



RESEARCH PAPER 01/51
10 MAY 2001

The Burden of Taxation

The burden of taxation represents the proportion of income – national or individual – which is paid in tax, and can be measured in a number of ways. This Research Paper looks at several datasets that provide different perspectives. It updates Research Paper 00/65 produced in June 2000.

Jane Hough

ECONOMIC POLICY AND STATISTICS SECTION

HOUSE OF COMMONS LIBRARY

Recent Library Research Papers include:

01/36	By-elections 1997-2000	28.03.01
01/37	UK election statistics 1945-2000	29.03.01
01/38	General Election results, May 1997	29.03.01
01/39	The <i>International Criminal Court Bill</i> [HL] [Bill 70 of 2000-2001]	29.03.01
01/40	The <i>Election Publications Bill</i> [HL] [Bill 41 of 2000-2001]	29.03.01
01/41	The <i>Adoption Bill</i> [Bill 16 of 2000-2001]	29.03.01
01/42	Economic Indicators	02.04.01
01/43	Parliamentary Pay and Allowances: current rates	03.04.01
01/44	The <i>Elections Bill</i> [Bill 80 of 2000-2001]	03.04.01
01/45	Unemployment by Constituency, March 2001	11.04.01
01/46	Taxation of Charities	12.04.01
01/47	Rural Rate Relief	30.04.01
01/48	Economic Indicators	01.05.01
01/49	The Treaty of Nice and the future of Europe debate	01.05.01
01/50	European Security and Defence Policy: Nice and beyond	02.05.01

Research Papers are available as PDF files:

- *to members of the general public on the Parliamentary web site,
URL: <http://www.parliament.uk>*
- *within Parliament to users of the Parliamentary Intranet,
URL: <http://hcl1.hclibrary.parliament.uk>*

Library Research Papers are compiled for the benefit of Members of Parliament and their personal staff. Authors are available to discuss the contents of these papers with Members and their staff but cannot advise members of the general public. Any comments on Research Papers should be sent to the Research Publications Officer, Room 407, 1 Derby Gate, London, SW1A 2DG or e-mailed to PAPERS@parliament.uk

Summary of main points

- The burden of taxation is a measure of the proportion of income, either national or individual, which is paid in taxes. There are a number of different ways in which the tax burden can be defined and measured. This Research Paper summarises information from a number of sources.
- As measured by the national accounts the burden of taxation in 2001/02 is estimated to be around 37.5% of GDP. At the start of the 20th Century the ratio was around 10%. See section II for details.
- Official projections suggest that, on unchanged policies, the burden of net taxes and social security contributions will be broadly stable at some 37% of GDP in the early years of this decade. This compares with a peak of 38.9% in 1982/83 and a recent low of 33.3% in 1993/94. See section III for details.
- Data for hypothetical working households suggest significant rises in real take home pay over the period 1991/92 to 2001/02. Lower paid families with children benefited significantly from the introduction of the working families tax credit in October 1999. Most, but not all, the families considered will face a lower burden of direct taxes at the end of this period than at the beginning. See section IV for details.
- Households with the top fifth of disposable incomes now pay a higher proportion of all household taxes than in 1979. However, as the share of gross income received by this group has also increased, the burden of tax they face has fallen. Taxes paid by the fifth of households with the lowest living standards now represent a higher proportion of income than in 1979. See section V for details.
- In 1999 the aggregate tax burden in the United Kingdom was significantly below the average for the EU15. It was, however, above the level in several major non-European countries including Australia, Japan and the United States. See section VI for details.

CONTENTS

I	Introduction	7
II	National Accounts data	9
	A. Background	9
	B. The long-term perspective	9
	C. Recent data and economic classification	10
III	Public finance presentation	11
IV	Hypothetical families	14
V	Household survey data	20
VI	International Comparisons	22
	Appendix 1: The tax burden 1900-2000	25
	Appendix 2: Assumptions and sources for calculation of taxes paid by typical families	28
	Appendix 3: Hypothetical families: tables for other income levels	30
	Appendix 4: Further reading and internet sources	34

I Introduction

The burden of taxation is a measure of the proportion of income, either national or individual, which is paid in taxes. The tax burden can change for a number of reasons: discretionary decisions by government, the state of the macro-economy (eg level of GDP relative to trend) and micro-economic factors such as changes in consumption patterns and the distribution of income. Each budget includes a raft of discretionary tax changes, some of which do not come into effect immediately. Details are published in each budget 'Red Book' together with estimates of the direct revenue implications.¹ The following table notes a selection of the major tax changes (in terms of revenue effect) coming into effect each year 1992/93 to 2001/02 organised by the budget in which they were announced.²

Year	Budget	Change
1992/93	Mar 1992	Introduction of 20p income tax band Married couples allowance (MCA) frozen for those under 65 Car tax halved from 10% to 5% Additional transitional relief for business rates
1993/94	Mar 1993	Income tax allowances frozen Lower rate band for income tax extended Car tax abolished and offsetting increases in fuel duties (announced Nov 1982) Additional transitional relief for business rates
1994/95	Mar 1993 Nov 1993	Married couples allowance restricted to 20% Mortgage tax relief restricted to 20% Lower rate band for income tax extended VAT on domestic fuel and power introduced at 8% Escalator introduced for road fuel duty at 3% ³ Standard rate of employees' NICs raised from 9% to 10% Income tax allowances frozen Insurance premium tax introduced Air passenger duty introduced Employers' NICs reduced
1995/96	Nov 1993 Nov 1994	Married couples allowance restricted to 15% Mortgage tax relief restricted to 15% Escalator for road fuel duty raised to 5% Escalator introduced for tobacco duty at 3% Additional transitional relief for business rates Additional increases in excise duties to offset decision not to increase VAT on domestic fuel and power to 17½%.

¹ See, for example, HM Treasury, *Budget 2001*, HC 279 2000-01 table A.11

² For details of current rates of direct taxes see Research Paper 01/24 *Direct Taxes: Rates and Allowances 2001-02*

³ Duty escalators require the rate of duty to be increased in each subsequent budget by a specified number of percentage points above the rate of inflation. As such they have an on-going effect.

Year	Budget	Change
1996/97	Nov 1995	Income tax personal allowance over-indexed Basic rate of income tax reduced from 25% to 24% Landfill tax introduced Lower rate band for income tax extended Income tax on savings reduced to 20% for basic rate taxpayers
1997/98	Nov 1995 Nov 1996 Jul 1997	Employer NICs reduced Basic rate of income tax reduced from 24% to 23% Income tax personal allowance over-indexed Increase in insurance premium tax from 2½% to 4% Air passenger duty doubled Phased withdrawal of tax relief on profit related pay VAT on domestic fuel and power reduced to 5% Payable tax credits abolished Corporation tax reduced from 33 to 31 percent Higher rates of stamp duty on property transfers introduced Windfall tax on privatised utilities Duty escalators raised to 6% for road fuels and 5% for tobacco
1998/99	Jul 1997 Mar 1998	Mortgage tax relief restricted to 10% Higher rates of stamp duty on property transfers increased Advance timing of increases in fuel duties
1999/00	Mar 1998 Mar 1999	Advanced corporation tax abolished and quarterly corporation tax payments introduced Working families' tax credit (WFTC) to replace family credit Entry fee for employee NICs abolished Married couples allowance restricted to 10% Corporation tax reduced from 31% to 30% 10p starting rate of income tax Higher rates of stamp duty on property transfers increased Advance timing of increases in tobacco duties Increase in insurance premium tax from 4% to 5%
2000/01	Mar 1999 Mar 2000	Mortgage tax relief abolished. Married couples allowance abolished for those born after 1935 Basic rate of income tax reduced to 22% Phased alignment of starting point for employee NICs with personal allowance and consequential increases in upper earnings limits Duty escalators abolished but tobacco duties increased by 5% in real terms Higher rates of stamp duty on property transfers increased
2001/02	Mar 1999 Mar 2001	New children's tax credit (CTC) Proposed climate change levy offset by reduction in employer NICs Increase in value of WFTC (from June 2001) and CTC (from April 2001) Over-indexation of starting rate band of income tax Cuts in fuel duties

II National Accounts data

A. Background

The national accounts are published by National Statistics with the aim of providing a coherent view of the UK economy. The accounts include details of the taxes paid by UK residents and received by government. Relating the level of tax revenues to gross domestic product (GDP) provides an aggregate measure of the tax burden. The advantages of this measure are that consistent data are available over a long period, data are on internationally recognised definitions and all types of tax (eg direct and indirect) are included. The disadvantages are that, as far as households are concerned, there is no information about the distribution of the tax burden and no adjustments are made for the impact of structural changes to the tax and benefit system (eg the switch from child tax allowances to child benefit in the late 1970s).

