheritance tax is in fact levied on the estate rather than separately for each beneficiary.

Annex) in an attempt to prevent people avoiding the tax by giving away their assets shortly before death.

With all of these capital taxes, the 1980s saw moves to reduce the number of rates and/or align them with income tax rates. Thus in 1979 capital transfer tax had no fewer than 14 separate rates; since 1988 its successor, inheritance tax, has been charged (above a tax-free threshold) at a single 40% rate, equal to the higher rate of income tax. As mentioned above, capital gains tax has been charged at the individual's marginal income tax rate since 1988. Four rates of stamp duty on properties were replaced by a single 1% rate in 1984. Stamp duty on shares and bonds was almost abolished entirely: the rate fell from 2% to 0.5% during the 1980s, and in 1990 the then Chancellor John Major announced that stamp duty on shares and bonds would be abolished in 1991–92 when the London Stock Exchange introduced a paperless dealing system known as TAURUS. However, this system was never introduced and so stamp duty on shares and bonds remained.

Labour's first Budget following their election in 1997 announced the re-introduction of graduated rates of stamp duty on properties, and these rates were increased in the next three Budgets so that the rates of stamp duty land tax (as it has been known since 2003) are now 1%, 3% and 4%. However, what has done most in recent years to bring stamp duty land tax, along with inheritance tax, to public attention is rapid growth in house prices. From 1997 to 2005, house price inflation averaged more than 10 per cent a year, far outstripping both the inheritance tax threshold (which has typically increased in line with general price inflation) and the stamp duty zero-rate threshold (which has typically been frozen in cash terms).

Table 6 illustrates the implications of this. When Labour came to power in 1997, around half of property transactions attracted stamp duty; by 2002–03 this had risen to almost three-quarters, although the decision in 2005 to double the zero-rate threshold has gone some way to reverse this. The link between house prices and inheritance tax is less direct, but since housing makes up about half of total household wealth, house prices are clearly an important determinant of how many estates are affected by inheritance tax. A widely reported concern is that rising house prices mean that inheritance tax is becoming a tax on 'ordinary people' instead of only on the very wealthy: indeed, in London average house prices are already above the inheritance tax threshold. But since most home-owners are unlikely to die in the very near future, this is a long-term concern: even if house prices remain high, there is plenty of time for the government to raise the inheritance tax threshold or reform the tax more radically before large numbers of people are affected. For the moment, while the proportion of death estates liable for inheritance tax has doubled since Labour came to power, at 5.9 per cent of the total it remains small.

Table 6: Stamp duty, inheritance tax and house prices

Year ^a	Average dwelling price ^b	Inheritance tax threshold	Stamp duty (land tax) zero-rate threshold ^c	Death estates liable for inheritance tax	Property transactions liable for stamp duty ^d
1992	£61,366	£140,000	£30,000	2.9%	37%
1993	£62,333	£140,000	£60,000	2.9%	42%
1994	£64,787	£150,000	£60,000	3.3%	43%
1995	£65,644	£154,000	£60,000	3.4%	43%
1996	£70,626	£200,000	£60,000	2.3%	45%
1997	£76,103	£215,000	£60,000	2.9%	49%
1998	£81,774	£223,000	£60,000	2.8%	53%
1999	£92,521	£231,000	£60,000	3.3%	58%
2000	£101,550	£234,000	£60,000	3.7%	62%
2001	£112,835	£242,000	£60,000	3.8%	69%
2002	£128,265	£250,000	£60,000	4.1%	73%
2003	£155,627	£255,000	£60,000	4.9%	73%
2004	£180,248	£263,000	£60,000	5.8%	71%
2005	£190,760	£275,000	£120,000	5.9%	55%

^aYears are financial years (so 1992 means 1992–93) except average house prices, which are for calendar years.

^bSimple average, not mix-adjusted, so changes reflect changes in the type of properties bought as well as changes in the price of a given type of property.

^cThreshold for residential properties not in disadvantaged areas.

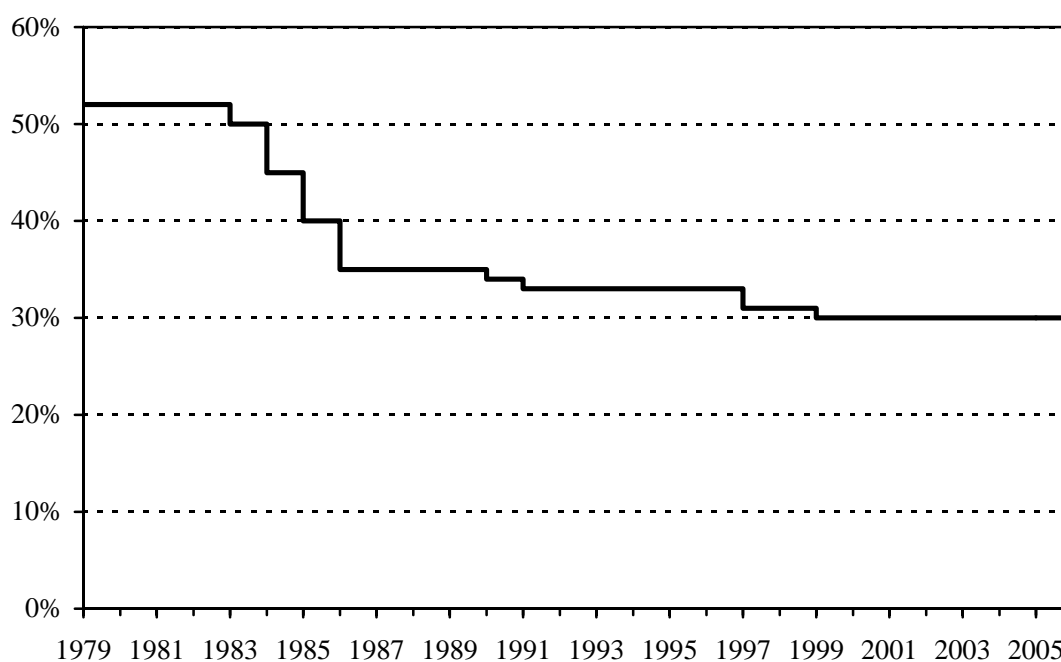
^dExcludes Scotland. Other columns are UK-wide.

Sources: HMRC, DCLG

3.3 Corporation tax

Corporation tax has been through two major periods of reform in the last 30 years, one in 1984 and the second since Labour came to power in 1997. The evolution of the main statutory rate is shown in Figure 10, showing a pattern of continual decline that is common amongst OECD countries.

Figure 10. The main rate of corporation tax



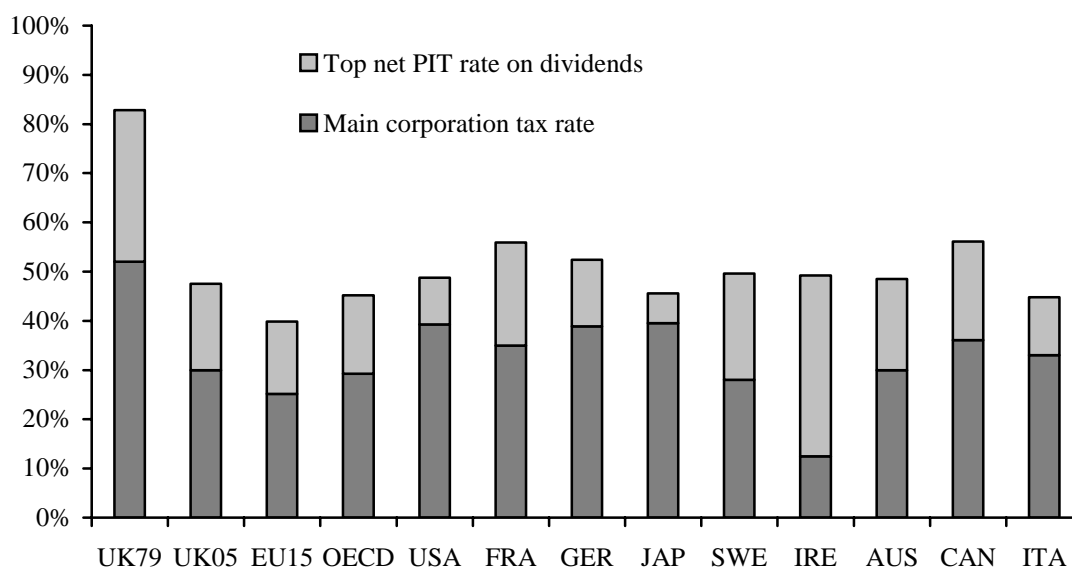
Source: HMRC

In 1984, the main corporation tax rate was cut from 52% to 35% (reduced to 33% by 1991–92), and a very generous system of deductions for capital investment (100% of investment in plant and machinery could be deducted from taxable profits in the year the investment was made) was replaced by a less generous one (25% of the remaining value each year for plant and machinery). The 1984 reform was intended to be broadly revenue-neutral.

The incoming Labour government of 1997 changed the way that dividend income was taxed: dividend tax credits, a deduction from income tax given to reflect the corporation tax already paid on the profits being distributed, ceased to be payable to certain shareholders (notably pension funds) that were already exempt from income tax. This was followed in 1999 with a reform of the payments system for corporation tax (see Annex). Since coming to power, the Labour government has also cut the main corporation tax rate from 33% to 30% and the small companies' rate (for companies with profits below £300,000) from 24% to 19%.

Figure 11 provides a comparison of the current corporate and shareholder taxes in the UK to other OECD countries, as well as showing the cuts in the UK since 1979. The bottom part of each bar shows the main corporate tax rate, while the top part shows the additional tax (net of dividend tax credit or equivalent relief) paid by a shareholder resident in the same country who pays the top rate of personal income tax. The UK reduction since 1979 is dramatic, reflecting both the cut in corporate tax rates and the very substantial cuts in the top rate of personal income tax. The UK corporate tax rate is slightly above the OECD and EU 15 averages but below the rates in the other G7 countries. This comparison remains true when shareholder taxes are added, except that the UK is now higher than Italy and Japan.

Figure 11. Taxation of companies and shareholders, 2005



Notes: [Assumes....]

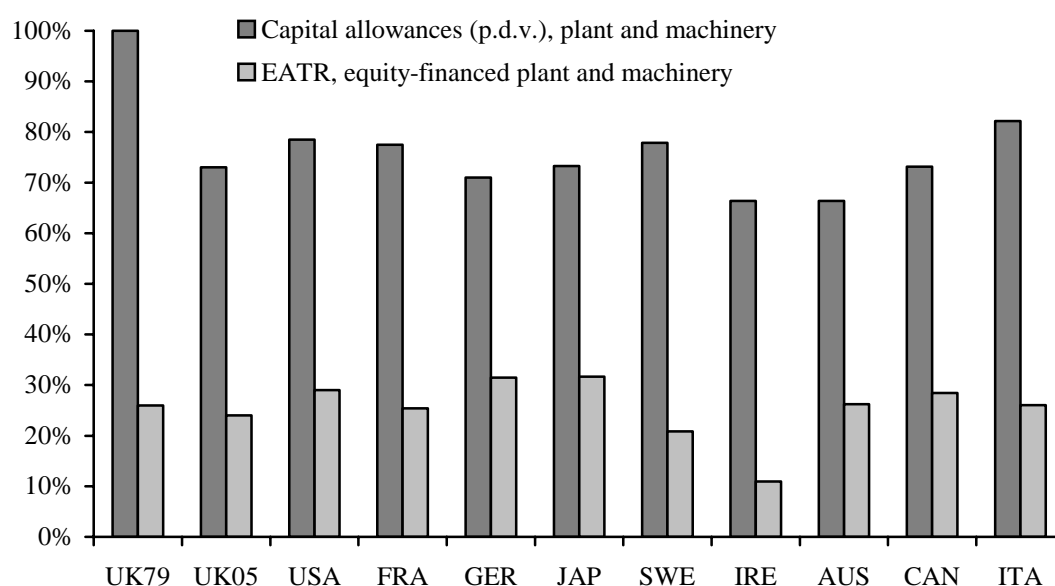
Source: OECD

Of course, corporation tax revenue depends on the base as well as the rate. Figure 12 shows the present discounted value¹⁰ of capital allowances and depreciation, major deductions from the corporate tax base. It also reports the effective average tax rate (EATR), which combines the statutory rates in Figure 11 with the deductions from the tax base to estimate the proportion of profits (net of assumed true economic depreciation) that a company can expect to pay in corporate taxes. This shows the substantial cut in UK capital allowances from 1979 to 2005, but also shows that the cut in the corporate rate was sufficient to outweigh this and reduce the EATR. Looking across countries, the UK's capital allowances are fairly similar to the other countries shown, and so it is not surprising that its EATR is (like its statutory corporate tax rate) lower than the other G7 countries.¹¹

¹⁰ This is the sum of future amounts, but reduced to take account of the fact that income in future years is less valuable than current income, as reflected in the interest rate that saved income earns.

¹¹ Data for OECD and EU15 averages are not available for the measures used in Figure 12.

