

# **The Green Budget**

**January 1998**

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# 1. Summary

## **Economic Prospects**

The Budget will be framed against uncertainty about how rapidly the economy will slow in 1998 and 1999. Our view is that the economy entered 1998 almost 1% above trend output. GDP growth is forecast to slow to 2.3% in 1998, broadly in line with trend, and further to 1.5% in 1999. Even so, the inflation target may prove elusive for much of the next two years before output falls below trend. A peak in base rates is likely to be seen during the first half of 1998, but around 0.5 percentage points above current levels. While there is a chance of a better performance than this, there are also risks of mild overheating leading to a more substantial decline in growth in 1999.

## **An Audit of the Public Finances**

We expect the PSBR for 1997-98 to be £9.9 billion, very close to the government's Pre-Budget Report (PBR) figure, and to fall to £2.5 billion in 1998-99. The 1997-98 PSBR will still break the 'golden rule', even though the ratio of debt to national income will fall. We do not expect significant net increases or decreases in tax in the Budget. The PSBR will decline further as the parliament progresses, moving into surplus in 2000-01 and reaching a public sector debt repayment (PSDR) of £6 billion in 2001-02. Both the golden rule and debt sustainability will easily be met. Indeed, core public spending could rise by 3% a year in real terms from 1998-99 to the end of the parliament and the golden rule would still be met in 2001-02. This is much more rapid than current spending growth, but lower than was seen in the recession of the early 1990s.

One reason for the rapid improvement in public finances is the large pre-announced tax increases which will continue over the parliament.

## **Direct Taxes, Benefits and Welfare-to-Work**

A 10p tax rate is likely to be a part of the Budget, but would be expensive unless covering only a narrow band. It is not well targeted on those on low incomes and will add significantly to the complexity of the system. If the objective is improving work incentives of the unwaged and the low-paid, it is the benefit system rather than the tax system which must be changed.

One of the centrepieces of the Budget is set to be the working families' tax credit (WFTC). Large-scale reform seems less likely than a re-badging of family credit as a tax credit, alongside the injection of additional funds. Increased spending on in-work support cannot evade the trade-off between unemployment and poverty traps. If we make work relatively more attractive than unemployment, by increasing in-work support (reducing the unemployment trap), we will increase the numbers in work facing withdrawal of benefit as incomes rise (worsening the poverty trap). This is particularly a

concern for two-earner couples, where the incentive of the second earner to work at all could be much reduced.

Payment of WFTC through the pay-packet might reduce stigma, but a shift from family credit, which is paid to the mother, would transfer income from women to men. There is little hard evidence on the importance of either of these factors.

The Chancellor also mentioned reform of the National Insurance (NI) regime in the PBR. We note that further alignment of the NI system with income tax allowances and thresholds would be possible and have some desirable features, but would still leave us some way short of full integration. Distortions in the labour market are more likely to be the result of the jumps in NI liability in the current system than the non-alignment with income tax. Wholesale reform here would be expensive unless increases in NI rates were acceptable.

### **The New Individual Savings Account**

The Individual Savings Account (ISA) will make tax-free interest income available to those who cannot afford to lock up their savings, and as such is to be welcomed. But many of the details of the scheme, and the administration of contribution limits in particular, are yet to be fully worked out. There is a reasonable rationale for an annual contribution limit. A limit on transfers from PEPs and TESSAs is unlikely to raise much revenue, since capped funds can seek alternative tax-favoured homes, and therefore has little rationale, but should not produce long-term problems. The proposal for a cumulative contribution limit of £50,000 will impose substantial compliance costs, is unlikely to raise revenue for the same reason as the transfer limit, and sits uneasily with a commitment to increased self-reliance in welfare provision.

It seems unlikely that the ISA will generate substantial new saving, not least since the new target groups have relatively low incomes and the size of the incentive for them will be modest for many and zero for non-taxpayers.

### **Issues in the Taxation of Companies**

The reforms of the July Budget and the November PBR result, in the long run, in a small increase in taxes on business source income, while in the short term there will be a one-off cumulative revenue increase of £7 billion over the transition period. We do not expect further major changes to UK corporate tax in the medium term. The reforms will lead to some reductions in tax-induced distortions of company investment decisions, but the cash-flow impact is unlikely to encourage investment particularly in the short term.

### **Taxation and the Environment**

In his PBR, Gordon Brown declared that ‘in securing the long term, nothing is more important than the environment’ and that the government would be ‘looking at how the tax system can reflect our environmental objectives’.

We describe the case for using tax instruments, noting that good proxies for the environmental ‘bad’ are needed if tax is to work well. The most substantial



'environmental' tax at present is arguably fuel duties, which are being raised rapidly. We point out that for many of the externalities associated with transport, fuel duties are a poor proxy. Company car taxation, and in particular the annual mileage limits, are likely to be targets for reform in the Budget.

### **Indirect Taxation**

The real level of alcohol tax has been reduced in recent Budgets, in part reflecting declining revenues from beer and spirits. The structure of alcohol taxes is still somewhat odd, with alcohol being taxed at very different rates depending on the form in which it is sold. Losses in revenue from smuggling and cross-border shopping, while significant, are too low to justify reductions in domestic duty rates.