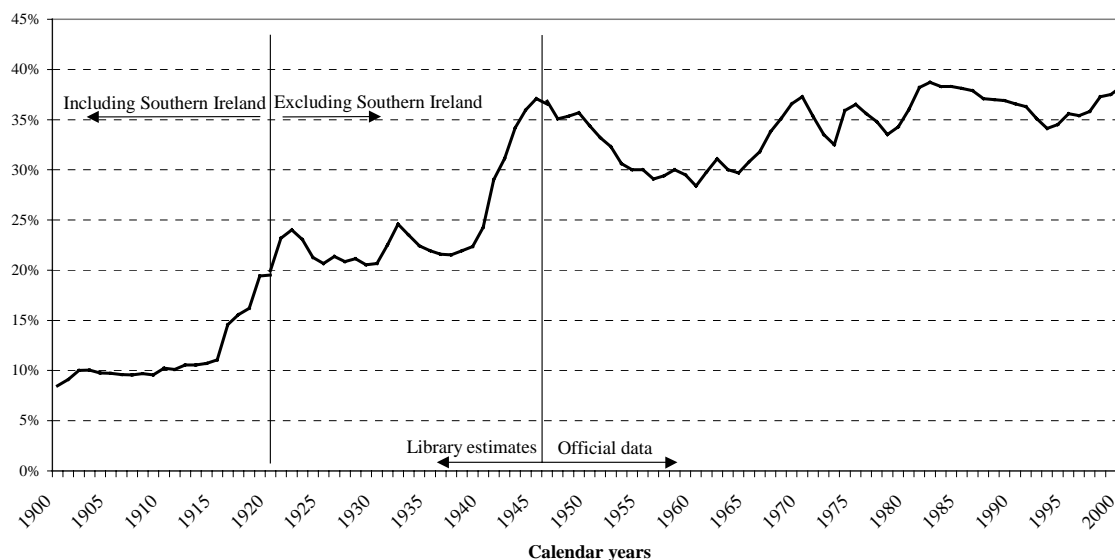
B. The long-term perspective

Chart 1 (overleaf) illustrates the tax burden each calendar year since 1900 based on the national accounts measure of the tax burden. The data for 1946 to 2000 are official figures. The ratios for earlier years have been estimated from a range of official and academic sources. Appendix 1 gives the supporting data.

At the start of the 20th Century the tax burden was around 10% compared to ratios of 34% to 39% over the last two decades. Apart from shorter-term cyclical factors, the main determinate of the tax burden is the level of public spending. The financial demands of the two world wars are immediately apparent. In addition the growth of the welfare state (education, health, social security and social housing) has put upward pressure on expenditure compared to the days of the poor law and church schools.

Chart 1

**Tax and Social Security Contributions
per cent of GDP**



C. Recent data and economic classification

Table 1 (overleaf) provides similar data for financial years since 1990/91 and includes forecasts for 2000/01 and 2001/02 consistent with the March 2001 Budget. The total includes taxes paid to central government, local government and the EU (in the form of 'own resources'). Total taxes are divided into four broad economic categories:

- Taxes on production and imports. This includes most of the main indirect taxes such as VAT and excise duties.
- Taxes on income, wealth, etc. This includes most of the main direct taxes such as income tax, capital gains tax and corporation tax.
- Taxes on capital (mainly inheritance tax).
- Social contributions (national insurance contributions).

Table 1
Taxes and Social Contributions

Per cent of GDP

Financial year	Taxes on production and imports (a)		Taxes on income, wealth etc (b)	Taxes on capital	Social Contributions	Total
	Paid to general government	Paid to EU				
1990/91	12.3%	1.1%	16.7%	0.2%	6.2%	36.6%
1991/92	13.4%	0.9%	15.6%	0.2%	6.2%	36.4%
1992/93	12.8%	1.0%	14.5%	0.2%	6.2%	34.5%
1993/94	12.8%	1.0%	13.8%	0.2%	6.2%	34.0%
1994/95	13.1%	0.8%	14.5%	0.2%	6.2%	34.8%
1995/96	13.3%	1.0%	15.1%	0.2%	6.2%	35.8%
1996/97	13.3%	0.9%	15.0%	0.2%	6.1%	35.6%
1997/98	13.6%	0.7%	16.0%	0.2%	6.3%	36.9%
1998/99	13.7%	0.7%	16.2%	0.2%	6.4%	37.2%
1999/00	13.9%	0.6%	16.6%	0.2%	6.3%	37.7%
2000/01 (c)	14.0%	0.7%	17.2%	0.2%	6.4%	37.9%
2001/02 (c)	13.9%	0.6%	17.2%	0.2%	6.3%	37.6%

Notes: (a) Includes non-domestic rates.

(b) Includes domestic rates / community charge / council tax and motor duties paid by households.

(c) Consistent with March 2001 Budget.

Sources: National Statistics - CSDB (series NZGX, FJWB, NMCU, NMGI, AIIIH, GCSU & BKTL)

HM Treasury, *Budget 2001*, HC 279 2000-01 tables C3, C9 & C22

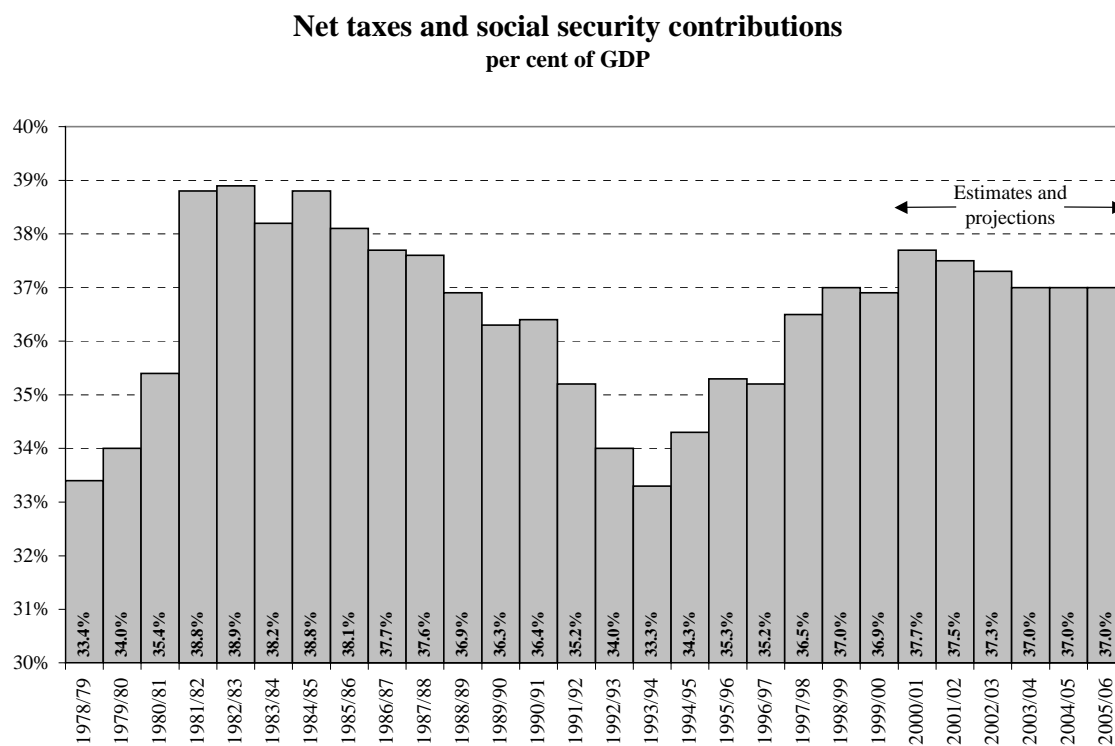
III Public finance presentation

For the purposes of presenting the public finances (eg in the budget documentation) the Treasury uses a slightly different measure of the aggregate tax burden: net taxes and social security contributions as a proportion of GDP. This indicator varies from the national accounts measure described in section II in a number of (mainly minor) respects:

- It is measured on a strict cash receipts basis whereas in the national accounts some revenues are on an accruals basis (i.e. revenues are shown against the period in which the liability arises and not when payment is made).
- Oil royalties (treated as rent in the national accounts) are included.
- It is measured net of certain tax credits that are classified as public expenditure in the national accounts. Such credits include mortgage tax relief (from 1991/92), life assurance premium relief and private medical insurance relief for the over 60s (from 1994/95) and from October 1999 the working families tax credit (WFTC) and disabled persons tax credit. Family credit, for which the WFTC was a partial replacement, was not treated as a tax credit.

Chart 2 shows the trend in this measure of the tax burden since 1978/79 together with forecasts and projections for years up to 2005/06.⁴

Chart 2



Technical box 1

Working families tax credit

The WFTC was introduced in October 1999 to provide in-work support for low-paid families with children. It replaced the social security benefit family credit, but, unlike family credit, it is administered by the Inland Revenue (rather than the DSS) and the normal method of payment is through the pay packet. In a number of respects the WFTC is more generous than family credit. In particular, the rate at which the WFTC is withdrawn is 55% of any increase in earnings (net of tax and national insurance) compared to a rate of 70% for family credit. The Government considers the WFTC to be part of the income tax system and the cost of the WFTC is therefore deducted from gross tax revenues to calculate net taxes and social security contributions as shown above. However, for the purposes of the national accounts, the WFTC is being treated as public expenditure. Under the 1995 European System of Accounts (ESA95) such a payment would only be classified as negative taxation in the national accounts if (a) the benefit to the individual taxpayer did not exceed the amount of tax paid by them, and (b) it was made as a matter of economic policy; and (c) the allowance was an integral part of the tax system.