Figure 12. Capital allowances and effective average tax rates, 2005



Notes: [Assumes...]
Source: Klemm (2005)

In April 2000, a tax credit for R&D was introduced (see Annex for details). At the same time, a 10% lower rate was introduced for companies with less than £10,000 of taxable profits, and this lower rate was cut to zero in April 2002. This last tax cut came as a surprise, with costs potentially running into billions of pounds if self-employed individuals registered as companies to reduce their tax liabilities.¹² Having apparently failed to anticipate the scale of this effect, the government swiftly reversed the reform. In April 2004, the zero rate was abolished for distributed profits, removing much of the tax advantage but at a cost of greater complexity; and so in December 2005, the zero rate was abolished for retained profits as well. This takes us back to precisely where we were before April 2000, with the standard 19% small companies' rate applying to all firms with profits up to £300,000, regardless of whether the profits are paid out as dividends or retained by the firm. In the mean time, there has been unnecessary upheaval in the tax system, and thousands of individuals have incurred effort and expense to set up legally incorporated businesses that they would not otherwise have done. This episode provides a clear illustration of how not to make tax policy.¹³

3.4 Indirect taxes

Value added tax

As noted earlier, the most dramatic shift in revenue-raising over the last 30 years has been the growth in VAT, which has doubled its share of total tax revenue. The bulk of this change occurred in 1979 when the incoming Conservative government raised the

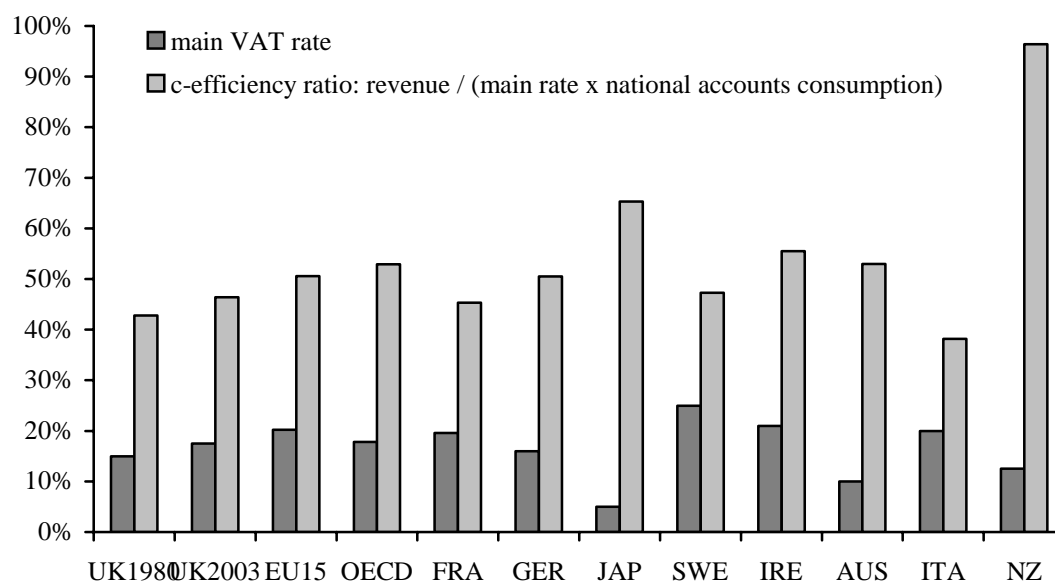
¹² See L. Blow, M. Hawkins, A. Klemm, J. McCrae and H. Simpson, *Budget 2002: Business Taxation Measures*, IFS Briefing Note 24, 2002 (www.ifs.org.uk/bns/bn24.pdf).

¹³ See S. Bond, "Company Taxation" in R. Chote, C. Emmerson, R. Harrison and D. Miles (eds), *The IFS Green Budget: January 2006* (www.ifs.org.uk/budgets/gb2006/index.php) for more discussion.

standard rate of VAT from 8% to 15% to pay for reductions in the basic rate and higher rates of income tax. The rate was increased from 15% to 17.5% in 1991, to pay for a reduction in the community charge (poll tax). Since then, there have been a number of small extensions to the base of VAT, and the introduction of a reduced rate of VAT on domestic fuel and a few other goods.

The UK in fact makes less use of reduced VAT rates than many other countries. However, far more goods are removed from VAT altogether in the UK than in almost any other country: for example, the UK and Ireland are the only EU countries to apply a zero rate to most food, water, books or children's clothes. Figure 13 provides an international comparison of VAT rates and bases. It shows the increase in both the VAT rate and the base (as measured by the c-efficiency ratio – VAT revenue as a percentage of what it would be if the main rate were applied to all consumption) since 1980, but also shows that many countries – and especially New Zealand – have found it possible to apply their standard rate of VAT to a much wider range of goods and services.

Figure 13. VAT rates and bases, 2003



Notes: [Assumes...]
Source: OECD

Excisable goods

Table 7 shows the total rate of indirect tax (VAT and excise duty) on the principal goods subject to excise duties. Between 1979 and 2000, taxes on cigarettes rose steadily, while those on petrol and diesel increased much more sharply. Both these commodity groups were covered by government commitments to substantial annual real increases in excise duty in the 1990s. Since 2000, however, taxes on cigarettes have increased only in line with inflation, while fuel taxes have fallen in real terms.

The pattern for alcoholic drink is more diverse. There has been a tendency for the rate of tax on spirits to fall, and the tax rate on spirits is now very much lower than it was in 1979. The tax rate on wine has shown relatively little trend, while that on beer has tended to fall since 1983. As shown in Table 8, implied duty rates per litre of pure

alcohol are now much closer together than they were in 1979, though substantial variation does persist. This may seem puzzling since a natural starting point for a tax regime for alcoholic drink would be to impose the same level of tax per unit of alcohol, regardless of the form in which it is consumed. Variation in tax rates might be justified if one form of alcohol were more likely to lead to anti-social behaviour, for example, but such arguments are rarely made. The truth appears to be that the current system is more a product of history than of a coherent rationale, and there is obvious merit in reviewing it.

The existence of relatively high tax rates in the UK on some easily portable commodities could lead to loss of revenue through cross-border shopping. While it is possible that the UK tax rates are so high that reductions in those rates would encourage enough additional consumption to produce a net increase in revenue, the available evidence suggests that this is unlikely.¹⁴ Only in the case of spirits is it likely that the current tax rate is high enough for a reduction to have little or no revenue cost, which might help explain why duty on spirits has been frozen in nominal terms (cut in real terms) every year since 1997.

¹⁴See I. Crawford, Z. Smith and S. Tanner, 'Alcohol taxes, tax revenues and the Single European Market', *Fiscal Studies*, 1999, vol. 20, pp. 305–20, and C. Walker and C-D. Huang, *Alcohol Taxation and Revenue Maximisation: The Case of Spirits Duty*, HM Customs and Excise Forecasting Team Technical Note *Series A* no. 10, 2003 (customs.hmrc.gov.uk/channelsPortalWebApp/downloadFile?contentID=HMCE_PROD_008438).

Table 7: Total tax as a percentage of retail price, 1979 to 2005

Year	Cigarettes	Beer	Wine	Spirits	Leaded petrol	Unleaded petrol ^a	Diesel ^a
1979	70	34	47	77	49	—	49
1980	71	34	49	79	48	—	47
1981	74	38	51	78	54	—	51
1982	75	38	52	75	58	—	50
1983	74	38	53	74	56	—	50
1984	75	36	46	73	55	—	51
1985	75	36	49	73	53	—	48
1986	75	35	48	72	60	—	57
1987	74	34	47	71	64	—	63
1988	75	34	48	69	67	63	63
1989	74	33	47	66	63	58	61
1990	74	32	47	66	64	60	62
1991	76	33	48	65	68	64	65
1992	76	33	48	66	70	66	66
1993	76	33	49	64	71	67	66
1994	76	31	50	65	75	71	68
1995	78	31	51	67	76	73	73
1996	78	31	51	65	77	76	74
1997	79	30	49	62	79	75	74
1998	79	30	51	63	80	79	79
1999	79	30	51	61	86	85	85
2000	80	30	52	62	— ^b	76	75
2001	80	29	51	61	—	75	74
2002	83 ^c	30	50	61	—	75	74
2003	83	29	51	60	—	73	72
2004	83	29	52	61	—	75	74
2005	82	29	52	60	—	70	68

^aUltra-low sulphur from 2000 onwards.

^bRetail sales of leaded petrol stopped from 1 January 2000.

^cThis rise does not represent a real rise in duty rates. The discontinuity arises because the ONS measure of average cigarette prices changed in 2002 to include more, cheaper, brands.

Notes: Percentages relate to April/May for all years up to and including 1993, to January from 1994 to 2000 and to April from 2001. ‘Cigarettes’ refers to a packet of 20 king-size cigarettes, ‘beer’ to a pint of bitter (3.9% abv) in licensed premises, ‘wine’ to a 75cl bottle of table wine (not exceeding 15% abv) in a retail outlet, ‘spirits’ to a 70cl bottle of whisky (40% abv) in a retail outlet, and ‘petrol’ and ‘diesel’ refer to a litre of fuel.

Sources: HM Customs and Excise, website

(customs.hmrc.gov.uk/channelsPortalWebApp/channelsPortalWebApp.portal?_nfpb=true&_pageLabel=pageExcise_InfoGuides) and various *Annual Report and Accounts*

(customs.hmrc.gov.uk/channelsPortalWebApp/downloadFile?contentID=HMCE_MIG_009880);

National Statistics, www.statistics.gov.uk; authors’ calculations.

Table 8: Implied duty rates per litre of pure alcohol (April 2005 prices)

Form of alcohol	1979	1989	2005
Beer	£11.01	£13.66	£12.92
Wine ^a	£19.52	£13.70	£13.98
Spirits	£33.94	£25.27	£19.56

^aWine of strength 12% abv.

Sources: HM Customs and Excise, website (www.hmrc.gov.uk/budget2005/pn02.htm) and various *Annual Reports*; National Statistics, www.statistics.gov.uk; authors' calculations.

Environmental taxes

Environmental taxes are difficult to define precisely, since all taxes affect economic activity and almost all economic activity has some environmental impact. However, a classification is attempted in the ONS's *Environmental Accounts*, estimating that environmental taxes raised £35.0 billion in 2005, some 7.7% of total receipts or 2.9% of GDP. This is somewhat reduced from a peak in 1999, although as of 2003 environmental taxes still accounted for a larger share of revenues in the UK than the EU15 or OECD averages, and indeed than in any other G7 country.¹⁵ More than three quarters of this revenue is accounted for by fuel tax (duty plus VAT on the duty), and the other sizeable chunk is vehicle excise duty, a license fee for road vehicles. Thus taxes on motoring account for more than 90% of environmental tax revenues. Since 1994, several new environmental taxes have been introduced: air passenger duty (1994), landfill tax (1996), climate change levy (2001), aggregates levy (2002) and London congestion charge (2003). These are described in the Annex, but the largest of them, air passenger duty, is forecast to raise only £1.0 billion in 2006–07.

The amount of revenue raised is rather limited as an indicator of the environmental impact of a tax. The more successful the tax is in changing behaviour, the less it will raise. It also matters how well the tax targets environmentally damaging behaviour rather than some broader activity. For example, differential fuel duty rates have been used extensively to encourage a switch to cleaner fuels. Similarly, vehicle excise duty changed in 1999 from a flat rate charge to one dependent on engine size, and then in 2001 to one based on vehicle emissions; in April 2006 the differential between high-emission and low-emission vehicles was widened. Such reforms can be designed either to increase or to reduce revenues while encouraging less environmentally harmful activities. Nevertheless, it remains fair to say that environmental taxation in the UK is dominated by taxes on motoring.

3.5 Local taxation

Thirty years ago, local taxes in the UK consisted of domestic rates (on residential property) and business rates (on business property). However, this was changed dramatically in 1990 when business rates (described in the Annex) were taken from local to national control and domestic rates were replaced by the community charge

¹⁵ As a share of GDP, environmental taxes in the UK were higher than the (weighted) OECD average and very similar to the (weighted) EU average: see Figure 11.5 of <http://www.ifs.org.uk/budgets/gb2007/07chap11.pdf>.

(poll tax), a flat-rate per-person levy.¹⁶ The poll tax was introduced in April 1990 in England and Wales after a one-year trial in Scotland, but was so unpopular that the government quickly announced that it would be replaced. The tax was based on the fact that an individual lived in a particular local authority, rather than on the value of the property occupied or the individual's ability to pay (subject to some exemptions and reliefs). In the 1991 Budget, the government increased VAT from 15% to 17.5% to pay for a large reduction in the burden of the poll tax, which resulted in a corresponding rise in the level of central government grant to local authorities. The poll tax was abolished in 1993 to be replaced by the council tax, which is based mainly upon the value of the property occupied, with some exemptions and reliefs (outlined in more detail in the Annex).

The result of these changes, and particularly the centralization of business rates, is that local services are now largely financed by central government, with the only significant local tax left – the council tax – financing only around a quarter of total local spending. As shown in Figure 5, this leaves UK taxation unusually centralised, with only 5% of revenues raised locally. At the margin, spending an extra pound locally requires the raising of an extra pound locally, giving local authorities appropriate incentives overall. But this extra money must come entirely from council tax, which bears particularly heavily on those groups (such as pensioners) with high property values relative to their incomes and hence limits local authorities' willingness to increase expenditure. Furthermore, while universal capping of local authority spending has ended, strengthened selective capping powers have been retained, and were used in 2004–05 and 2005–06 for the first time since 1998–99. No local authorities have been capped in 2006–07, but two authorities have been told that they will be allowed a lower maximum increase for 2007–08 because of the size of their increase in 2006–07. The threat and practice of capping are another limitation on local authorities' financial autonomy.