⁴ Source: HM Treasury, *Budget 2001*, HC 2796 2000-01 tables C10 & C23

In the early to mid-1980s the tax burden rose sharply reflecting the impact of the recession and attempts to reduce the public sector deficit. Receipts peaked at 39% of GDP in 1982/83. This was a period when revenues were also boosted by substantial receipts relating to North Sea oil production. However, these declined rapidly after the world oil price fell sharply in 1986. The late 1980s saw a period of rapid economic growth and strong public finances. This allowed the government of the day to announce a series of tax reductions. Most notably in the 1988 budget when the basic rate of income tax was reduced to 25% (from 27%), higher rates of income tax above 40% were abolished and allowances were increased by more than indexation. The tax burden fell steadily to around 36.3% of GDP at the end of the decade.

With the recession of the early 1990s the economy shrank (in real terms GDP in 1992/93 was lower than it had been in 1989/90) and the tax burden fell sharply, largely as the result of cyclical factors (see technical box 2 on taxation and the cycle). This resulted in a series of phased tax increases announced in the two budgets of 1993, which were aimed at putting the public finances back on a sustainable basis. Further increases occurred before a peak of 37.7% was reached in 2000/01 reflecting factors such as the abolition of payable tax credits and the continuing impact of the escalators for road fuel and tobacco duties. The Treasury stated in the March 2001 *Budget Red Book* that, even after allowing for the high oil price (which boosted North Sea oil revenues),

[...] the increase in the ratio of net taxes and social security contributions to GDP in the two years to 2000-01 has been significantly greater than could have been expected by the Treasury's published ready reckoners for the effects of the economic cycle on the public finances [...] This is reflected in fairly large forecasting errors for receipts in 2000-01 [...] Most of these errors relate to the forecasts of income tax and social security contributions.⁵

Slight reductions are expected in 2001/02 and 2002/03 reflecting factors such as increases in the WFTC, the introduction of the Children's Tax Credit and reductions in fuel duty.

⁵ For example, income tax receipts in 2000/01 are now expected to be about £6 billion higher than forecast in the March 2000 Budget. Around half of this is thought to reflect higher than expected Self Assessment receipts (mainly from the self-employed) and about half down to higher than expected PAYE receipts, probably from bonus payments.

Technical box 2

Taxation and the cycle

Revenues from some taxes, most notably income tax and corporation tax, vary disproportionately with changes in GDP. Thus economic growth above the long-term trend is associated with a rising tax burden and vice versa. Estimates published by the Treasury in 1999 suggest that the long-term effect of a 1 per cent rise in output relative to trend could be an approximate 0.2 percentage point increase in the **ratio** of total tax receipts to GDP. This compares with an estimate of 0.3 percentage points published by the Treasury in a similar study in 1995. While they can be significant, cyclical factors account for only a small proportion of the variation in the tax burden over the last 20 years.

Source: HM Treasury, *Fiscal Policy: public finances and the cycle*, Budget Publications March 1999

IV Hypothetical families

From 1981 until 1996 the Treasury answered a series of parliamentary questions about the taxes paid by various hypothetical families on different multiples of average male earnings.⁶ These answers included both direct taxes such as income tax and national insurance and indirect taxes such as VAT, excise duties and local government taxes. Similar questions since the 1997 General Election have only received substantive replies about direct taxes. For example, the following comments were made in answer to a question tabled after the 1998 Budget:⁷

Further consideration is being given to whether the information provided is typical of families in the UK. Similarly, estimating the impact of indirect taxes is imprecise as spending patterns vary widely between households with the same composition and income. The level of council tax payments will also vary depending on where families live. Further consideration is being given to whether the conventions, assumptions and sampling methods can be improved in order to provide information which is meaningful and reliable.

A question after the 1999 Budget specifically requesting data on indirect taxes received the following answer:⁸

Estimating the impact of indirect taxes on the basis of average assumptions about household spending is imprecise as spending patterns vary widely between households with the same composition and income, with the consumption of the

⁶ See, for example, HC Deb 11 December 1996 c190W

⁷ HC Deb 5 May 1998 c331W

⁸ HC Deb 24 May 1999 c56W

majority of goods and services far from universal. For example, only around one third of adults are smokers. This can be contrasted with direct taxes and benefits where at specified earnings and for particular household types there is a known benefit entitlement or tax liability.

The 1999/00 edition of the Treasury publication *The Tax Benefit Reference Manual*, published in July 1999 announced that: “Following careful consideration this series has been discontinued [...]”.⁹

As a result, this Research Paper concentrates on the amounts of direct tax that would be paid by hypothetical families and the resulting measure of take-home pay. Those interested in the impact of indirect taxes in the years 1978/79 to 1997/98 are referred to previous versions of this Research Paper.¹⁰

The analysis here covers the period 1991/92 to 2001/02. Family credit and the working families tax credit are included. This reflects the Government’s view that the WFTC is an integral part of the tax system (see technical box on WFTC above). Further details of the assumptions and methodology are set out in Appendix 2. The three household types considered here are a single person; a married couple (without children) both working; and a couple with two children under 11 where only the husband works. The detailed analysis below looks at families on 75% and 100% of median earnings (see technical box on mean and median earnings). Similar data for families on 50%, 150% and 200% of median earnings are set out in Appendix 3.

Technical box 3

Median and mean earnings

The median and mean are both measures of average. The mean is the conventional arithmetic average where the earnings of all those in the sample are added together and divided by the sample size. The median, on the other hand, is the point that divides the earnings distribution in half (i.e. 50% of employees earn less than the median and 50% more than the median) and is often described as being the ‘typical’ level of earnings. Characteristically, distributions of earnings are positively skewed with a long ‘tail’ of high earners situated significantly above the median value. In this situation the mean value will exceed the median and a small number of very higher earners may have a disproportionate effect on the mean. During the 1980s mean earnings grew faster than median earnings suggesting that the distribution of earnings was becoming less equal.

Tables 2 and 3 on pages 18 and 19 relate to families on 75 and 100 per cent of median earnings. Some of the main features are:

⁹ p13.13

¹⁰ For example, *The Burden of Taxation*, Research Paper 97/50, 22 May 1997

- All the families experience rising real take-home pay during both the periods 1991/92 to 1996/97 and from 1996/97 to 2001/02. This partly reflects rising gross earnings (real median gross earnings in 2001/02 are assumed to be nearly 13½% above their level in 1991/92) and, for most families, a decline in the proportion of gross earnings taken by income tax and NICs.
- In 2001/02 working couples on combined earnings of 75% of average earnings have a marginally higher direct tax burden than in 1991/92 although it is lower than in a number of intervening years. This partly reflects the loss of the MCA.
- Lower paid families with children gain significantly from the introduction of the WFTC, which is substantially more generous than family credit. Couples with children also gain from real increases in child benefit in 1999/00. Taking account of child benefit and FC/WFTC, take home pay for those on 75% of the median exceeds gross earnings in 2000/01 and 2001/02 (i.e.the tax burden is negative).¹¹
- Married couples without children see smaller increases in real take home pay than either single people or couples with children. In part this reflects the fact that they lose the married couples allowance but do not benefit from the new children's tax credit (see technical box).

¹¹ The Treasury calculates that for a single-earner couple with two children on average (mean) earnings the burden of direct taxes in 2001/02 will be the lowest since 1972. [HM Treasury, *Budget 2001*, HC 279 2000-01 paragraph 1.41]

Technical Box 4

Married couples allowance and the children's tax credit

The married couples allowance (MCA) – given to all married couples – was introduced in its current form in 1990/91 at a rate of £1,720 (for those aged under 65) and could be set against income at a taxpayer's highest marginal rate. The concept of the MCA was seen by some commentators as sitting uneasily with the new system of independent taxation for husbands and wives. There were no increases in the nominal amount of the allowance until 1996/97. In 1994/95 it was transformed into a tax credit worth 20% of the nominal allowance (i.e. £344) which could be set against a taxpayer's final income tax liability. This was reduced to 15% in 1995/96 and to 10% in 1999/00 when the nominal value was £1,970. The MCA was withdrawn from all couples from 6 April 2000 except those aged 65 or over at this date.

The March 1999 Budget included a proposal to introduce a children's tax credit in 2001/02. This will have a nominal value of £5,200 per family payable at a rate of 10% (i.e. a tax credit worth £520). The child tax credit is to be withdrawn from those with higher incomes at rate of £1 for each £15 of income that is liable to income tax at the higher rate. On the basis of the allowances and thresholds in 2001/02, this will be at a gross income level of £41,735.

In the March 2001 Budget the Chancellor proposed that from 2002/03 the value of the children's tax credit would be increased to £1,000 for families in the year of a child's birth.

Two limitations of this analysis should be noted. First, it takes no account of non-standard tax reliefs (such as mortgage interest relief or changes to the taxation of non-monetary income such as company cars) or changes to the tax system for unearned income. Second, the families are not necessarily typical of the majority of taxpayers. For example, no account is taken of the self-employed or pensioners, who also pay tax. Also, although employees are assumed to be contracted into SERPS, the majority of people now pay NICs at the contracted-out rate.

Table 2

**The burden of direct taxes and real take home pay:
£ per week**

75% of median earnings

		1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02
Gross Earnings	Cash prices	£191.85	£201.75	£208.20	£214.58	£221.78	£231.00	£240.60	£249.53	£258.38	£270.00	£282.20
Single person												
Income Tax	Cash prices	£32.12	£31.95	£33.08	£34.20	£35.42	£35.06	£35.08	£36.36	£36.50	£37.34	£38.56
NICs	Cash prices	£13.63	£14.38	£14.82	£16.90	£17.54	£18.22	£19.10	£19.83	£19.24	£19.40	£19.52
Income tax + NICs	Cash prices	£45.75	£46.33	£47.90	£51.09	£52.96	£53.28	£54.18	£56.19	£55.74	£56.74	£58.08
Income tax + NICs	1999/00 prices	£56.43	£55.40	£56.32	£58.48	£58.70	£57.66	£56.75	£57.08	£55.74	£54.95	£55.28
Income tax + NICs	% of earnings	23.8%	23.0%	23.0%	23.8%	23.9%	23.1%	22.5%	22.5%	21.6%	21.0%	20.6%
Take-home pay	Cash prices	£146.10	£155.42	£160.30	£163.48	£168.82	£177.72	£186.42	£193.34	£202.64	£213.26	£224.12
Take-home pay	1999/00 prices	£180.23	£185.86	£188.47	£187.10	£187.13	£192.31	£195.25	£196.40	£202.64	£206.55	£213.33
Take-home pay	Index at 1999/00 prices	100.0	103.1	104.6	103.8	103.8	106.7	108.3	109.0	112.4	114.6	118.4
Married, no children, both working												
Income Tax	Cash prices	£8.01	£7.23	£8.52	£10.04	£12.46	£12.08	£11.73	£12.16	£10.94	£15.95	£16.29
NICs	Cash prices	£9.99	£10.60	£10.90	£12.34	£12.90	£13.34	£14.14	£14.71	£12.64	£11.80	£10.82
Income tax + NICs	Cash prices	£18.00	£17.83	£19.42	£22.38	£25.36	£25.42	£25.87	£26.87	£23.58	£27.75	£27.11
Income tax + NICs	1999/00 prices	£22.20	£21.32	£22.84	£25.61	£28.11	£27.50	£27.09	£27.29	£23.58	£26.87	£25.81
Income tax + NICs	% of earnings	9.4%	8.8%	9.3%	10.4%	11.4%	11.0%	10.8%	10.8%	9.1%	10.3%	9.6%
Take-home pay	Cash prices	£173.85	£183.92	£188.78	£192.20	£196.41	£205.59	£214.73	£222.66	£234.80	£242.25	£255.09
Take-home pay	1999/00 prices	£214.46	£219.94	£221.96	£219.97	£217.71	£222.47	£224.91	£226.18	£234.80	£234.63	£242.81
Take-home pay	Index at 1999/00 prices	100.0	102.6	103.5	102.6	101.5	103.7	104.9	105.5	109.5	109.4	113.2
Married, 2 children, husband working												
Income Tax	Cash prices	£23.85	£23.68	£24.81	£27.58	£30.46	£29.90	£29.80	£30.87	£32.71	£37.34	£28.56
NICs	Cash prices	£13.63	£14.38	£14.82	£16.90	£17.54	£18.22	£19.10	£19.83	£19.24	£19.40	£19.52
Child benefit	Cash prices	£16.13	£17.45	£18.10	£18.45	£18.85	£19.60	£20.05	£20.75	£24.00	£25.00	£25.85
FC/WFTC	Cash prices	£0.00	£0.00	£0.00	£0.00	£4.85	£4.87	£2.12	£2.45	£21.06	£48.65	£43.95
Income tax + NICs - CB-FC/WFTC	Cash prices	£21.35	£20.61	£21.53	£26.03	£24.29	£23.65	£26.74	£27.51	£6.89	£-16.91	£-21.72
Income tax + NICs - CB-FC/WFTC	1999/00 prices	£26.34	£24.65	£25.32	£29.79	£26.93	£25.59	£28.00	£27.94	£6.89	£-16.38	£-20.67
Income tax + NICs - CB-FC/WFTC	% of earnings	11.1%	10.2%	10.3%	12.1%	11.0%	10.2%	11.1%	11.0%	2.7%	-6.3%	-7.7%
Take-home pay	Cash prices	£170.50	£181.14	£186.67	£188.55	£197.48	£207.35	£213.86	£222.02	£251.49	£286.91	£303.92
Take-home pay	1999/00 prices	£210.32	£216.61	£219.48	£215.79	£218.90	£224.38	£224.00	£225.53	£251.49	£277.88	£289.29
Take-home pay	Index at 1999/00 prices	100.0	103.0	104.4	102.6	104.1	106.7	106.5	107.2	119.6	132.1	137.5

Table 3

**The burden of direct taxes and real take home pay:
£ per week**

100% of median earnings

		1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02
Gross Earnings	Cash prices	£255.80	£269.00	£277.60	£286.10	£295.70	£308.00	£320.80	£332.70	£344.50	£360.00	£376.20
Single person												
Income Tax	Cash prices	£48.11	£48.76	£50.43	£52.08	£53.90	£53.54	£53.53	£55.49	£56.31	£57.14	£59.24
NICs	Cash prices	£19.38	£20.43	£21.06	£24.05	£24.93	£25.92	£27.12	£28.15	£27.85	£28.40	£28.92
Income tax + NICs	Cash prices	£67.49	£69.19	£71.50	£76.13	£78.83	£79.46	£80.65	£83.64	£84.16	£85.54	£88.16
Income tax + NICs	1999/00 prices	£83.26	£82.75	£84.06	£87.13	£87.38	£85.99	£84.47	£84.96	£84.16	£82.85	£83.92
Income tax + NICs	% of earnings	26.4%	25.7%	25.8%	26.6%	26.7%	25.8%	25.1%	25.1%	24.4%	23.8%	23.4%
Take-home pay	Cash prices	£188.31	£199.81	£206.10	£209.97	£216.87	£228.54	£240.15	£249.06	£260.34	£274.46	£288.04
Take-home pay	1999/00 prices	£232.30	£238.93	£242.33	£240.31	£240.39	£247.31	£251.53	£253.01	£260.34	£265.82	£274.18
Take-home pay	Index at 1999/00 prices	100.0	102.9	104.3	103.4	103.5	106.5	108.3	108.9	112.1	114.4	118.0
Married, no children, both working												
Income Tax	Cash prices	£24.00	£22.01	£23.36	£26.49	£29.47	£28.97	£28.84	£29.88	£29.60	£35.08	£35.71
NICs	Cash prices	£15.74	£16.65	£17.14	£19.49	£20.29	£21.04	£22.16	£23.03	£21.25	£20.80	£20.22
Income tax + NICs	Cash prices	£39.74	£38.66	£40.51	£45.98	£49.76	£50.01	£51.00	£52.91	£50.85	£55.88	£55.93
Income tax + NICs	1999/00 prices	£49.02	£46.23	£47.63	£52.62	£55.15	£54.12	£53.42	£53.74	£50.85	£54.12	£53.24
Income tax + NICs	% of earnings	15.5%	14.4%	14.6%	16.1%	16.8%	16.2%	15.9%	15.9%	14.8%	15.5%	14.9%
Take-home pay	Cash prices	£216.06	£230.34	£237.09	£240.12	£245.94	£257.99	£269.80	£279.79	£293.65	£304.12	£320.27
Take-home pay	1999/00 prices	£266.53	£275.45	£278.77	£274.81	£272.61	£279.18	£282.58	£284.22	£293.65	£294.55	£304.85
Take-home pay	Index at 1999/00 prices	100.0	103.3	104.6	103.1	102.3	104.7	106.0	106.6	110.2	110.5	114.4
Married, 2 children, husband working												
Income Tax	Cash prices	£39.84	£40.50	£42.16	£45.46	£48.94	£48.38	£48.25	£50.00	£52.52	£57.14	£49.24
NICs	Cash prices	£19.38	£20.43	£21.06	£24.05	£24.93	£25.92	£27.12	£28.15	£27.85	£28.40	£28.92
Child benefit	Cash prices	£16.13	£17.45	£18.10	£18.45	£18.85	£19.60	£20.05	£20.75	£24.00	£25.00	£25.85
FC/WFTC	Cash prices	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£3.64	£14.99	£8.79
Income tax + NICs - CB-FC/WFTC	Cash prices	£43.10	£43.48	£45.13	£51.06	£55.02	£54.70	£55.32	£57.40	£52.73	£45.55	£43.52
Income tax + NICs - CB-FC/WFTC	1999/00 prices	£53.16	£51.99	£53.06	£58.44	£60.99	£59.19	£57.94	£58.31	£52.73	£44.11	£41.43
Income tax + NICs - CB-FC/WFTC	% of earnings	16.8%	16.2%	16.3%	17.8%	18.6%	17.8%	17.2%	17.3%	15.3%	12.7%	11.6%
Take-home pay	Cash prices	£212.70	£225.52	£232.47	£235.04	£240.68	£253.30	£265.48	£275.30	£291.77	£314.45	£332.68
Take-home pay	1999/00 prices	£262.39	£269.69	£273.33	£269.00	£266.78	£274.10	£278.06	£279.65	£291.77	£304.56	£316.67
Take-home pay	Index at 1999/00 prices	100.0	102.8	104.2	102.5	101.7	104.5	106.0	106.6	111.2	116.1	120.7