4. Economic aspects of the UK tax and benefit system

This section looks at some key economic features of the UK tax system as a whole: its effects on the income distribution and on incentives to work, save and invest. The division between taxes and benefits seems rather artificial in this context – it is the overall distributional and incentive effects created by all different taxes and benefits together that matters, and we would not wish to change our analysis according to whether tax credits were counted as deductions from tax or additions to benefits, for example – and so in this section we consider the tax and benefit system as a whole

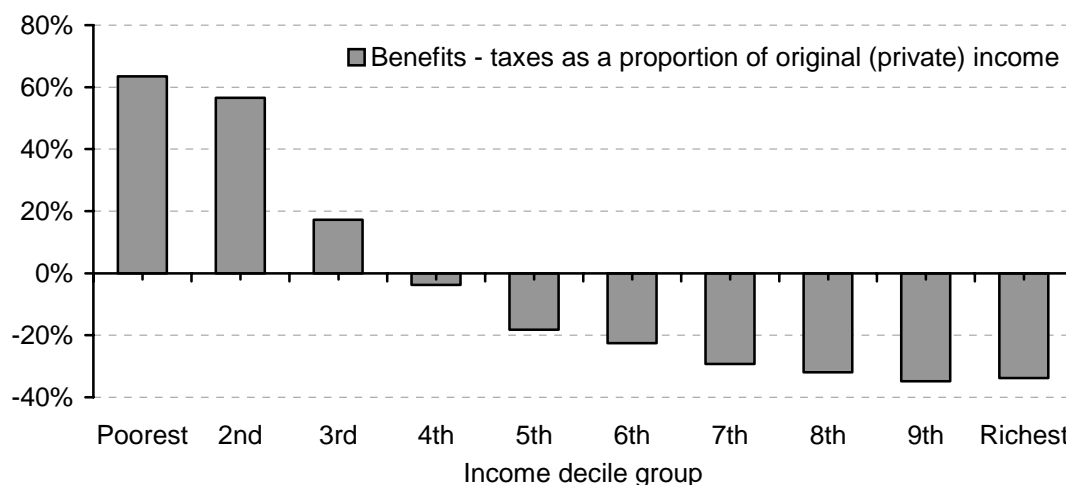
4.1. The distribution of income

The UK tax and benefit system is progressive: it transfers money from high-income to low-income households. Figure 14 shows that benefits (less taxes) increased the income of the lowest-income tenth of households (decile group) by over 60% in 2004–05, while taxes (less benefits) reduced the incomes of the highest-income decile group by one third. The poorest three decile groups are net beneficiaries overall from

¹⁶ These reforms were not introduced in Northern Ireland, which retained a system of locally varying business and domestic rates.

the tax and benefit system while the richest seven decile groups make a net contribution

Figure 14. Distributional impact of the UK tax and benefit system in 2004–05

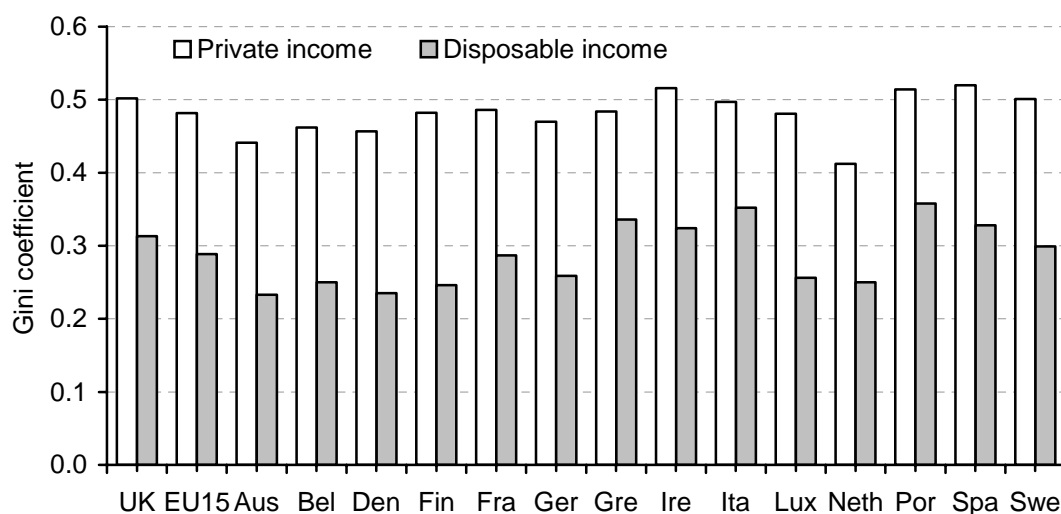


Note: Excludes most ‘business taxes’ but includes all direct and indirect personal taxes, tax credits and benefits. Income decile groups are derived by dividing all households into 10 equal-sized groups according to disposable income (ie after direct taxes and benefits but before indirect taxes) adjusted for family size using the McClements equivalence scale.

Source: Authors’ calculations from ONS (2006).

Income inequality is therefore clearly lower after taxes and benefits than before. Figure 15 shows the Gini coefficient, a standard measure of inequality that can take values between zero (everyone has equal income) and one (one person has all the income in the economy), before and after personal direct taxes and benefits in the UK and the other EU15 countries in 1998, the latest year available. In that year, personal direct taxes and benefits reduced the Gini coefficient by 0.2 in the UK, very similar to the EU15 average, but this reduction was from a higher starting level of private income inequality.

Figure 15. Effect of tax and benefit system on inequality in the EU15, 1998



Note: Excludes indirect taxes and most ‘business taxes’.

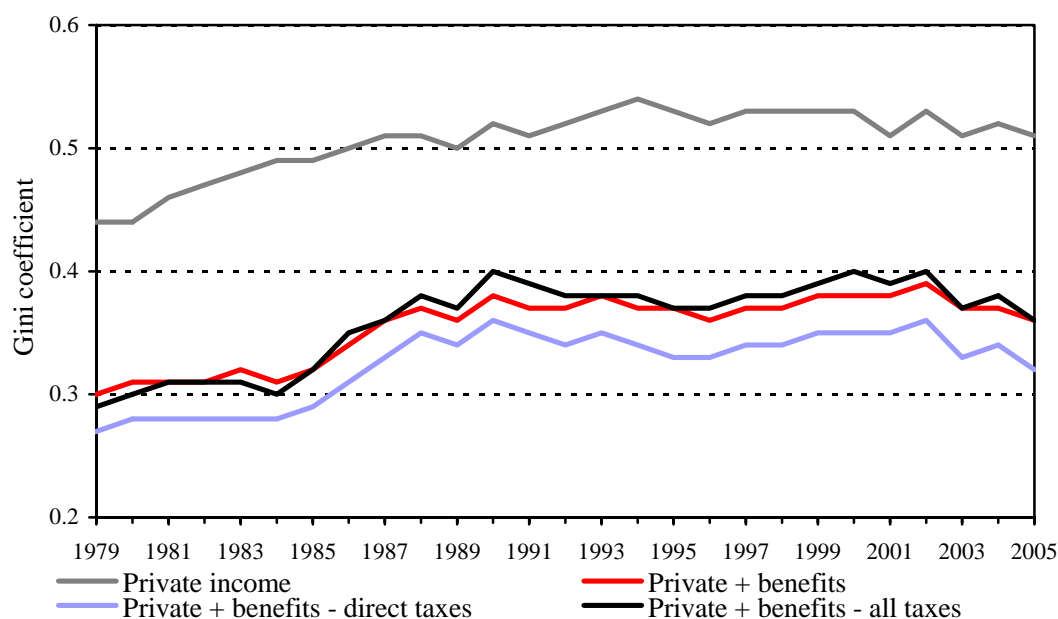
Source: Immervol, Levy, Lietz, Mantovani, O'Donoghue, Sutherland and Verbist (2005).

Income inequality has risen markedly in the UK since 1979, more than in any other industrialised country (Gottschalk and Smeeding, 2000). Figure 16 shows how the Gini coefficient for different measures of income, corresponding to different stages of the redistributive process, has changed since 1979.

The Gini coefficient is around 0.15 higher for private incomes than for incomes after all personal taxes and benefits. It is clear from the Figure that the benefit system is responsible for the bulk of this reduction in inequality, with direct taxes also reducing inequality slightly and indirect taxes appearing to increase inequality slightly. This last point requires some qualification, however.

Indirect taxes bear heavily on those with high expenditures, and will clearly target those with high incomes in any particular year less precisely than, say, an income tax does. But much low income is temporary and need not reflect low lifetime living standards (many people have volatile earnings, are temporarily unemployed, are studying, are taking a break from the labour market to raise children, are retired with hefty savings, etc). Over a lifetime, income and expenditure must be equal (ignoring inheritances), so a 1% tax on all income and a 1% tax on all expenditure must bear equally heavily on someone with a given lifetime income. People's ability to borrow and save means that those with low current incomes will typically have high expenditure relative to their income, and many of those who in a particular year have low income but pay a lot in indirect taxes are people we would not ordinarily think of as 'poor' – indeed, annual expenditure is arguably better than annual income as a guide to lifetime living standards. If we were to look at the effect of the tax and benefit system on lifetime income inequality, indirect taxes would appear much more progressive relative to direct taxes and benefits. This is not to say that indirect taxes are progressive relative to lifetime income – that depends on whether the progressivity of zero-rating necessities such as food, water and children's clothes for VAT outweighs the regressivity of excise duties (alcohol and tobacco are consumed disproportionately by the poor) – but certainly their effect on the distribution of annual income gives only a partial, and arguably misleading, impression of their overall effect.

Figure 16. Inequality of incomes at different stages of the redistributive process



Note: Excludes most 'business taxes'.

Source: ONS (2002, 2006)

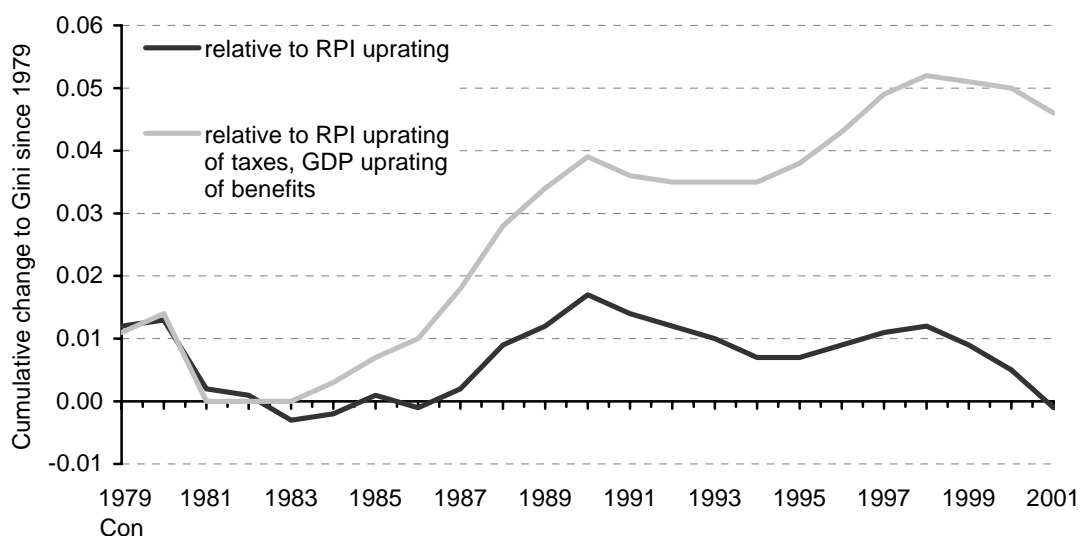
Looking at the changes over time shown in Figure 16, the amount by which taxes and benefits reduce the Gini coefficient (for annual income) fluctuates, but at 0.15 is the same in 2005–06 as it was in 1979–80. This does not mean, however, that the tax and benefit systems in place at the start and end of the period were equally progressive. The amount of redistribution that a given tax and benefit system achieves depends on the economy to which it is applied, and there have been major changes in the UK economy since 1979 – not least the sharp increase in private income inequality shown in the Figure. Other things being equal, a progressive tax and benefit system will redistribute more if applied to a more unequal income distribution, so the fact that the 1979–80 and 2005–06 tax and benefit systems reduce the Gini coefficient by the same amount suggests that reforms to the tax and benefit system may have been regressive, offsetting the tendency for the tax and benefit system to redistribute more as inequality rose.

To measure the effect of policy reforms on inequality more precisely, Clark and Leicester (2004) use a tax and benefit micro-simulation model to compare what actually happened to inequality with what *would* have happened to inequality if there had been no reforms to the tax and benefit system. However, doing this raises the question of exactly what is meant by “no reforms”: does ‘no change’ mean that tax rates and thresholds are uprated in line with price inflation, or with growth in average earnings, GDP, or something else? Clark and Leicester (2004) consider two scenarios for their ‘no change’ baseline: one in which all taxes and benefits are uprated in line with the Retail Prices Index (RPI) so that there is no real-terms change in rates and thresholds, and a second in which tax thresholds are uprated in line with the RPI and benefits in line with GDP growth. The rationale for this second scenario is two-fold: first, it corresponds reasonably closely to the government’s standard uprating practice prior to 1979; and second, reforms since 1979 have had relatively little impact on the overall budgetary position if measured relative to this baseline (much less than

relative to universal price-uprating or universal GDP-uprating), which seems like a relatively ‘neutral’ counterfactual to choose.