V Household survey data

National Statistics conducts a regular analysis of the 'effects of taxes and benefits on household income' that enables some conclusions to be drawn about the changing burden of taxation on different types of household and on households with different income levels. The latest results were published in the April 2001 edition of *Economic Trends* and this source should be consulted for details of the methodology. The analysis combines data on the income and expenditure patterns of households from the Family Expenditure Survey with details of tax revenues and public spending to produce estimates of the average amounts paid in taxes and received in benefits by groups at various points in the income distribution. (Indirect taxes include an estimate of the extent to which intermediate taxes on businesses are passed on to consumers in the form of higher prices.)

There are some problems when using information from this source as a time series. Each year's analysis is undertaken as a free-standing exercise and figures for successive years are not necessarily comparable. For example, in recent years the definition of income has been widened to include the value of company cars (from 1990) and the beneficial value of loans by employers for house purchase (from 1992). In addition the results are based on a relatively small sample survey and are, of necessity, subject to sampling errors. While detailed comparisons between any two figures may not be firmly based, the data should, nevertheless, provide a feel for the overall pattern and broad trends. The results are presented for each quintile ranked by to equivalised disposable income.^{12,13}

The overall burden of taxes on households, expressed as a proportion of gross income, was 37% in 1999/00 (see table 4 overleaf) - the same as in 1979. These data suggest that the tax burden on the lowest quintile has increased since 1979 although much less so compared to 1977 or 1981. The low tax burden for the bottom quintile in 1979 compared with either 1977 or 1981 looks to be somewhat out of line with the trend and probably reflects a number of factors:

- There were above-inflation increases in personal allowances in 1977/78 and 1979/80 and the introduction of a 25% lower rate of income tax in 1978/79. To a large extent, these factors were offset in 1980/81 when the lower rate was removed and in 1981/82 when allowances were frozen.
- More generally, there is a concern about the possible under-recording of income for some poorer households.
- Sampling error.

¹² Quintiles are groups obtained by dividing the income distribution into five equally-sized parts. For recent years data are available by decile (i.e. tenths of the income distribution) but consistent figures from the 1970s to the present day have only been published by quintile.

¹³ Equivalisation adjusts income for family composition so that income is a better reflection of living standards. For example, a single person with a particular disposable income would generally be considered to have a higher standard of living than a family of four with the same income.

Table 4**Direct and indirect taxes as a percentage of gross income**

Period	Quintile of equivalised disposable income					All households
	Lowest	Second	Third	Fourth	Highest	
1977	37%	37%	39%	40%	37%	38%
1979	31%	34%	38%	39%	37%	37%
1981	36%	36%	40%	41%	39%	39%
1983	37%	36%	40%	41%	40%	39%
1985	36%	35%	39%	40%	38%	38%
1987	37%	36%	38%	39%	37%	37%
1989	39%	36%	38%	37%	35%	36%
1991 (a)	38%	35%	37%	36%	34%	35%
1993/94 (b)	39%	33%	36%	36%	35%	36%
1994/95 (b)	39%	34%	36%	37%	36%	36%
1995/96 (b)	42%	36%	37%	38%	37%	37%
1996/97 (b)(c)	37%	35%	37%	37%	35%	36%
1997/98 (b)(c)	38%	34%	36%	38%	35%	36%
1998/99 (b)(c)	40%	35%	38%	38%	36%	37%
1999/00 (b)(c)	41%	35%	37%	38%	35%	37%

Notes: (a) Income includes company cars.

(b) Income includes company cars and beneficial loans for house purchase from employers.

(c) Sample re-weighted to reflect total population.

Source: ONS, "The effects of taxes and benefits on household income", *Economic Trends*, April 2001 and earlier editions

Table 5 (overleaf) shows each quintile's share of those direct and indirect taxes that can reasonably be allocated to households. Comparing 1999/00 with 1979, the shares of taxation paid by the top 20% of households appears to have risen with 42% of all taxes on households now being paid by this group compared to 36% in 1979. This is despite the top quintile facing a slightly lower tax burden (see table 4 above). This is possible because this group has benefited from an increased share of gross income (up from 35% in 1979 to 44% in 1999/00). There have been modest falls in the shares paid by the second, third and fourth quintiles and a slight rise in the share of the lowest quintile.

Table 5
Share of direct and indirect taxes

Period	Quintile of equivalised disposable income					All households
	Lowest	Second	Third	Fourth	Highest	
1977	7%	12%	20%	26%	35%	100%
1979	6%	12%	20%	27%	36%	100%
1981	7%	11%	19%	26%	37%	100%
1983	7%	10%	19%	25%	38%	100%
1985	7%	10%	19%	26%	38%	100%
1987	7%	10%	18%	25%	40%	100%
1989	7%	10%	19%	26%	39%	100%
1991 (a)	6%	10%	18%	26%	40%	100%
1993/94 (b)	7%	9%	17%	24%	42%	100%
1994/95 (b)	7%	9%	17%	25%	42%	100%
1995/96 (b)	8%	10%	17%	24%	41%	100%
1996/97 (b)(c)	7%	10%	17%	25%	41%	100%
1997/98 (b)(c)	7%	10%	17%	25%	41%	100%
1998/99 (b)(c)	7%	10%	17%	24%	42%	100%
1999/00 (b)(c)	7%	10%	17%	25%	42%	100%

Notes: (a) Income includes company cars.

(b) Income includes company cars and beneficial loans for house purchase from employers.

(c) Sample re-weighted to reflect total population.

(d) Figures may not sum to 100% due to rounding.

Source: ONS, "The effects of taxes and benefits on household income", *Economic Trends*, April 2001 and earlier editions

VI International Comparisons

International comparisons of the tax burden are available from a number of sources. This section summarises the results of two regular studies published by the OECD. Eurostat (the Statistical Office of the European Communities) produce similar data for the members of the EU.

Table 6 (overleaf) shows OECD countries ranked (from highest to lowest) by the ratio of total tax revenues (including social security contributions) to gross domestic product in 1998 together with figures for selected earlier years and provisional data for 1999 where available. On this basis the United Kingdom was ranked 15th highest of the 28 countries for which figures are available for 1998. The UK's ratio of 37.2% was marginally above the unweighted average for the OECD, but below that for the EU. There is a clear difference between the 'European model' and countries such as Australia, the United States and Japan. Nine of the ten countries with the highest ratios for 1998 were EU member states and the unweighted average for the EU was 41.3% compared to an average for the other 14 countries of 32.3%.

Table 6**Total tax revenue as percentage of GDP at market prices (a)**

	1980	1985	1990	1992	1994	1995	1996	1997	1998	1999 (prov)
Sweden	47.1	48.3	53.7	49.3	48.7	47.6	49.8	51.5	52.0	52.1
Denmark	43.9	47.4	47.1	47.3	49.9	49.4	49.9	50.0	49.8	50.6
Finland	36.2	40.0	44.7	45.9	46.6	44.9	47.3	46.1	46.2	46.5
Belgium	43.1	46.3	43.9	43.3	45.3	44.8	45.2	45.7	45.9	45.4
France	40.6	43.8	43.0	43.1	43.7	44.0	45.0	45.2	45.2	46.0
Austria	39.5	41.6	40.2	42.2	42.5	41.6	43.4	44.2	44.4	44.3
Norway	42.7	43.3	41.8	41.0	41.3	41.5	41.5	42.4	43.6	41.8
Italy	30.3	34.4	38.9	41.7	41.4	41.2	42.7	44.2	42.7	43.0
Luxembourg	40.8	45.3	40.7	39.9	42.2	41.9	43.3	41.8	41.5	42.1
Netherlands	43.4	42.4	42.8	44.9	43.0	41.9	48.0	42.0	41.0	40.3
Hungary (b)	..	..	..	45.7	44.0	42.4	40.7	39.0	38.7	37.0
Czech Republic (b)	..	..	..	..	41.3	40.1	39.1	38.6	38.3	37.5
Poland (b)	..	..	..	38.2	40.6	39.8	39.6	39.1	37.9	..
Canada	32.0	33.1	36.1	36.2	35.4	35.7	36.1	36.9	37.4	..
United Kingdom	35.3	37.7	36.0	34.8	34.0	35.2	35.1	35.3	37.2	36.6
Germany (c)	33.1	32.9	32.6	37.7	38.1	38.2	37.4	37.0	37.0	37.7
New Zealand	33.0	33.6	38.1	36.5	36.7	37.6	35.7	36.3	35.2	..
Switzerland	28.9	30.6	30.9	31.2	33.0	33.5	34.2	33.8	35.1	35.1
Portugal	24.6	27.1	29.6	32.9	32.0	32.7	32.6	33.5	34.2	34.5
Spain	22.9	27.6	33.0	34.3	33.5	32.8	32.6	33.7	34.2	35.1
Iceland	29.2	28.4	31.4	32.2	30.9	31.2	32.2	31.8	33.6	35.4
Ireland	31.5	35.1	33.6	34.5	35.7	33.1	33.2	32.8	32.2	31.9
Australia	27.4	29.1	29.3	27.1	28.7	29.4	30.1	29.8	29.9	..
United States	27.0	26.1	26.7	26.6	27.3	27.6	27.9	28.3	28.9	..
Turkey	17.9	15.4	20.0	22.4	22.2	22.6	25.4	27.9	28.7	31.8
Japan	25.4	27.6	30.9	28.8	27.8	28.4	28.2	28.7	28.4	27.7
Korea	17.7	16.9	19.1	19.4	20.4	20.5	21.4	21.4	21.1	23.8
Mexico	16.2	17.0	17.3	17.6	17.2	16.6	16.6	17.5	16.0	16.5
Greece	24.0	28.6	29.4	30.5	31.3	31.7	31.8	33.7	..	..
Unweighted averages:										
OECD total (d)	32.1	33.8	35.0	35.9	36.4	36.1	36.8	36.8	37.0	..
EU 15 (d)	35.8	38.6	39.2	40.2	40.5	40.1	41.2	41.1	41.3	..

Notes: (a) Ranked by the 1998 figures.

(b) The Czech Republic, Hungary and Poland joined the OECD in 1995/1996. Data for earlier years are not available.

(c) Unified Germany from 1991 onwards.

(d) Unweighted averages include an OECD estimate for Greece for 1998.

Source: OECD, *Revenue Statistics*, 1965-1999 (tables 3 & 39)

As with all international comparisons it is difficult to ensure complete comparability, as there is considerable variation between the tax regimes existing in different countries. In preparing these estimates the OECD have defined taxes as, "... *compulsory, unrequited payments to general government*". However, it is sometimes unclear whether certain levies and licence fees fall within this definition. In the case of the United Kingdom, this definition excludes oil royalties from total taxation. In addition, countries are at different stages in the economic cycle which may affect the revenue from some taxes.

Table 7 (overleaf) is based on the tax and benefit position of a single person and a single-earner couple with two children where the employee is receiving the average for a manual worker in manufacturing industry. As with the data for the United Kingdom in section IV, the calculation of income tax only reflects standard allowances and reliefs and the exercise is subject to the same limitations. The table shows, for 1999-2000, the ratio to

gross earnings of income tax plus employees' social security contributions less cash benefits such as child benefit.

Table 7

Tax less cash benefits as % of gross earnings (a)
Average production worker, 2000 (provisional)

Country	Single person	One-earner couple with two children
Australia	22.6	7.7
Austria	27.8	7.4
Belgium	41.8	20.9
Canada	26.5	15.8
Czech Republic	23.1	-1.5
Denmark	44.2	30.8
Finland	33.5	24.1
France	27.8	15.1
Germany	41.3	19.4
Greece	17.7	17.8
Hungary	31.1	10.7
Iceland	20.9	-6.2
Ireland	20.3	5.3
Italy	28.2	14.5
Japan	16.1	11.8
Korea	9.2	8.4
Luxembourg	26.4	-1.1
Mexico	2.4	2.4
Netherlands	36.1	24.9
New Zealand	19.4	15.2
Norway	29.3	18.0
Poland	31.3	25.4
Portugal	17.7	8.6
Spain	18.5	9.4
Sweden	32.9	23.9
Switzerland	21.9	8.6
Turkey	28.6	28.6
United Kingdom	23.8	15.3
United States	25.6	15.6
Unweighted averages:		
OECD total	25.7	13.7
EU15	29.2	15.8

Notes: (a) Income tax and social security contributions less cash benefits as percentage of gross earnings.

Source: OECD, *Taxing Wages*, 1990-2000, table 14

For a single person the United Kingdom ratio of 23.8% is below the unweighted average for the OECD and the EU and is the 17th highest among the 29 OECD members. The United Kingdom's ratio for a couple with two children, 15.3%, is above the OECD average but below the EU average, and is ranked 13th highest. (The negative figures for the Czech Republic, Iceland and Luxembourg occur because, at this level of earnings, child benefit payments more than offset the tax liability and social security contributions.)

Appendix 1: The tax burden 1900-2000

Taxes and Social Contributions

Percent of GDP

Calendar year	Library estimates		Official data
	Including Southern Ireland	Excluding Southern Ireland	
1900	8.5%		
1901	9.1%		
1902	10.0%		
1903	10.0%		
1904	9.8%		
1905	9.7%		
1906	9.6%		
1907	9.6%		
1908	9.7%		
1909	9.6%		
1910	10.2%		
1911	10.1%		
1912	10.6%		
1913	10.6%		
1914	10.7%		
1915	11.1%		
1916	14.6%		
1917	15.6%		
1918	16.2%		
1919	19.4%		
1920	19.5%	19.9%	
1921		23.2%	
1922		24.0%	
1923		23.1%	
1924		21.3%	
1925		20.7%	
1926		21.4%	
1927		20.9%	
1928		21.1%	
1929		20.5%	
1930		20.7%	
1931		22.5%	
1932		24.6%	
1933		23.5%	
1934		22.4%	
1935		21.9%	
1936		21.6%	
1937		21.5%	
1938		21.9%	
1939		22.4%	
1940		24.3%	
1941		29.0%	
1942		31.1%	
1943		34.2%	

Calendar year	Library estimates		Official data
	Including Southern Ireland	Excluding Southern Ireland	
1944		36.0%	
1945		37.1%	
1946		36.6%	36.8%
1947			35.1%
1948			35.3%
1949			35.7%
1950			34.4%
1951			33.2%
1952			32.3%
1953			30.6%
1954			30.0%
1955			30.0%
1956			29.1%
1957			29.4%
1958			30.0%
1959			29.5%
1960			28.4%
1961			29.8%
1962			31.1%
1963			30.0%
1964			29.7%
1965			30.8%
1966			31.8%
1967			33.8%
1968			35.1%
1969			36.6%
1970			37.3%
1971			35.3%
1972			33.5%
1973			32.5%
1974			35.9%
1975			36.5%
1976			35.6%
1977			34.8%
1978			33.5%
1979			34.3%
1980			36.0%
1981			38.2%
1982			38.7%
1983			38.3%
1984			38.3%
1985			38.1%
1986			37.9%
1987			37.1%
1988			37.0%
1989			36.9%
1990			36.6%
1991			36.3%

Calendar year	Library estimates		Official data
	Including Southern Ireland	Excluding Southern Ireland	
1992			35.1%
1993			34.1%
1994			34.5%
1995			35.6%
1996			35.4%
1997			35.8%
1998			37.3%
1999			37.5%
2000			38.3%

ONS - CSDB database series GCSU & YBHA

Sefton & Weale, *Balanced Estimates of national income for the UK 1920-1990*, 1995

CH Feinstein, *National Income, Expenditure & Output for the UK 1855-1965*, 1972

CSO, *Annual Abstract of Statistics*, 1952 table 254 & earlier editions

Library estimates

Appendix 2: Assumptions and sources for calculation of taxes paid by typical families

The following notes summarise the assumptions and sources used to compile the figures on the taxes paid by typical families as described in section IV above.