Figure 17 shows the cumulative change in the actual Gini coefficient for disposable income relative to these two baseline scenarios. It is clear that the choice of baseline is of crucial importance. The 2001 direct tax and benefit system reduced inequality by exactly as much as the 1979 system would have done if it had been price-indexed, but by much less than if taxes had been price-indexed and benefits GDP-indexed after 1979. Indeed, relative to this second baseline scenario, tax and benefit reforms from 1979 to 2001 acted to increase the Gini coefficient by about 0.05, accounting for almost half of the total increase in disposable income inequality over this period.

Figure 17. Cumulative change to the Gini coefficient, 1979-2001



Notes: Gini coefficients are for disposable income: indirect taxes and most ‘business taxes’ are excluded. The incoming Conservative government made some changes to the April 1979 tax and benefit system it inherited in June 1979. 1979 Con gives the effect of these changes.

Source: Clark and Leicester (2004), based on the IFS tax and benefit micro-simulation model, TAXBEN, run on data from the 1997–98 Family Expenditure Survey.

One caveat to these findings is needed. When looking at what would have happened to inequality as the economy evolved if the tax and benefit had not changed, Clark and Leicester (2004) assumes that tax and benefit reforms did not themselves affect the evolution of the economy. But individuals and firms respond to the incentives created by the tax and benefit system, so this assumption is unlikely to be accurate in practice. The true effect of tax and benefit reforms on inequality, therefore, depends not only on their direct redistributive effects, but also on how they affected people’s decisions to work, save, and so on. These indirect effects depend partly on how far individuals respond to such incentives, which is difficult to estimate; but we can more easily estimate how the incentives themselves have been changed by tax and benefit reforms, and it is to this question that we now turn.

4.2. Work incentives

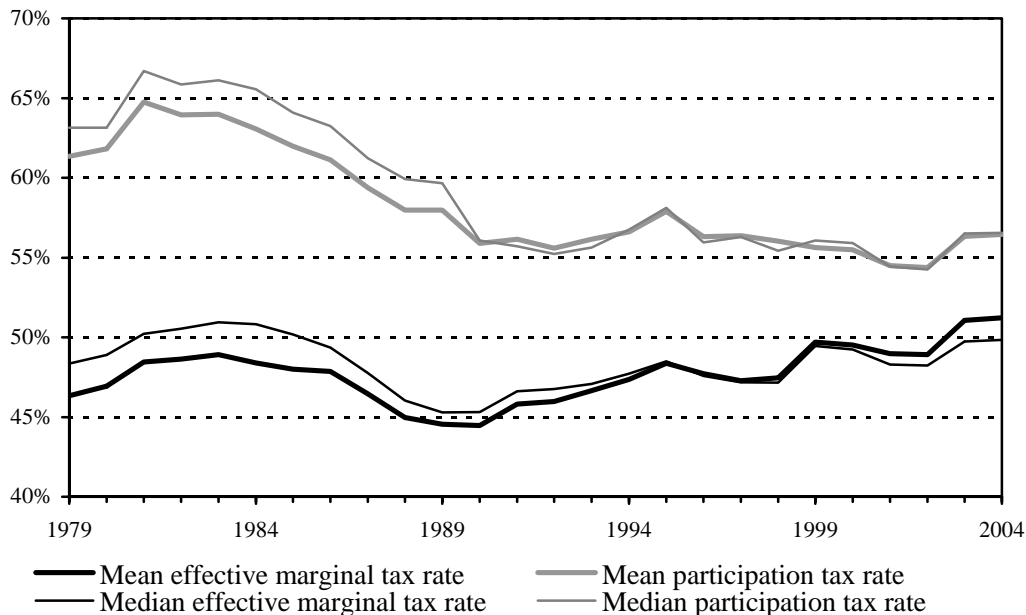
Commentators often express concern about the effect of high income tax rates on work incentives, although such complaints faded somewhat as rates were reduced during the 1980s. But means-tested benefits and tax credits, which have expanded

significantly in recent years, can be just as important: the prospect of losing such support as income rises can be a crucial factor in the work decisions of low-income families. And indirect taxes can be as important as direct taxes: if the attractiveness of working is determined by the amount of goods and services that can be bought with the wage earned, a tax that reduces all earnings and a tax that increases all prices will clearly have very similar effects. Looking at work incentives is not just a matter of inspecting the income tax schedule: the whole tax and benefit system must be taken into account.

We should also distinguish between the incentive to be in work at all as opposed to not working – which can be measured by the participation tax rate (PTR), the proportion of total earnings taken in tax and withdrawn benefits – and the incentive for those in work to increase their earnings slightly, whether by working more hours, seeking promotion or getting a better-paid job – which can be measured by the effective marginal tax rate (EMTR), the proportion of a small increase in earnings taken in tax and withdrawn benefits. High PTRs among non-workers are often referred to as the unemployment trap; high EMTRs among low-income families are known as the poverty trap.

On average, British workers’ earnings are worth 44% of what they cost their employers, and any increase in earnings is worth around half of what it costs the employer. Figure 18 shows how these averages have changed since 1979. During the Conservatives’ period in office from 1979 to 1997, the average EMTR fluctuated, but it ended up at a similar level to where it began; under Labour, there has been a significant rise (weakening of incentives). Incentives to stay in work at all strengthened considerably on average under the Conservatives; but there has been little change under Labour.

Figure 18. Average effective marginal tax rates and participation tax rates among workers, 1979-2004



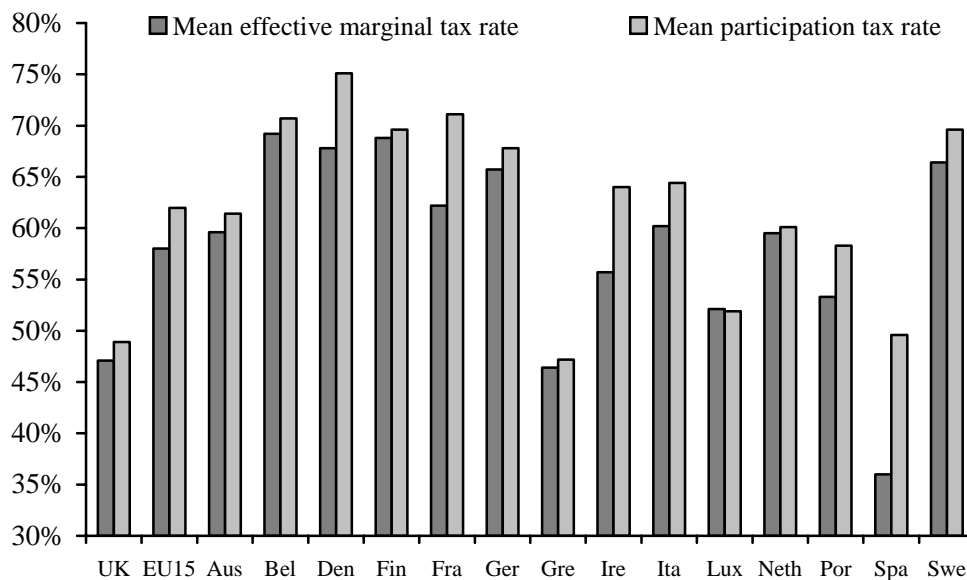
Notes: Personal taxes and benefits only. Excludes over-55s, self-employed and disabled. [More detail]
Source: Adam (2005)

As with the changing distribution of income, these changes in work incentives do not just reflect policy reforms: demographic shifts and changes in wages, rent levels and working patterns also matter. Adam et al (2006) attempts to separate out these factors and look at the effect of policy changes in isolation, in much the same way as Clark and Leicester did for income inequality. It finds that reforms (relative to price-indexation) under Conservatives tended to strengthen work incentives, while on average Labour's reforms to date have acted to weaken both incentives to be in work at all and incentives for those in work to increase their earnings. These trends have not been universal, however: Labour's reforms have strengthened work incentives on average for some groups previously facing the weakest incentives.

Figure 18 shows work incentives only among workers. It is much more difficult to estimate the work incentives facing non-workers, since we would need to estimate what wage they would earn if they did work. Studies that have attempted to do this (see eg Adam et al, 2006) find that non-workers typically face weaker incentives than workers, as we might expect if they are at least partly responding to weak incentives. Among those in work, people with low earnings tend to face stronger work incentives, since they are typically pay income tax only at the 10% starting rate, if at all. But the weakest work incentives are faced by those with the very lowest incomes, who face having their means-tested benefits or tax credits withdrawn if they increase their income. Such disincentives are much greater than those imposed on high-income people through higher rates of income tax.

Figure 19 shows that in 1998, on both measures, work incentives in the UK were substantially stronger than the EU15 average, and indeed stronger than in any other country except Greece and Spain.

Figure 19. Work incentives among workers across the EU15, 1998



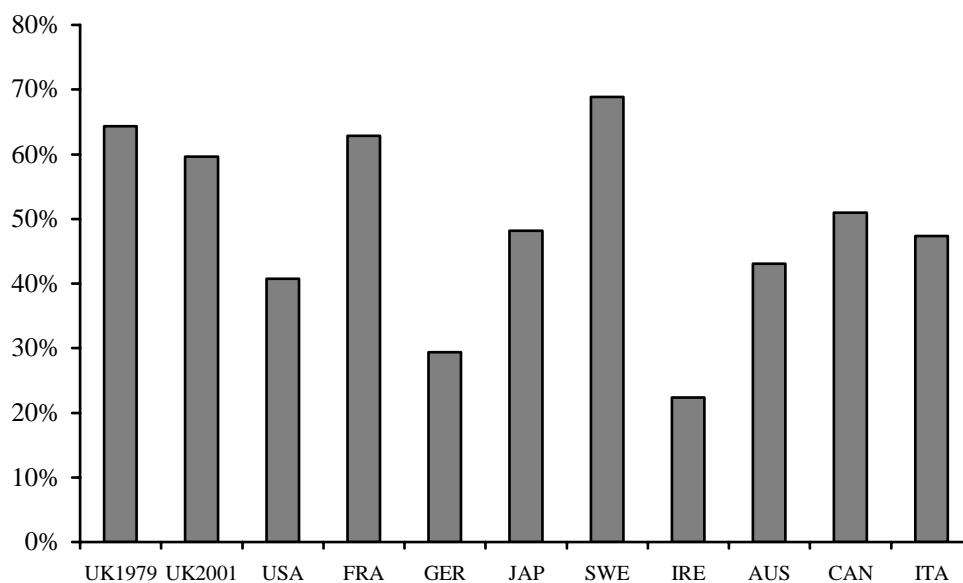
Notes: Personal taxes and benefits only. [More here.]

Source: Immervol, Kleven, Kreiner and Saez (2005)

4.3. Incentives to save and invest

To measure the overall extent of capital taxation in an economy, we can look at how much revenue the government raises from all taxes on capital – income tax on saving, capital gains tax, corporation tax, property taxes, stamp duties and inheritance tax – as a proportion of the total capital income in the economy. Figure 20 shows that this measure, the implicit tax rate on capital, fell in the UK from 64.3% in 1979 to 59.6% in 2001, although this conceals substantial fluctuations over this period (in fact broadly matching the trends in the overall tax burden shown in Figure 1). This leaves the UK's implicit tax rate on capital in 2001 amongst the highest in the developed world.

Figure 20. Implicit tax rates on capital, 2001



Notes: [More here.]

Source: David Carey and Josette Rabesona, OECD

Aggregate revenue-based measures can tell us about total level of capital taxation in the economy. But not all capital taxes simply reduce incentives to save and invest. And differential treatment of different forms of saving and investment, distorting the form that such activities take, can be equally important.

The last 25 years have seen a significant reduction in the extent to which the tax system distorts the return on different savings vehicles. There are three reasons for this. First, one of the most difficult areas in the taxation of saving is the treatment of inflation. At the levels of inflation seen during the 1970s and 1980s, distortions created by variations in the treatment of inflation were large. At the inflation rates seen in the last 15 years, however, this is a far less severe problem, and if rates remain close to the 2% target, it will become even less important. Second, the dispersion of tax rates (especially income tax rates) has narrowed. If a particular form of saving attracted tax relief at, say, 83%, its underlying performance could be quite poor and yet it could still provide an attractive return. As the number of tax bands has fallen and the highest rates have come down, the distortion caused by the taxation of different forms of saving has also fallen.

Third, there has been a series of reforms that have reduced the tax advantage of previously highly tax-privileged saving, and others that have removed tax disadvantages of other forms of saving, leading to a general levelling of the tax treatment of saving. Tax relief on life assurance and on mortgage interest provided significant net subsidies to saving in these forms, but have now been abolished; meanwhile, the introduction of personal pensions and the introduction of PEPs, TESSAs and ISAs greatly extended the range of tax-free saving vehicles available. Housing, pensions and ISAs cover the saving activity of the bulk of the population, and over the last two decades we have moved from an incoherent tax regime for saving to one that seems much more satisfactory. It has rarely been the case that a clear strategy has been evident, but the power of the practical arguments for similar tax treatment of all saving seems to have been great. We now have a situation where for housing, and for shares and cash held in ISAs, saving is out of taxed income and there is no tax on returns and no tax on withdrawals, while for pensions, saving is out of untaxed income, fund income is untaxed but withdrawals are taxed. These two regimes produce the same effective tax rate of zero on the normal return to saving. The one obvious exception is the existence of the tax-free lump sum in pensions, which makes the effective tax rate on the return to pensions saving negative. In addition, employers' pension contributions are particularly tax-favoured since they are not subject to either employer or employee National Insurance at the point of contribution or at the point of withdrawal. There is still some way to go to reach an income tax system that is neutral in its effects, but we are far closer to it now than we were 20 years ago.