- Income tax liability is calculated on the basis that taxpayers have no allowances other than their personal allowances. Earnings, child benefit and family credit/working families tax credit are the only sources of income.
- National Insurance contributions are assumed throughout to be Class 1 at the not contracted-out rate averaged over the financial year.
- Earnings relate to the median earnings of full-time adult employees whose pay was unaffected by absence. The median is the point that divides the earnings distribution in half (i.e. 50% of employees earn less than the median and 50% more than the median). These are based on the findings of the Office for National Statistics' survey of earnings taken in April each year known as the *New Earnings Survey* (NES). Figures for financial years are the averages of successive Aprils. The figures for 2000/01 and 2001/02 are estimates, and are based on the assumption of earnings growth of 4½% per annum.
- Married couples where both are working are assumed to have joint earnings of the level specified. Earnings are assumed to be split between husband and wife in the ratio 60:40.
- Child Benefit, where appropriate, has been treated as negative income tax. This is the normal approach in such exercises reflecting the replacement of child tax allowances and taxable family allowances by child benefit in the late 1970s.
- Family credit and the working families tax credit are calculated on the basis of a single earner couple with two children aged under 11. The family is therefore eligible for the 30-hour credit and is assumed not to be eligible for the childcare credit.
- Retail prices are measured by the all-items Retail Prices Index. This is assumed to rise by 3¼% in 2000/01 and 1¾% in 2001/02. (In both cases, these are the forecasts for the September falling in the middle of each financial year.)

Tax and benefit rates for 2000/01 & 2001/02

	2000/01	2001/02
Income tax		
Personal allowance (pa)	£4,385	£4,535
Starting rate limit (£pa)	£1,520	£1,880
Basic rate limit (£pa)	£28,400	£29,400
Starting rate	10%	10%
Basic rate	22%	22%
Higher rate	40%	40%
Children's tax credit		
Amount (£pa)		£5,200
Rate		10%
Taper for higher rate taxpayers		£1 per £15
Employee NICs		
Lower earnings level (£pw)	£67	£69
Primary threshold (£pw)	£76	£87
Upper earnings limit (£pw)	£535	£575
Rate	10%	10%
WFTC		
Taper	55%	55%
Adult credit (£pw)	£53.15	£59.00 (b)
30 hour credit (£pw)	£11.25	£11.45
Child credit (under 11) (£pw)	£25.60 (a)	£26.00
Applicable amount (£pw)	£91.45	£92.80
Child benefit		
First child (£pw)	£15.00	£15.50
Second child (£pw)	£10.00	£10.35

Notes: (a) From June 2000. The rate for April and May was £21.25.

(b) From June 2001. The rate for April and May was £54.00.

Appendix 3: Hypothetical families: tables for other income levels

The tables on the following pages provide similar data to tables 2 and 3 in Section IV. The levels of earnings considered here are 50%, 200% and 500% of the median.

The burden of direct taxes and real take home pay:

£ per week

50% of median earnings

		1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02
Gross Earnings	Cash prices	£127.90	£134.50	£138.80	£143.05	£147.85	£154.00	£160.40	£166.35	£172.25	£180.00	£188.10
Single person												
Income Tax	Cash prices	£16.13	£15.14	£15.73	£16.32	£16.94	£16.58	£16.64	£17.22	£16.69	£17.54	£17.86
NICs	Cash prices	£7.87	£8.33	£8.57	£9.75	£10.15	£10.52	£11.08	£11.52	£10.63	£10.40	£10.11
Income tax + NICs	Cash prices	£24.00	£23.46	£24.31	£26.06	£27.08	£27.10	£27.72	£28.74	£27.32	£27.94	£27.97
Income tax + NICs	1999/00 prices	£29.61	£28.06	£28.58	£29.83	£30.02	£29.33	£29.03	£29.19	£27.32	£27.06	£26.62
Income tax + NICs	% of earnings	18.8%	17.4%	17.5%	18.2%	18.3%	17.6%	17.3%	17.3%	15.9%	15.5%	14.9%
Take-home pay	Cash prices	£103.90	£111.04	£114.49	£116.99	£120.77	£126.90	£132.68	£137.61	£144.93	£152.06	£160.13
Take-home pay	1999/00 prices	£128.16	£132.78	£134.62	£133.89	£133.86	£137.32	£138.97	£139.79	£144.93	£147.27	£152.43
Take-home pay	Index at 1999/00 prices	100.0	103.6	105.0	104.5	104.4	107.1	108.4	109.1	113.1	114.9	118.9
Married, no children, both working												
Income Tax	Cash prices	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£2.37	£2.56
NICs	Cash prices	£3.27	£3.48	£3.58	£5.19	£5.51	£5.64	£6.12	£6.40	£4.03	£3.20	£2.59
Income tax + NICs	Cash prices	£3.27	£3.48	£3.58	£5.19	£5.51	£5.64	£6.12	£6.40	£4.03	£5.57	£5.15
Income tax + NICs	1999/00 prices	£4.03	£4.17	£4.20	£5.93	£6.10	£6.10	£6.41	£6.50	£4.03	£5.39	£4.90
Income tax + NICs	% of earnings	2.6%	2.6%	2.6%	3.6%	3.7%	3.7%	3.8%	3.8%	2.3%	3.1%	2.7%
Take-home pay	Cash prices	£124.63	£131.02	£135.22	£137.87	£142.35	£148.36	£154.28	£159.96	£168.23	£174.43	£182.95
Take-home pay	1999/00 prices	£153.75	£156.67	£158.99	£157.78	£157.78	£160.54	£161.59	£162.49	£168.23	£168.94	£174.14
Take-home pay	Index at 1999/00 prices	100.0	101.9	103.4	102.6	102.6	104.4	105.1	105.7	109.4	109.9	113.3
Married, 2 children, husband working												
Income Tax	Cash prices	£7.86	£7.03	£7.89	£9.70	£11.98	£11.42	£11.36	£11.74	£12.91	£17.54	£7.86
NICs	Cash prices	£7.87	£8.33	£8.57	£9.75	£10.15	£10.52	£11.08	£11.52	£10.63	£10.40	£10.11
Child benefit	Cash prices	£16.13	£17.45	£18.10	£18.45	£18.85	£19.60	£20.05	£20.75	£24.00	£25.00	£25.85
FC/WFTC	Cash prices	£22.76	£25.02	£26.67	£30.37	£38.49	£40.45	£39.73	£41.46	£57.13	£82.31	£79.14
Income tax + NICs - CB-FC/WFTC	Cash prices	-£23.15	-£27.11	-£28.30	-£29.37	-£35.22	-£38.11	-£37.34	-£38.95	-£57.60	-£79.37	-£87.02
Income tax + NICs - CB-FC/WFTC	1999/00 prices	-£28.56	-£32.42	-£33.27	-£33.62	-£39.04	-£41.24	-£39.11	-£39.56	-£57.60	-£76.88	-£82.83
Income tax + NICs - CB-FC/WFTC	% of earnings	-18.1%	-20.2%	-20.4%	-20.5%	-23.8%	-24.7%	-23.3%	-23.4%	-33.4%	-44.1%	-46.3%
Take-home pay	Cash prices	£151.05	£161.61	£167.10	£172.42	£183.07	£192.11	£197.74	£205.30	£229.85	£259.37	£275.12
Take-home pay	1999/00 prices	£186.33	£193.26	£196.47	£197.33	£202.92	£207.89	£207.11	£208.55	£229.85	£251.21	£261.88
Take-home pay	Index at 1999/00 prices	100.0	103.7	105.4	105.9	108.9	111.6	111.2	111.9	123.4	134.8	140.5

The burden of direct taxes and real take home pay:**£ per week****200% of median earnings**