Table 9 shows the current tax treatment of different assets at the personal level. As the Table makes clear, the taxation of saving is not just a matter of the income tax regime. Saving in shares and bonds, whether directly or through pension funds or ISAs, is penalised by 0.5% stamp duty each time the securities are bought and sold, which reduces the effective return to saving in that form as well as hindering the efficient allocation of capital. Houses are subject to even higher rates of stamp duty each time they change hands for £125,000 or more, and are also subject to council tax. And those whose total assets are worth more than £285,000 face the prospect of inheritance tax on their bequests if they are not foresighted or lucky enough to dispose of their assets more than seven years before they die – although inheritance tax does at least treat all major assets equally.

Finally, a substantial proportion of savings is invested in companies, either directly or indirectly. Corporation tax is omitted from Table 9 because of the difficulty in identifying precisely which forms of personal saving will be affected by it and because the effective rate at which such investments are taxed is not merely the statutory corporation tax rate, but varies according to a wide range of factors: the form of the company's investment (plant and machinery, industrial buildings, R&D, etc), the depreciation rate of that asset, interest rates, the rate of inflation, and so on.

Figure 12 showed the effective average tax rate (EATR) that a firm might expect to pay on all its profits from equity-financed investment in plant and machinery, combining statutory rates and capital allowances and making various assumptions about the profitability of investment and so on. This is a measure of firms' incentive to undertake such investment at all, and so is useful for comparing the relative tax-attractiveness of different countries for inbound foreign direct investment.

Table 8. Tax treatment of different assets

Asset	Income tax and NICs on contributions	Stamp duty on transactions	Returns		Income tax and NICs on withdrawals	Other taxes ^b
			Income tax on interest/dividends ^a	Capital gains tax		
Private pension funds (employee contribution)	Exempt from income tax, not exempt from employer and employee NICs	Purchases of UK securities taxed at 0.5%	Exempt	Exempt	Taxed except for a 25% lump-sum, no NICs	n/a
Private pension funds (employer contribution)	Exempt from income tax, employer and employee NICs	Purchases of UK securities taxed at 0.5%	Exempt	Exempt	Taxed except for a 25% lump-sum, no NICs	n/a
ISA	Taxed	Purchases of UK securities taxed at 0.5%	Exempt ^c	Exempt	Exempt	n/a
Interest-bearing account	Taxed	n/a	Taxed at 10%, 20% or 40% rate	n/a	Exempt	n/a
Direct equity holdings	Taxed	Taxed at 0.5%	Taxed at 10% or 32.5% but offsetting dividend tax credit means effective rates are 0% and 25%	Taxed	Exempt	n/a
Owner-occupied housing (primary or only house)	Taxed	Taxed at 0%, 1%, 3% or 4% depending on value	Exempt ^d	Exempt	Exempt	Council tax
Housing (second or subsequent house)	Taxed	Taxed at 0%, 1%, 3% or 4% depending on value	Rental income taxed	Taxed	Exempt	Council tax ^e
Other physical assets (e.g. jewellery, antiques)	Taxed	n/a	n/a	Taxed ^f	Exempt	n/a

(a) Dividends are paid out of profits which attract corporation tax. The effects of this are ignored.

(b) All asset types shown here are also subject to inheritance tax if bequeathed to non-exempt beneficiaries at or within seven years of death.

(c) Until April 2004, a tax credit was also paid for dividends from UK companies paid into equity ISAs.

(d) Dividends are effectively the imputed value of income from owner-occupation – this was taxed on the basis of the notional rental value of owner-occupied housing until 1963. Note that income tax is payable on income received from letting out part of a main residence while the owner resides there, although the first £4,250 per year can be tax-free.

(e) Council tax would only be payable by the investor (at the discounted second home rate) if the property was not let.

(f) Jewellery, paintings, antiques and other personal effects that are individually worth £6,000 or less are exempt.

For firms already operating in a particular country and deciding whether or not to invest a little more, a more relevant measure is the effective marginal tax rate (EMTR). This looks at a small (marginal) investment that is only just worthwhile for the firm to make and estimates the proportion of the additional profits it generates that would be paid in tax.

EMTRs (and indeed EATRs) vary widely according to the type of asset invested in and how the investment is financed. Figure 21 shows the EMTRs created by corporation tax for three different investments: equity-financed plant and machinery, debt-financed plant and machinery, and equity-financed industrial buildings. All the countries shown treat investment in plant and machinery more favourably than investment in industrial buildings, and all countries treat debt-financed investment more favourably than equity-financed investment.¹⁷ Both of these distortions have been reduced in the UK since 1979, although the removal of 100% capital allowances for plant and machinery (see Figure 12) has meant that equity-financed plant and machinery – easily the biggest form of investment – has experienced an increase in its EMTR.

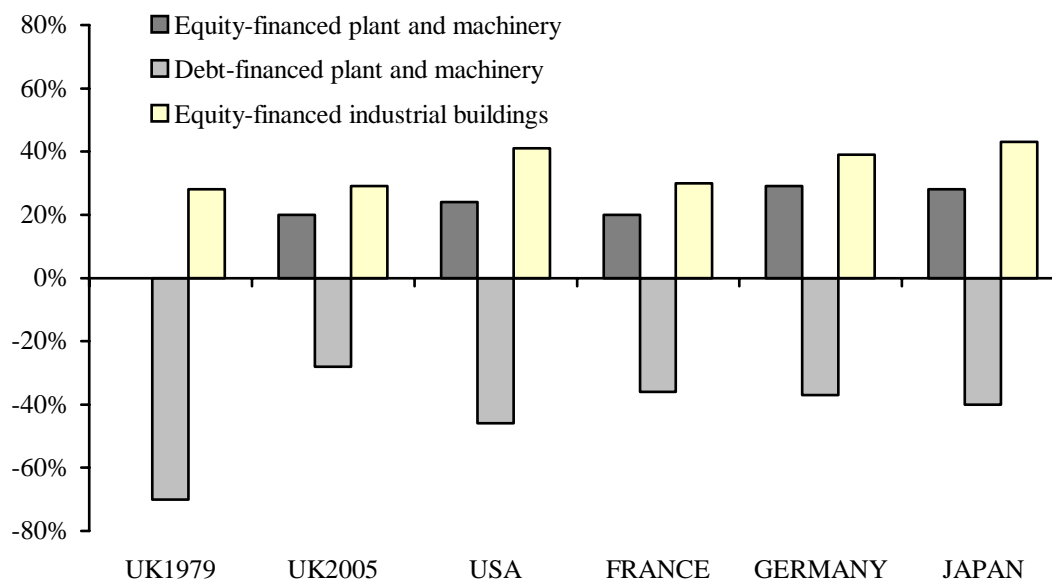
The EMTRs shown in Figure 21 and the EATRs shown in Figure 12, however, illustrate only the effects of corporation tax. How these interact with the personal tax system shown in Table 8 is complicated:

- “Equity-financed” investments can really be financed in two ways: the firm can issue new equity, or it can retain profits (ie pay lower dividends than it otherwise would and finance investment out of the savings); similarly, the proceeds of the investment can be paid out in dividends, or they can be used to buy back shares (or issue less new equity). These have very different personal tax implications: dividend payments are potentially subject to income tax – and, correspondingly, retaining profits means less dividend taxation in the period in which the investment is made – whereas issuing or buying back equity does not affect the income tax liabilities of the shareholders.
- Many shareholders are not liable for income tax in any case. A great deal of companies’ equity and debt is held through pension funds or ISAs, which are tax-exempt. In such cases the investment has no personal tax implications, though this is a recent development: until dividend tax credits stopped being payable to tax-exempt shareholders (in 1997 for pension funds, 2004 for ISAs), they produced a net subsidy for dividends on shares held in these vehicles, broadly offsetting the positive EMTRs and EATRs at the corporate level.
- There is also the international dimension to consider: with global capital markets, much of the equity and debt of UK companies is held by foreigners, who are not liable for UK income tax but may be liable for personal taxes in their own country. Similarly, many UK residents have savings invested in non-UK companies, and the rate at which such savings are taxed depends on how the UK personal tax system interacts with another country’s corporate tax system.

¹⁷ Indeed, all countries’ corporation tax regimes give substantial net subsidies to debt-financed investment. This arises because debt interest payments are completely deductible from taxable profits while in addition investment expenditure may be deducted more quickly than the assets really depreciate.

Interactions between the personal and corporate tax systems can have significant implications for overall incentives to save and invest and for the distortion between debt, new equity and retained earnings as sources of finance. How these interactions play out, however, is complex and opaque.

Figure 21. Effective marginal corporation tax rates on different investments



Notes: Assumes economic depreciation rates of 12.5% for plant and machinery and 3.61% for industrial buildings, inflation of 3.5% and a real interest rate of 10%, [More here.]
Source: Klemm (2005) and OECD

As with the analysis in sections 4.1 and 4.2, our analysis of saving incentives must take account of benefits as well as taxes: if savings reduce entitlement to means-tested benefits and tax credits then this adds to the effective tax rate on saving. The income against which tax credit entitlement is assessed is the same as the income tax base, so saving in pensions, ISAs, owner-occupied housing and other physical assets have the same effective rate of tax of zero while other forms of savings income are counted for the means test and reduce tax credit entitlement. Means-tested benefits treat assets in a completely different way. Owner-occupied housing and other physical assets are disregarded, as for income tax and tax credits; pension income is counted, but unlike for income tax and tax credits, only half of pension contributions are deducted from income. For other savings – ISAs receive no special treatment – the actual income generated is disregarded; however, if the total value of these assets is above £6,000, every £250 (£500 for those aged 60 or over) of savings above this level is assumed to give an income of £1 per week for the purposes of the means test, and those with assets of more than £16,000 are not eligible for means-tested benefits at all.¹⁸ These rules, combined with the high withdrawal rates of means-tested benefits, create a very strong disincentive for those who are on means-tested benefits, or consider themselves likely to be eligible for them in the future, to build up financial assets worth more than £6,000.

¹⁸ This upper limit does not apply to those aged 60 or over.

Finally, it should be noted that means-testing magnifies what was already a significant complication in the taxation of pensions. We noted earlier that the treatment of pensions for income tax and tax credits – deducting pension contributions from income and not taxing returns within the fund but then taxing pension income paid out of the fund – amounts to a zero effective tax rate on the normal return to saving, in effect deferring the tax on earnings saved in a pension until they are withdrawn from the pension fund.¹⁹ But in practice, an individual's marginal tax rate when they are making contributions and when they are receiving pension income may be very different, so the deferral of tax can make a dramatic difference to the amount actually paid. A higher-rate taxpayer who expects to be a basic-rate taxpayer in retirement receives 40% tax relief on contributions, but pays only 22% tax on the pension income. Means tests magnify this: someone contributing to a pension while facing tax credit withdrawal at 37% along with 22% basic rate income tax receives 59% relief on their contributions; if in retirement they are still a basic rate taxpayer but no longer face withdrawal of tax credits, they will pay only 22% tax on the proceeds. Conversely, a basic rate taxpayer receiving 22% tax relief on their contributions may be eligible for pension credit in retirement and see their pension income effectively taxed at 40% – or even higher, up to 91% if they also face withdrawal of housing benefit and council tax benefit.²⁰ Such differentials can make saving in a pension appear hugely attractive or unattractive according to how individuals expect their tax and benefit position to evolve over their life-cycle, and also provides large incentives for people to concentrate their pension contributions at times when their marginal rate is highest: to make contributions at times in their life when they are either higher-rate taxpayers or facing tax credit withdrawal, rather than when they are simply paying basic rate tax. The reduced dispersion of income tax rates has reduced the magnitude of these effects to some degree: the difference between the basic and top rates of income tax is now much less than in 1979, when contributions relieved at 83% could finance pensions taxed at 33%. On the other hand, recent years have seen significant increases in both the number of people paying higher-rate income tax and the number of people subject to means tests, meaning that such considerations now affect many more people than they used to.

5. Conclusion

Over the period since 1979, the tax system in the UK has undergone very large changes. In common with most other OECD countries, the UK has cut top and other rates of personal income tax; shifted from excise duties towards VAT; cut corporate tax rates, broadened the corporate tax base and reformed shareholder taxation; shifted from family to individual taxation; and increased social security contributions. It has also been part of two smaller groups of countries: one that has introduced in-work support through the tax system and another that has developed new environmental taxes. However, the UK has also moved against the international trends by

¹⁹ Note again that the 25% tax-free lump sum and the lack of NICs on employer contributions make the true position more generous than this.

²⁰ The marginal tax rate faced by an individual can also vary over time simply because of policy changes: a pensioner currently pays basic rate tax of 22% on their pension income, but contributions they made in 1979 – when also a basic rate taxpayer – received relief at 33%.

introducing a low starting rate of income tax, removing mortgage interest relief and increasing centralisation of tax revenues.

The overall effect of these changes on income distribution is unclear because of the difficulty of establishing a firm counter-factual. However, there is clearer evidence of their results in other areas. The incentive to be in work has increased on average, while the incentive to work extra hours has been reduced. There is, now, less distortion between different savings vehicles and between different forms of investment.

References

[to come]

Annex: The UK tax system in 2006–07

A.1. Income tax

Income tax liabilities

Around 29.5 million individuals pay income tax in the UK, but not all income is subject to tax. The primary forms of taxable income are earnings from employment, income from self-employment and non incorporated businesses, jobseeker's allowance, retirement pensions, income from property, bank and building society interest and dividends on shares. Incomes from most means-tested social security benefits are not liable to income tax. Many non-means-tested benefits are taxable (e.g. the basic state pension), but some (notably child benefit) are not. Gifts to registered charities can be deducted from income for tax purposes, as can employer and employee pension contributions, although employee social security (National Insurance) contributions are not deducted. Income tax is also not paid on income from certain savings products, such as National Savings Certificates and Individual Savings Accounts.

Income tax is forecast to raise £144.0 billion in 2006–07.

Allowances, bands and rates

Income tax in the UK operates through a system of allowances and bands of income. Each individual has a personal allowance, which is deducted from total income before tax to give *taxable* income. Taxpayers under 65 years old receive a personal allowance of £5,035, while older people are entitled to higher personal allowances (see Table A1).

Table A1: Personal allowances, 2006–07

Type of allowance	Allowance (£ per year)
Aged under 65	5,035
Aged 65–74	7,280 ^a
Aged 75 or over	7,420 ^a

^aFor higher-income individuals, these are gradually reduced to the level of the under-65s' allowance, as described in the text.

Source: HM Revenue and Customs, www.hmrc.gov.uk/rates/it.htm.

In the past, married couples were also entitled to a married couple's allowance (MCA). This was abolished in April 2000, except for those already aged 65 or over at that date (i.e. born before April 1935). For these remaining claimants, the MCA no longer acts to increase the personal allowance; instead, it simply reduces final tax liability, by £606.50 in 2006–07 (£613.50 for those aged 75 or over). Couples may choose which of them claims the MCA, or they can claim half each.

If income for those aged 65 or over exceeds a certain limit (£20,100 in 2006–07), then first the higher personal allowance and then (where appropriate) the MCA are gradually reduced. The personal allowance is reduced by 50 pence for every pound of income above the £19,500 threshold, gradually reducing it to a minimum level equal to the allowance for the under-65s for those with incomes above £24,590 (£24,870 for

those aged 75 or over). Above this latter threshold, those entitled to MCA have it reduced by five pence for every additional pound of income until it reaches a minimum level of £235.00 for those with incomes above £32,020 (£32,440 for those aged 75 or over).

Taxable income is subject to different tax rates depending upon the ‘tax band’ within which income falls. The first £2,150 of taxable income (i.e. income above the personal allowance) is taxed at the starting rate of 10%. The next £31,150 is subject to the basic rate of 22%. Taxable income above the basic-rate limit of £33,300 is subject to the higher rate of 40%. Table A2 summarises these marginal tax rates and bands.

Table A2: Tax bands and rates, 2006–07

Taxable income (£ per year)	Rate of tax (%)
0–2,150 (starting-rate band)	10
2,150–33,300 (basic-rate band)	22
Over 33,300 (higher-rate band)	40

Source: HM Revenue and Customs, www.hmrc.gov.uk/rates/it.htm.

Savings and dividend income are subject to slightly different rates of tax. Interest on savings is taxed at 10% in the starting-rate band and 40% in the higher-rate band, like other income; but savings income in the basic-rate band is taxed at a lower rate of 20% instead of the 22% basic rate. Dividend income is taxed at 10% up to the basic-rate limit and 32.5% above that. However, this is offset by a dividend tax credit, which reduces the effective rates to 0% and 25% respectively. This means that, for basic-rate taxpayers, company profits paid out as dividends are taxed once (via corporation tax on the company profits) rather than twice (via both corporation tax and income tax). When calculating which tax band different income sources fall into, dividend income is treated as the top slice of income, followed by savings income, followed by other income.

Table A3 shows the income tax liabilities of starting-, basic- and higher-rate taxpayers. Of a UK adult population of 48.2 million, it is estimated that there will be 29.5 million taxpayers in 2006–07. Of them, 14% will pay tax at only the starting rate (or at the lower savings or dividend rate), 74% at the basic rate and 12% at the higher rate.

Table A3: Projected income tax liabilities of starting-, basic- and higher-rate taxpayers, 2006–07

Group of taxpayers	Number (000s)	Tax revenue (£m)	Tax revenue as a percentage of total (%)
Starting-rate taxpayers ^a	4,210	1,350	1.0
Basic-rate taxpayers	22,000	59,800	45.6
Higher-rate taxpayers	3,290	70,000	53.4
Total	29,500	131,150	100.0

^aIncludes those whose only income above the starting-rate limit is from either savings or dividends and whose income is below the basic-rate limit.

Note: Figures may not sum exactly because of rounding.

Sources: HM Revenue and Customs, http://www.hmrc.gov.uk/stats/income_tax/table2_1.pdf and http://www.hmrc.gov.uk/stats/income_tax/table2_5.pdf.

Bands and allowances are increased at the start (in April) of every tax year in line with statutory indexation provisions, unless Parliament intervenes. Their increase is announced at the time of the annual Budget, and is in line with the percentage increase in the retail price index (RPI) in the year to the previous September. Increases in personal allowances and the starting-rate limit are rounded up to the next multiple of £10. The increase in the basic-rate limit is rounded up to the next multiple of £100.

Payments system

Most income tax is deducted at source: by employers through the Pay-As-You-Earn (PAYE) system, or by banks etc. for any interest payments. The UK income tax system is cumulative in the sense that total tax payable for a particular financial year depends upon total income in that year. Thus, when calculating tax due each week or month, the employer considers income not simply for the period in question but for the whole of the tax year to date. Tax due on total cumulative income is calculated and tax paid thus far is deducted, giving a figure for tax due this week or month. For those with stable incomes, this system will be little different from a non-cumulative system (in which only income in the current period is considered). For those with volatile incomes, however, the cumulative system means that, at the end of the tax year, the correct amount of tax should have been deducted, whereas under a non-cumulative system, an end-of-year adjustment might be necessary. To enable employers to deduct the right amount of tax, HM Revenue and Customs supplies them with a 'tax code' for each employee, which describes the allowances to which the employee is entitled. If individual circumstances change (starting to receive a pension, for example), the Revenue issues a new tax code for that individual.

Most people need do nothing more: for those with relatively simple affairs, the cumulative system means that no end-of-year adjustment to the amount of tax paid is necessary. Those with more complicated affairs, however, such as the self-employed, those with very high incomes, company directors and landlords, must fill in a self-assessment tax return, setting down their incomes from different sources and any tax-privileged spending such as pension contributions or gifts to charity. Taxpayers may send their returns to HM Revenue and Customs before 30 September each year, and

HM Revenue and Customs will calculate the tax owed, given the information on income sources provided by the taxpayer. Alternatively, for those wishing to calculate their own tax bill, the deadline is the following 31 January, which is also the deadline for payment of the tax. Fixed penalties and surcharges operate for those failing to make their returns by the deadlines and for underpayment of tax.

Tax credits

The last eight years have seen a move towards the use of tax credits to provide support that would previously have been delivered through the benefit system. Since April 2003, there have been two tax credits in operation: child tax credit and working tax credit. Both are based on family circumstances (apart from the married couple's allowance, the rest of the income tax system operates at the individual level) and both are refundable tax credits, meaning that a family's entitlement is payable even if it exceeds the family's tax liabilities.

Child tax credit (CTC) provides means-tested support for families with children as a single integrated credit paid on top of universal child benefit. Families are eligible for CTC if they have at least one child aged under 16, or aged 16–18 and in full-time education. CTC is made up of a number of elements: a family element of £545 per year (doubled for families with a child under the age of 1), a child element of £1,765 per child per year, a disabled child element worth £2,350 per child per year and a severely disabled child element worth £945 per child per year. Entitlement to CTC does not depend on employment status – both out-of-work families and lower-paid working parents are eligible for it – and it is paid directly to the main carer in the family (nominated by the family itself).

Working tax credit (WTC) provides in-work support for low-paid working adults with or without children. It consists of a basic element worth £1,665 per year, with an extra £1,640 for couples and lone parents (i.e. everyone except single people without children) and an extra £680 for those working at least 30 hours a week (30 hours in total for couples). Families with children and workers with a disability are eligible for WTC provided at least one adult works 16 or more hours per week; for those without children or a disability, at least one adult must be aged 25 or over and working at least 30 hours per week to be eligible. All childless claimants without a disability will therefore be entitled to the 30-hour premium. There are supplementary payments for disability and for those over 50 returning to work. In addition, for families in which all adults work 16 hours or more per week, there is a childcare credit, worth 80% of eligible childcare expenditure of up to £175 for families with one child, or £300 for families with two or more children (i.e. worth up to £140 or £240). The childcare credit is paid directly to the main carer in the family. The rest of WTC is paid to a full-time worker (two-earner couples can choose who receives it); originally this was done through the pay packet where possible, but this proved rather burdensome for employers, and so since April 2006 all WTC has been paid directly to claimants.

A means test applies to child tax credit and working tax credit together. Families with pre-tax family income below £5,220 per year (£14,155 for families eligible only for child tax credit) are entitled to the full CTC and WTC payments appropriate for their circumstances. Once family income exceeds this level, the tax credit award is reduced by 37p for every £1 of family income above this level. The main WTC entitlement is withdrawn first, then the childcare element of WTC and finally the child elements of the child tax credit. The family element of the child tax credit, however, is not

withdrawn unless family income exceeds £50,000 per year; above that level, it is reduced by £1 for every additional £15 of income.

HM Revenue and Customs estimates that the total tax credit entitlement of claimants in 2005–06 was £10.6 billion in CTC and £5.4 billion in WTC, some of which is counted as negative taxation and some as public expenditure in the National Accounts. However, since their introduction child and working tax credits have suffered from a major problem of overpayments: many families have been paid more than their true entitlement over the year, either because of administrative errors or because family circumstances changed to reduce their entitlement (eg income rose) and HM Revenue and Customs did not find out early enough (or did not respond quickly enough) to make the necessary reduction in payments for the rest of the year. Largely as a result of this, actual spending on tax credits has been significantly higher than these entitlement figures. As at April 2006, 6.0 million families were receiving tax credits: 4.1 million receiving just child tax credit, 0.3 million receiving just working tax credit, and 1.6 million receiving both.

A.2. National Insurance contributions

National Insurance contributions (NICs) act like a tax on earnings, but their payment entitles individuals to certain ('contributory') social security benefits.²¹ In practice, however, contributions paid and benefits received bear little relation to each other for any individual contributor, and the link has weakened over time.

In 2006–07, National Insurance contributions are forecast to raise £89.6 billion, the vast majority of which will be Class 1 contributions. Two groups pay Class 1 contributions: employees as a tax on their earnings and employers as a tax on those they employ. Since 1975, Class 1 contributions for employers and employees have been related to employee earnings (including employee, but not employer, pension contributions), subject to an earnings floor which since April 2001 has been set equal to the income tax personal allowance for both employers and employees. Employees pay NICs at a rate of 11% on any earnings between the earnings threshold (ET, £97 per week in 2006–07) and the upper earnings limit (UEL, £645 in 2006–07), and at 1% on earnings above the UEL. Employers pay NICs for each employee who earns over the ET, at a rate of 12.8% of all earnings above this level.

NICs are lower for those who have contracted out of the State Second Pension (formerly the State Earnings-Related Pension Scheme, SERPS) and instead belong to a recognised private pension scheme. The reduction depends on the type of pension scheme that an individual has joined. For defined benefit pensions, the percentage levied on earnings between the ET and the UEL is currently reduced by 1.6 percentage points for employee contributions and by 3.5 percentage points for employer contributions. The equivalent rebates for those who have opted out into a defined contribution pension scheme depend on age. Table A4 summarises the Class 1 contribution structure for 2006–07.

²¹ For details of contributory benefits, see D. Phillips and L. Sibieta, *A Survey of the UK Benefit System*, IFS Briefing Note 13, 2006 (www.ifs.org.uk/bns/bn13.pdf).

Table A4: National Insurance contribution (NIC) rates, 2006–07 (%)

Band of weekly earnings (£)	Employee NICs		Employer NICs	
	Standard rate	Contracted-out rate	Standard rate	Contracted-out rate
0–97 (ET)	0	0	0	0
97–645 (UEL)	11	9.4	12.8	9.3
Above 645	1	1	12.8	12.8

Notes: Rates shown are marginal rates, and hence apply to the amount of weekly earnings within each band. Contracted-out rate applies to defined benefit pension schemes, i.e. contracted-out salary-related schemes (COSRSs). The rates applying to defined contribution pension schemes – i.e. contracted-out money-purchase schemes (COMPSs) – vary according to age.

Source: HM Revenue and Customs, www.hmrc.gov.uk/rates/nic.htm.

Class 1 contributions are remitted to HMRC by employers along with income tax. But unlike for income tax, NICs liabilities are calculated for each pay period (typically a week, fortnight or month) separately, without reference to earnings in the rest of the year.

The self-employed pay two different classes of NI contributions – Class 2 and Class 4. Class 2 contributions are paid at a flat rate (£2.10 per week for 2006–07) by those whose earnings (i.e. profits, since these people are self-employed) exceed the small earnings exception, currently £4,465 per year. Class 4 contributions are paid at 8% on any profits between the lower profits limit (£5,035 per year for 2006–07) and the upper profits limit (£33,540 per year for 2006–07), and at 1% on profits above the upper profits limit. This regime for the self-employed is much more generous than the Class 1 regime, and the self-employed typically pay far less than would be paid by employee and employer combined.

Class 3 NI contributions are voluntary and are usually made by UK citizens living abroad in order to maintain their entitlement to benefits when they return. Class 3 contributions are £7.55 per week for 2006–07.