		1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02
Gross Earnings	Cash prices	£511.60	£538.00	£555.20	£572.20	£591.40	£616.00	£641.60	£665.40	£689.00	£720.00	£752.40
Single person												
Income Tax	Cash prices	£112.06	£118.41	£124.81	£131.13	£136.27	£135.98	£137.83	£142.81	£146.97	£152.45	£159.97
NICs	Cash prices	£31.46	£32.67	£33.88	£38.44	£39.36	£40.62	£41.54	£43.38	£43.40	£45.90	£48.80
Income tax + NICs	Cash prices	£143.52	£151.08	£158.69	£169.57	£175.63	£176.60	£179.37	£186.19	£190.37	£198.35	£208.77
Income tax + NICs	1999/00 prices	£177.04	£180.67	£186.58	£194.07	£194.68	£191.10	£187.87	£189.14	£190.37	£192.11	£198.72
Income tax + NICs	% of earnings	28.1%	28.1%	28.6%	29.6%	29.7%	28.7%	28.0%	28.0%	27.6%	27.5%	27.7%
Take-home pay	Cash prices	£368.08	£386.92	£396.51	£402.63	£415.77	£439.40	£462.23	£479.21	£498.63	£521.65	£543.63
Take-home pay	1999/00 prices	£454.06	£462.69	£466.20	£460.80	£460.86	£475.49	£484.13	£486.79	£498.63	£505.23	£517.46
Take-home pay	Index at 1999/00 prices	100.0	101.9	102.7	101.5	101.5	104.7	106.6	107.2	109.8	111.3	114.0
Married, no children, both working												
Income Tax	Cash prices	£87.95	£89.26	£92.60	£97.54	£102.84	£101.92	£101.78	£105.49	£108.83	£114.28	£118.48
NICs	Cash prices	£38.76	£40.86	£42.13	£48.10	£49.86	£51.84	£54.24	£56.30	£55.70	£56.80	£57.84
Income tax + NICs	Cash prices	£126.71	£130.12	£134.73	£145.64	£152.70	£153.76	£156.02	£161.79	£164.53	£171.08	£176.32
Income tax + NICs	1999/00 prices	£156.31	£155.60	£158.41	£166.68	£169.26	£166.39	£163.41	£164.35	£164.53	£165.70	£167.83
Income tax + NICs	% of earnings	24.8%	24.2%	24.3%	25.5%	25.8%	25.0%	24.3%	24.3%	23.9%	23.8%	23.4%
Take-home pay	Cash prices	£384.89	£407.88	£420.47	£426.56	£438.70	£462.24	£485.58	£503.61	£524.47	£548.92	£576.08
Take-home pay	1999/00 prices	£474.80	£487.76	£494.38	£488.19	£486.27	£500.20	£508.59	£511.58	£524.47	£531.64	£548.35
Take-home pay	Index at 1999/00 prices	100.0	102.7	104.1	102.8	102.4	105.4	107.1	107.7	110.5	112.0	115.5
Married, 2 children, husband working												
Income Tax	Cash prices	£103.79	£107.75	£111.58	£124.51	£131.31	£130.81	£132.55	£137.33	£143.18	£152.45	£156.62
NICs	Cash prices	£31.46	£32.67	£33.88	£38.44	£39.36	£40.62	£41.54	£43.38	£43.40	£45.90	£48.80
Child benefit	Cash prices	£16.13	£17.45	£18.10	£18.45	£18.85	£19.60	£20.05	£20.75	£24.00	£25.00	£25.85
FC/WFTC	Cash prices	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00
Income tax + NICs - CB-FC/WFTC	Cash prices	£119.12	£122.97	£127.36	£144.50	£151.82	£151.83	£154.04	£159.96	£162.58	£173.35	£179.57
Income tax + NICs - CB-FC/WFTC	1999/00 prices	£146.95	£147.05	£149.74	£165.38	£168.28	£164.30	£161.34	£162.49	£162.58	£167.90	£170.93
Income tax + NICs - CB-FC/WFTC	% of earnings	23.3%	22.9%	22.9%	25.3%	25.7%	24.6%	24.0%	24.0%	23.6%	24.1%	23.9%
Take-home pay	Cash prices	£392.48	£415.03	£427.84	£427.70	£439.58	£464.17	£487.56	£505.44	£526.42	£546.65	£572.83
Take-home pay	1999/00 prices	£484.16	£496.31	£503.04	£489.49	£487.25	£502.29	£510.66	£513.44	£526.42	£529.44	£545.26
Take-home pay	Index at 1999/00 prices	100.0	102.5	103.9	101.1	100.6	103.7	105.5	106.0	108.7	109.4	112.6

The burden of direct taxes and real take home pay:

500% of median earnings

£ per week

		1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02
Gross Earnings	Cash prices	£1,279.00	£1,345.00	£1,388.00	£1,430.50	£1,478.50	£1,540.00	£1,604.00	£1,663.50	£1,722.50	£1,800.00	£1,881.00
Single person												
Income Tax	Cash prices	£417.89	£441.21	£457.93	£474.45	£491.11	£505.58	£522.79	£542.05	£560.37	£584.45	£611.41
NICs	Cash prices	£31.46	£32.67	£33.88	£38.44	£39.36	£40.62	£41.54	£43.38	£43.40	£45.90	£48.80
Income tax + NICs	Cash prices	£449.35	£473.88	£491.81	£512.89	£530.47	£546.20	£564.33	£585.43	£603.77	£630.35	£660.21
Income tax + NICs	1999/00 prices	£554.31	£566.68	£578.25	£586.99	£588.00	£591.05	£591.07	£594.70	£603.77	£610.51	£628.43
Income tax + NICs	% of earnings	35.1%	35.2%	35.4%	35.9%	35.9%	35.5%	35.2%	35.2%	35.1%	35.0%	35.1%
Take-home pay	Cash prices	£829.65	£871.12	£896.19	£917.61	£948.03	£993.80	£1,039.67	£1,078.07	£1,118.73	£1,169.65	£1,220.79
Take-home pay	1999/00 prices	£1,023.45	£1,041.71	£1,053.70	£1,050.19	£1,050.84	£1,075.42	£1,088.93	£1,095.13	£1,118.73	£1,132.83	£1,162.03
Take-home pay	Index at 1999/00 prices	100.0	101.8	103.0	102.6	102.7	105.1	106.4	107.0	109.3	110.7	113.5
Married, no children, both working												
Income Tax	Cash prices	£312.08	£331.19	£347.43	£370.08	£385.86	£389.99	£398.71	£413.23	£427.94	£448.91	£470.42
NICs	Cash prices	£62.92	£65.34	£67.76	£76.88	£78.72	£81.24	£83.08	£86.76	£86.80	£91.80	£97.60
Income tax + NICs	Cash prices	£375.00	£396.53	£415.19	£446.96	£464.58	£471.23	£481.79	£499.99	£514.74	£540.71	£568.02
Income tax + NICs	1999/00 prices	£462.59	£474.19	£488.16	£511.54	£514.96	£509.93	£504.61	£507.90	£514.74	£523.69	£540.67
Income tax + NICs	% of earnings	29.3%	29.5%	29.9%	31.2%	31.4%	30.6%	30.0%	30.1%	29.9%	30.0%	30.2%
Take-home pay	Cash prices	£904.00	£948.47	£972.81	£983.54	£1,013.92	£1,068.77	£1,122.21	£1,163.51	£1,207.76	£1,259.29	£1,312.98
Take-home pay	1999/00 prices	£1,115.17	£1,134.21	£1,143.79	£1,125.64	£1,123.87	£1,156.54	£1,175.39	£1,181.93	£1,207.76	£1,219.65	£1,249.78
Take-home pay	Index at 1999/00 prices	100.0	101.7	102.6	100.9	100.8	103.7	105.4	106.0	108.3	109.4	112.1
Married, 2 children, husband working												
Income Tax	Cash prices	£404.66	£427.98	£444.70	£467.83	£486.15	£500.41	£517.51	£536.57	£556.58	£584.45	£611.41
NICs	Cash prices	£31.46	£32.67	£33.88	£38.44	£39.36	£40.62	£41.54	£43.38	£43.40	£45.90	£48.80
Child benefit	Cash prices	£16.13	£17.45	£18.10	£18.45	£18.85	£19.60	£20.05	£20.75	£24.00	£25.00	£25.85
FC/WFTC	Cash prices	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00
Income tax + NICs - CB-FC/WFTC	Cash prices	£419.99	£443.20	£460.48	£487.82	£506.66	£521.43	£539.00	£559.20	£575.98	£605.35	£634.36
Income tax + NICs - CB-FC/WFTC	1999/00 prices	£518.10	£529.99	£541.41	£558.30	£561.61	£564.26	£564.54	£568.05	£575.98	£586.30	£603.82
Income tax + NICs - CB-FC/WFTC	% of earnings	32.8%	33.0%	33.2%	34.1%	34.3%	33.9%	33.6%	33.6%	33.4%	33.6%	33.7%
Take-home pay	Cash prices	£859.01	£901.80	£927.52	£942.68	£971.84	£1,018.57	£1,065.00	£1,104.30	£1,146.52	£1,194.65	£1,246.64
Take-home pay	1999/00 prices	£1,059.67	£1,078.40	£1,090.54	£1,078.87	£1,077.23	£1,102.22	£1,115.46	£1,121.77	£1,146.52	£1,157.04	£1,186.64
Take-home pay	Index at 1999/00 prices	100.0	101.8	102.9	101.8	101.7	104.0	105.3	105.9	108.2	109.2	112.0

Appendix 4: Further reading and internet sources

The following notes provide some suggestions for further reading on the burden of taxation and taxation statistics. Internet sources are also indicated.

HM Treasury

Budget 2001 (the Budget “Red Book”) HC 279 2000-01

<http://www.hm-treasury.gov.uk/budget2001/fsbr/contents.html>

Details of previous budgets and pre-budget reports since 1994 are also available on the Treasury website.

National Statistics

“The effects of taxes and benefits on household income 1999-00”, *Economic Trends*, April 2001. Please note that the online version corrects for an error discovered in the initial hard copy publication. Available on the internet at:

http://www.statistics.gov.uk/themes/economy/Articles/General/extracts/downloads/Household_income_taxes_&_benefits_1999-2000.pdf

Inland Revenue

Inland Revenue Statistics 2000. Some tables in the online edition have been updated to 2001. Available on the internet at: <http://www.inlandrevenue.gov.uk/stats/index2000.htm>

Institute of Fiscal Studies

The Institute of Fiscal Studies is an independent research institute specialising in matters relating to the UK tax and benefit system. Its internet site <http://www.ifs.org.uk> contains links to a number of publications, including the Institute’s analysis of the March 2001 Budget and a series of election briefings.