A.3 Value added tax (VAT)

VAT is a proportional tax paid on all sales to UK purchasers. Before passing the revenue on to HM Revenue and Customs, however, firms may deduct any VAT they paid on inputs into their products; hence it is a tax on the *value added* at each stage of the production process, not simply on all expenditure. The standard rate of VAT is 17.5%. In 1994–95, a reduced rate was introduced for domestic fuel and power, originally 8% but now 5%. The reduced rate has since been extended to cover women’s sanitary products, children’s car seats, contraceptives, certain residential conversions and renovations, and certain energy-saving materials. A number of goods are either zero-rated or exempt. Zero-rated goods have no VAT levied upon the final good, and firms can reclaim any VAT paid on inputs as usual. Exempt goods have no VAT levied on the final good sold to the consumer, but firms cannot reclaim VAT paid on inputs; thus exempt goods are effectively liable to lower rates of VAT (between about 4% and 7%, depending upon the firm’s cost structure and suppliers). Approximately 55% of households’ expenditure is taxable at the standard rate; 12% is zero-rated, 2% is taxable at the reduced rate and 31% is on exempt items. Table A5

lists the main categories of goods that are zero-rated, reduced-rated and exempt, together with estimates of the revenue forgone by not taxing them at the standard rate.

Table A5: Estimated costs of zero-rating, reduced-rating and exempting goods and services for VAT revenues, 2005–06

	Estimated cost (£m)
Zero-rated:	
Food	10,600
Construction of new dwellings ^a	6,550
Domestic passenger transport	2,250
International passenger transport ^a	100
Books, newspapers and magazines	1,550
Children's clothing	1,200
Water and sewerage services	1,050
Drugs and medicines on prescription	1,350
Supplies to charities ^a	200
Ships and aircraft above a certain size	600
Vehicles and other supplies to people with disabilities	400
Cycle helmets ^a	5
Reduced-rated:	
Domestic fuel and power	2,000
Women's sanitary products	50
Contraceptives	5
Children's car seats	5
Energy saving materials	50
Residential conversions and renovations	150
VAT-exempt:	
Rent on domestic dwellings ^a	2,950
Rent on commercial properties ^a	150
Private education	300
Health services ^a	850
Postal services ^a	500
Burial and cremation	100
Finance and insurance ^a	3,900
Betting, gaming and lottery ^a	1,250
Businesses below registration threshold ^a	300
Total	38,410

^a Figures for these categories are subject to a wide margin of error.

Sources: Tables A.1 and A3.1 of HM Treasury, *Financial Statement and Budget Report 2006* (http://www.hm-treasury.gov.uk/media/20F/2F/bud06_cha_134.pdf); HM Revenue and Customs Statistics (http://www.hmrc.gov.uk/stats/tax_expenditures/b1_apr06.pdf).

Only firms whose sales of non-exempt goods and services exceed the VAT registration threshold (£61,000 in 2006–07) need to pay VAT. Since April 2002, small firms (defined as those with total sales below £187,500 and non-exempt sales below £150,000 in 2006–07, excluding VAT) have had the option of using a simplified flat-rate VAT scheme. Under the flat-rate scheme, firms pay VAT at a single rate on their total sales and give up the right to reclaim VAT on inputs. The flat rate, which varies between 2% and 13.5% depending on the industry, is intended to reflect the average VAT rate in each industry, taking into account recovery of VAT on inputs, zero-rating and so on.

VAT is expected to raise £76.5 billion in 2006–07.

A.4 Other indirect taxes

Excise duties

Excise duties are levied on five major goods: beer, wine, spirits, tobacco and fuel. They are levied at a flat rate (per pint, per litre, per packet etc.); tobacco products are subject to an additional *ad valorem* tax of 22% of the total retail price (including the flat-rate duty, VAT and the *ad valorem* duty itself). Since flat-rate duties are expressed in cash terms, they must be revalorised (i.e. increased in line with inflation) each year in order to maintain their real value. Table A6 shows the rates of duties levied in 2006–07. These excise duties are forecast to raise £40.1 billion in 2006–07.

Table A6: Excise duties, 2006–07

Good	Duty (pence)	Total duty as a percentage of price (%)	Total tax as a percentage of price (%) ^a
Packet of 20 cigarettes: specific duty	210	} 66.4	} 81.3
<i>ad valorem</i> (22% of retail price)	104		
Pint of beer	29	13.5	28.4
Wine (75cl bottle)	129	38.2	53.1
Spirits (70cl bottle)	548	48.0	62.9
Ultra-low sulphur petrol (litre)	47	50.8	65.7
Ultra-low sulphur diesel (litre)	47	49.1	64.0

^aIncludes VAT.

Notes: Assumes beer (bitter) at 3.9% abv, wine not exceeding 15% abv, spirits (whisky) at 40% abv.

Percentages are calculated for April 2006 prices.

Sources: HM Revenue and Customs website

(customs.hmrc.gov.uk/channelsPortalWebApp/channelsPortalWebApp.portal?_nfpb=true&_pageLabel=pageExcise_InfoGuides); UK Trade Info website (www.uktradeinfo.co.uk); National Statistics (www.statistics.gov.uk); authors' calculations.

Vehicle excise duty

In addition to VAT and excise duties, revenue is raised through a system of licences. The main licence is vehicle excise duty (VED), levied annually on road vehicles. For cars and vans registered before 1 March 2001, there are two bands. VED is £110 per vehicle for vehicles with engines smaller than 1,550cc; above this size, VED is £175. Cars and vans registered on or after 1 March 2001 are subject to a different VED system based primarily on carbon dioxide emissions. For petrol cars or vans, VED ranges from zero for vehicles emitting less than 100g of carbon dioxide per kilometre to £190 for vehicles emitting more than 186g of carbon dioxide per kilometre. Vehicles registered since March 2006 that emit more than 223g of carbon dioxide per kilometre are liable for an even higher rate, £210. Different rates apply for diesel vehicles and for other types of vehicles, such as motorbikes, caravans and heavy goods vehicles. In 2006–07, VED is forecast to raise about £5.1 billion.

Insurance premium tax

Insurance premium tax (IPT) came into effect in October 1994 as a tax on general insurance premiums. It is designed to act as a proxy for VAT, which is not levied on financial services because of difficulties in implementation. IPT is payable on most types of insurance where the risk insured is located in the UK (e.g. motor, household, medical and income replacement insurance) and on foreign travel insurance if the policy lasts for less than four months. Long-term insurance (such as life insurance) is exempt. Since 1 July 1999, IPT has been levied at a standard rate of 5% of the gross premium. If, however, the policy is sold as an add-on to another product (e.g. travel insurance sold with a holiday, or breakdown insurance sold with vehicles or domestic appliances), then IPT is charged at a higher rate of 17.5%. This prevents insurance providers from being able to reduce their tax liability by increasing the price of the insurance (which would otherwise be subject to insurance premium tax at 5%) and reducing, by an equal amount, the price of the good or service (subject to VAT at 17.5%). Insurance premium tax is forecast to raise around £2.4 billion in 2006–07.

Air passenger duty

On 1 November 1994, an excise duty on air travel from UK airports came into effect (flights from the Scottish Highlands and Islands are exempt). Currently, the air passenger duty rate on economy flights is £5 for destinations in the EU and £20 for other destinations. The rates for those travelling first or club class are £10 within the EU and £40 elsewhere. In 2006–07, air passenger duty is forecast to raise £1.0 billion.

Landfill tax

Landfill tax was introduced on 1 October 1996. It is currently levied at two rates: a lower rate of £2 per tonne for disposal to landfill of inactive waste (waste that does not decay or contaminate land) and a standard rate of £21 per tonne for all other waste. The government has announced that the standard rate will increase by at least £3 per tonne every year until it reaches a medium- to long-term rate of £35 per tonne.²² The tax is forecast to raise £0.8 billion in 2006–07.

Climate change levy

The climate change levy came into effect on 1 April 2001. It is charged on industrial and commercial use of electricity, coal, natural gas and liquefied petroleum gas, with the tax rate varying according to the type of fuel used. The levy is designed to help the UK move towards the government's domestic goal of a 20% reduction in carbon dioxide emissions between 1990 and 2010. In 2006–07, the rates are 0.43 pence per kilowatt-hour for electricity, 0.15 pence per kilowatt-hour for coal and natural gas, and 0.07 pence per kilowatt-hour for liquefied petroleum gas. Energy-intensive sectors that have concluded climate change agreements that meet the government's criteria are charged a reduced rate equal to 20% of the standard climate change levy. The levy is forecast to raise around £0.7 billion in 2006–07.

Aggregates levy

Aggregates levy is a tax on the commercial exploitation of rock, sand and gravel (e.g. their removal from the originating site or their use in construction). The levy was

²²HM Treasury, *Pre Budget Report*, 2003 (www.hm-treasury.gov.uk/pre_budget_report/prebud_pbr03/report/prebud_pbr03_repindex.cfm).

introduced in April 2002 to reduce the environmental costs associated with quarrying. It has been charged at a rate of £1.60 per tonne since its introduction and is forecast to raise £0.3 billion in 2006–07.

Betting and gaming duties

Until relatively recently, most gambling was taxed as a percentage of the stakes laid. Since October 2001, however, general betting duty (and pool betting duty for pool betting) has been charged at 15% of gross profits for all bookmakers and the Horserace Totalisator Board (the Tote), except for spread betting, where a rate of 3% for financial bets and 10% for other bets is applied. Pool betting duty (since April 2002) and bingo duty (since October 2003) are also charged at 15% of gross profits on those activities. In all cases, ‘gross profits’ means total stakes (and any participation fees for bingo) minus winnings paid.

Gaming duty, which replaced gaming licence (premises) duty on 1 October 1997, is based on the ‘gross gaming yield’ for each establishment where dutiable gaming takes place. The gross gaming yield is money gambled minus winnings paid: this consists of the total value of the stakes, minus players’ winnings, on games in which the house is the banker, and participation charges, or ‘table money’, exclusive of VAT, on games in which the bank is shared by players. Gaming duty is levied at marginal rates of between 2.5% and 40% according to the amount of gross gaming yield.

Duties on betting and gaming are forecast to raise £1.4 billion in 2006–07.

A.5. Capital taxes

Capital gains tax

Capital gains tax was introduced in 1965 and is levied on gains arising from the disposal of assets by individuals and trustees. Capital gains made by companies are subject to corporation tax. The total capital gain is defined as the value of the asset when it is sold (or given away etc.) minus its value when originally bought (or inherited etc.). As with income tax, there is a threshold below which capital gains tax does not have to be paid. In 2006–07, this ‘exempt amount’ is £8,800 for individuals and £4,400 for trusts. This is subtracted from total capital gains to give taxable capital gains. Taxable capital gains are in effect subject to income tax as if they were savings income: treated as the top slice of income, capital gains are taxed at 10% below the starting-rate limit, 20% between the starting- and basic-rate limits, and 40% above the basic-rate limit. In practice, most capital gains are subject to 40% tax.

Table A7: The capital gains tax taper, 2006–07

Number of complete years after 5 April 1998 for which asset held	Non-business assets		Business assets	
	Percentage of gain chargeable	Equivalent tax rate for higher-rate taxpayer	Percentage of gain chargeable	Equivalent tax rate for higher-rate taxpayer
0	100	40	100	40
1	100	40	50	20
2	100	40	25	10
3	95	38	25	10
4	90	36	25	10
5	85	34	25	10
6	80	32	25	10
7	75	30	25	10
8	70	28	25	10
9	65	26	25	10
10 or more	60	24	25	10

Source: HM Revenue and Customs, http://www.hmrc.gov.uk/stats/capital_gains/tableA-7.pdf.

Capital gains tax was reformed in the March 1998 Budget by the introduction of a taper system and removal of the previous indexation allowance (given to reflect increases in the price of assets over time solely due to inflation). As Table 8 illustrates, the taper system reduces the amount of capital gains tax paid the longer an asset is held. The holding period for capital gains tax taper relief for non-business assets is 10 years. For business assets (assets used wholly or partly for trading purposes, and shares and securities in a company), the taper length is two years. It was reduced from 10 to four years in the 2000 Budget and down to its current level in the 2002 Budget. The regime is more generous (a smaller percentage of the gain is chargeable) for business assets than for non-business assets.

The key exemption from capital gains tax is gains arising from the sale of a main home. Private cars and certain types of investment are also exempt, as are transfers to a spouse or civil partner and gifts to charity. Some consecutive short-term investments, where the gains are reinvested, can be treated as a single long-term investment for the purposes of taper relief. Capital gains tax is ‘forgiven’ at death: the deceased’s estate is not liable for tax on any increase in the value of assets prior to death, and those inheriting the assets are deemed to acquire them at their market value at the date of death. This is partly because estates may instead be subject to inheritance tax (see below).

It is estimated that in 2006–07, capital gains tax will raise £3.8 billion in revenue. Although this represents only a small proportion of total government receipts, capital gains tax is potentially important as an anti-avoidance measure, as it discourages wealthier individuals from converting a large part of their income into capital gains in order to reduce their tax liability. In 2006–07, approximately 260,000 individuals and trusts will pay capital gains tax.

Inheritance tax

Inheritance tax was introduced in 1986 as a replacement for capital transfer tax. The tax is applied to transfers of wealth on or shortly before death that exceed a minimum threshold (£285,000 in 2006–07). In Budget 2006 the Government announced that this threshold will increase by more than the likely rate of inflation over the next three years, to £300,000 in 2007–08, £312,000 in 2008–09 and £325,000 in 2009–10. Inheritance tax is charged on the part of the transfers above this threshold at a single rate of 40% for transfers made on death or during the previous three years, and is normally payable out of estate funds. Transfers made between three and seven years before death attract a reduced tax rate, while transfers made seven or more years before death are not normally subject to inheritance tax. This is set out in Table A8. Gifts to companies or discretionary trusts that exceed the threshold attract inheritance tax immediately at a rate of 20%, for which the donor is liable; if the donor then dies within seven years, these gifts are taxed again as usual but any inheritance tax already paid is deducted.

Table A8: Inheritance tax reductions for transfers before death, 2006–07

Years between transfer and death	Reduction in tax rate (%)	Actual tax rate (%)
0–3	0	40
3–4	20	32
4–5	40	24
5–6	60	16
6–7	80	8
7+	100	0

Sources: HM Revenue and Customs, <http://www.hmrc.gov.uk/cto/customerguide/page13-1.htm>; Tolley's *Inheritance Tax 2006–07*.

Some transfers of wealth are exempt from inheritance tax, including those between spouses and civil partners, to charities and to political parties. Other assets, particularly those associated with farms and small businesses, are eligible for relief. Relief reduces the value of the asset by 50% or 100% depending on the type of property transferred, and tax is assessed on the reduced value. The estimated number of taxpaying death estates in 2006–07 is 37,000, equivalent to around 6% of all deaths. The estimated yield from inheritance tax in 2006–07 is about £3.6 billion.

Stamp duties

The main stamp duties are levied on securities (share and bond) transactions and on conveyances and transfers of land and property. They are so named because, historically, stamps on documents, following their presentation to the Stamp Office, indicated their payment. Nowadays, most transactions do not require a document to be stamped and are not technically subject to stamp duty: since 1986, securities transactions for which there is no deed of transfer (e.g. electronic transactions) have instead been subject to stamp duty reserve tax (SDRT), and since 2003, land and property transactions have been subject to stamp duty land tax (SDLT). This is essentially a matter of terminology, however: the rates are the same and the term 'stamp duty' is still widely used to encompass SDRT and SDLT as well. The buyer is responsible for paying the tax.

Table A9 gives stamp duty rates as they stand currently. For residential land and property transactions, there is a threshold of £125,000 below which no stamp duty is paid. A different threshold – £150,000 – applies to non-residential properties and to residential properties in certain designated disadvantaged areas. For land and property above this exemption threshold, a range of duty rates applies, depending on the purchase price. The appropriate rate of duty applies to the whole purchase price, including the part below the relevant threshold. As a result, a small difference in the purchase price can lead to a large change in tax liability if it moves the transaction across a threshold; this structure creates unnecessary distortions in the property market and is long overdue for reform. For shares and bonds, there is no threshold and stamp duty is levied at 0.5% of the purchase price. The total duty payable is always rounded up to the next multiple of £5.

Table A9: Rates of stamp duty, 2006–07

Transaction	Rate (%) ^a
Land and buildings:	
Up to and including £125,000 ^b	0
Above £125,000 but not exceeding £250,000 ^b	1
Above £250,000 but not exceeding £500,000	3
Above £500,000	4
Shares and bonds	0.5

^aTotal duty payable is rounded up to the next multiple of £5.

^bThe zero rate extends to £150,000 for non-residential properties and for residential properties in certain designated disadvantaged areas.

Source: HM Revenue and Customs, http://www.hmrc.gov.uk/so/current_sdlr_rates.htm, <http://www.hmrc.gov.uk/so/sdrtrates.htm>.

Total stamp duties are forecast to raise £12.2 billion in 2006–07. Approximately two-thirds of this will come from sales of land and property, and the remainder from sales of securities.

A.6. Corporation tax

Corporation tax is charged on the global profits of UK-resident companies, public corporations and unincorporated associations. Firms not resident in the UK pay corporation tax only on their UK profits. The profit on which corporation tax is charged comprises income from trading, investment and capital gains, less various deductions described below. Trading losses may be carried back for one year to be set against profits earned in that period or carried forward indefinitely.²³

The standard rate of corporation tax in 2006–07 is 30%, with a reduced rate of 19% on profits under £300,000. For firms with profits between £300,000 and £1,500,000, a system of relief operates, such that an effective marginal rate of 32.75% is levied on profits in excess of £300,000. This acts to increase the average tax rate gradually until it reaches 30%.

²³The rules for offsetting trading losses, investment losses and capital losses are complicated. More details can be found in A. Klemm and J. McCrae, *Reform of Corporation Tax: A Response to the Government's Consultation Document*, IFS Briefing Note 30, 2002 (www.ifs.org.uk/bns/bn30.pdf).

Table A10: Rates of corporation tax, 2006–07

Profits (£ p.a.)	Marginal tax rate (%)	Average tax rate (%)
0–300,000	19	19
300,001–1,500,000	32.75	19–30
1,500,000 or more	30	30

Sources: HM Revenue and Customs, <http://www.hmrc.gov.uk/rates/corp.htm>; *Tolley's Corporation Tax 2006–07*.

Broadly speaking, current expenditure (such as wages, raw materials and interest payments) is deductible from taxable profits, while capital expenditure (such as buildings and machinery) is not. To allow for the depreciation of capital assets, however, firms can claim capital allowances, which reduce taxable profits over several years by a proportion of capital expenditure. Capital allowances may be claimed in the year that they accrue, set against future profits, or carried back for up to three years. Different classes of capital expenditure attract different capital allowances:

- Expenditure on plant and machinery may be 'written down' on a 25% declining-balance basis.²⁴ A higher, 40%, allowance is available in the first year for expenditure by small and medium-sized companies; in 2006-07 this was increased to 50% for small companies for one year only.
- 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.
- Intangible assets expenditure is written down on a straight-line basis at either the accounting depreciation rate or 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. However, there is now additional tax relief available for current R&D expenditure. For small and medium-sized companies, there is a two-part tax credit (introduced in April 2000). 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, since R&D expenditure is already fully deductible). The second part is a refundable tax credit that is only available to loss-making firms. Firms can give up the right to offset losses equivalent to 150% of their R&D expenditure (or to offset their total losses, if these are smaller) against future profits, in return for a cash payment of 16% of the losses given up (up to a certain limit). An

²⁴The declining-balance method means that for each £100 of investment, taxable profits are reduced by £25 in the first year (25% of £100), £18.75 in the second year (25% of the remaining balance of £75) and so on. The straight-line method with a 4% rate simply reduces profits by £4 per year for 25 years for each £100 of investment.

R&D tax credit for large companies was introduced in April 2002. This credit applies at a rate of 25%, allowing 125% of qualifying expenditure to be deducted from taxable profits.

In all cases, to claim R&D tax credit, companies must incur eligible current R&D expenditure of at least £10,000 (reduced from £25,000 in 2003) in a 12-month accounting period; but the tax credit is then payable on all eligible expenditure, not just the amount above the £10,000 threshold.

Before April 1999, firms paid their total tax bill nine months after the end of the accounting year unless profits had been distributed to shareholders in the form of dividends. In that case, firms had to pay advance corporation tax (ACT), which could then, in most cases, be deducted from the total due nine months after the end of the accounting year. In April 1999, ACT was abolished apart from certain transitional arrangements. Large companies are now required to pay corporation tax in four equal quarterly instalments on the basis of their anticipated liabilities for the accounting year, making the first payment six months into the accounting year. Small and medium-sized companies still pay their total tax bill nine months after the end of the accounting year.

Corporation tax will raise approximately £49.0 billion in 2006–07.

A.7. Taxation of North Sea production

The current North Sea tax regime has three layers of tax: petroleum revenue tax (PRT), corporation tax and a supplementary charge.²⁵ All of these taxes are levied on measures of profit, but there are some differences in allowances and permissible deductions.

Corporation tax is the same as on the mainland, except that it is ring-fenced, so that losses on the mainland cannot be offset against profits from a continental-shelf field.

The supplementary charge is levied on broadly the same base as corporation tax, except that certain financing expenditure is disallowed. It was introduced in the 2002 Budget, and was set at a rate of 10% on all fields. This was increased to 20% in the December 2005 Pre-Budget report, effective from January 2006.

PRT is only payable on oil fields approved before March 1993. It is assessed every six months for each separate oil and gas field and then charged at a rate of 50% on the profits (less various allowances) arising in each chargeable period. PRT is forecast to raise £1.9 billion in 2006–07. It is treated as a deductible expense for both the corporation tax and the additional charge.

A.8. Council tax

On 1 April 1993, the community charge system of local taxation (the ‘poll tax’, levied on individuals) was replaced by council tax, a largely property-based tax. Domestic residences are banded according to an assessment of their market value; individual local authorities then determine the overall level of council tax, while the ratio

²⁵Until January 2003, some oil fields were also subject to licence royalties, a revenue-based tax.

between rates for different bands is set by central government (and has not changed since council tax was introduced).²⁶

Table A11 shows the eight value bands and the proportion of dwellings in England in each band. The council tax rates set by local authorities are usually expressed as rates for a Band D property, with rates for properties in other bands calculated as a proportion of this as shown in the Table. But since most properties are below Band D, most households pay less than the Band D rate: thus in England the average Band D rate for 2006–07 is £1,268, but the average rate for all households is only £1,056.

Property bandings in England and Scotland are currently based on assessed market values as at 1 April 1991. In Wales, a revaluation took effect in April 2005 based on April 2003 property values, and a ninth band paying $2\frac{1}{3}$ times the Band D rate was introduced. A revaluation was also due to take effect in England in April 2007, but in September 2005 the Government postponed the revaluation pending the outcome of a broader inquiry into local government finance led by Sir Michael Lyons. The Lyons Inquiry is due to report to ministers in December 2006, but the Government has stated that no revaluation will take place in this Parliament. A similar review of local government finance in Scotland, chaired by Sir Peter Burt, reported in November 2006 and recommended that council tax be replaced by a tax on property values, abolishing the banding system. This is similar to the system being introduced in Northern Ireland in April 2007. The Burt Review recommendations are currently being considered by the Scottish Parliament and Executive.

There is a range of exemptions and reliefs from council tax, including a 25% reduction for properties with only one resident adult and a 50% reduction if the property is empty or a second home.²⁷ Properties that are exempt from council tax include student halls of residence and armed forces barracks. Low-income families can have their council tax bill reduced or eliminated by claiming council tax benefit.²⁸ Council tax, net of council tax benefit, is expected to raise £22.0 billion in 2006–07, providing around a quarter of local authority revenue.

²⁶Northern Ireland operates a different system: the community charge was never introduced there, and the system of domestic rates that preceded it in the rest of the UK still applies. A major reform to the system of domestic rates in Northern Ireland is due to take effect in April 2007, so that the tax is charged as a percentage of the (2005) property value rather than a percentage of market rent (last determined in 1976 based on data from the 1960s).

²⁷Since 2003, however, councils have had the power to charge second homes up to 90% of council tax and empty homes 100%. Some empty properties are entirely exempt from council tax, e.g. those left empty by patients in hospitals and care homes.

²⁸For details of council tax benefit, see D. Phillips and L. Sibieta, *A Survey of the UK Benefit System*, IFS Briefing Note 13, 2006 (www.ifs.org.uk/bns/bn13.pdf).

Table A11: Value bands for England, September 2006

Band	Tax rate relative to band D	Property valuation as of 1 April 1991	Distribution of dwellings by band (%)
A	$\frac{2}{3}$	Up to £40,000	25.2
B	$\frac{7}{9}$	£40,001 to £52,000	19.3
C	$\frac{8}{9}$	£52,001 to £68,000	21.6
D	1	£68,001 to £88,000	15.2
E	$1\frac{2}{9}$	£88,001 to £120,000	9.5
F	$1\frac{4}{9}$	£120,001 to £160,000	5.0
G	$1\frac{2}{3}$	£160,001 to £320,000	3.6
H	2	Above £320,000	0.6

Note: Percentages may not sum exactly because of rounding.

Source: Department for Communities and Local Government, *Local Government Finance Statistics* (<http://www.local.odpm.gov.uk/finance/stats/data/ctbdwell2006.pdf>).

A.9. Business rates

National non-domestic rates, or business rates, are a tax levied on non-residential properties, including shops, offices, warehouses and factories. They were transferred from local to national control in 1990. Companies pay a fixed proportion (currently 43.3% in England, 43.2% in Wales and 45.3% in Scotland²⁹) of the officially estimated market rent (“rateable value”) of properties they occupy.

Some types of property qualify for reductions, including unoccupied buildings, small rural shops, and agricultural land and associated buildings. Since April 2005, lower rates have applied to small businesses in England and Scotland. Businesses with a low rateable value – below £21,500 in Greater London, £15,000 in the rest of England and £29,000 in Scotland – pay reduced rates of 42.6% (44.9% in Scotland). These rates are further reduced on a sliding scale for businesses with a rateable value below £10,000 (£11,500 in Scotland), with the liability halved for businesses with a rateable value below £5,000 (£3,500 in Scotland). There is currently no business rate relief scheme for Wales, but a scheme will begin in April 2007: all businesses with a rateable value of less than £2,000 will receive a 50% deduction from their rates bill while those with a rateable value between £2,000 and £5,000 will receive a 25% reduction.

Properties are revalued every five years. The latest revaluation took effect in April 2005, based on April 2003 rental values. Major changes in business rates bills caused by revaluation are phased in through a transitional relief scheme.

Business rates are expected to raise £21.4 billion in 2006–07.

²⁹Northern Ireland operates a slightly different system of regional rates and locally varying district rates. The average combined rate in 2006–07 is 47.7%.