Tobacco taxes are rising rapidly, with continuing pre-announced annual increases to come in future. The number of cigarettes consumed is falling, but the number of smokers has fallen far less quickly. The distributional impact of future increases will be substantial, hitting low-income households hardest. This is not necessarily a reason for changing the policy, but might call for adjustments elsewhere, and does underline the necessity of a clearer understanding of the determinants of smoking behaviour.

### **Issues in Public Spending**

Public spending control has been very tight in 1996-97 and 1997-98, and is set to be so again in 1998-99. We expect the plans to be met this year and next, although the strains on the contingency reserve and on public services will be severe. In health and education, the government's manifesto pledges to increase the real level of health spending and the share of national income taken by education should be easier to meet than its commitments on waiting-lists and class sizes.

The debate about welfare reform, in the context of social security, must recognise that the current level of spending will not meet expectations, but emphasise the difficulty of making savings while protecting those most in need. It is true that some benefit spending goes to the relatively well off, but in many cases, such as the support of disabled people or the state retirement pension, this reflects deliberate decisions, which would be hard to reverse.

## **2. Economic prospects**

The Budget will be framed amid greater uncertainty than usual about economic prospects. There is widespread agreement that UK economic growth must slow in 1998 to avoid overheating and indeed that the economy will slow. However, there is no clear consensus about the extent to which growth will slow, nor the magnitude of the slowdown that is necessary to keep inflation firmly under control. The latter depends to a large extent on where the economy is relative to potential and the sustainable rate of growth. Both have implications for the structural budgetary position (see Chapter 3). The Goldman Sachs view is that the economy entered 1998 almost 1% above potential. GDP growth is forecast to slow to 2.3% this year, broadly in line with trend, and to only 1.5% in 1999. Even so, the government's inflation target may prove elusive for much of the next two years, given that it will take a number of quarters before output falls below trend. A peak in base rates is likely to be seen during the first half of 1998 but around 0.5 percentage points higher than current levels.

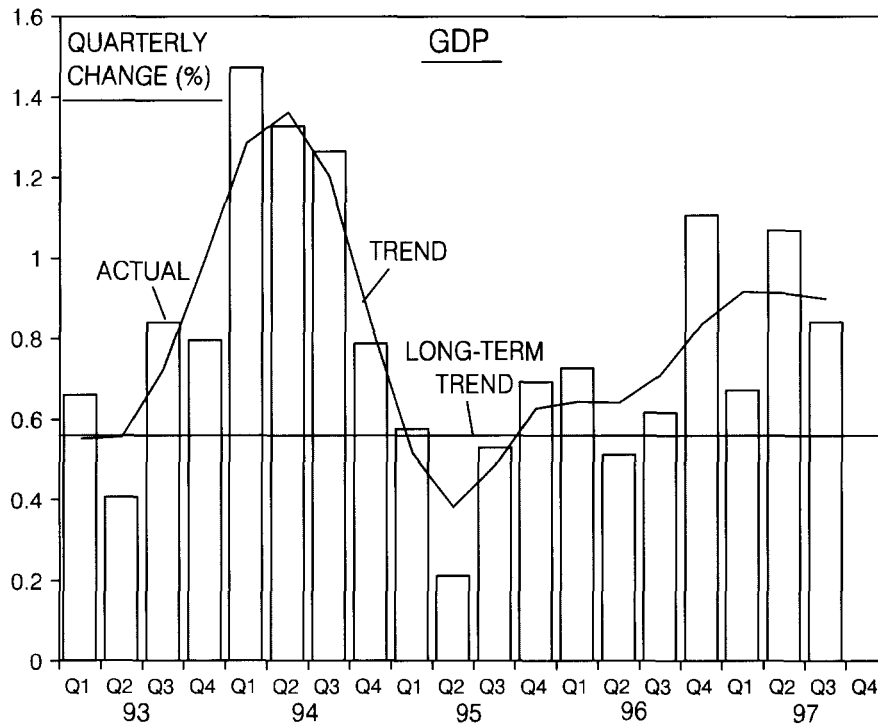
### **2.1 How much will growth slow?**

Ever since this time last year, the economy has been expanding, on the official GDP statistics, at an annualised rate of almost 4%. This rate may have eased slightly since the summer, but it is almost double the rate of growth that can safely be sustained in the UK economy over any lengthy period, particularly bearing in mind that revisions to GDP data at this stage of the economic cycle are almost always upwards. Business surveys are consistent with the view that GDP growth has peaked but they provide little indication that growth is about to slow to a trend rate or below. Consumer spending has been, and remains, the main driving force behind the economic expansion.

There are good reasons for expecting GDP growth to slow in 1998. The most important factor is that monetary policy has been tightened considerably since the Bank of England gained independence. Since the general election last May, base rates have risen from 6% to 7.25% and the sterling trade-weighted exchange rate has appreciated by 5% — more if appropriate weight is given to the Asian currencies.

In addition, the shock from the financial crisis in Asia will undoubtedly retard growth although the effects are difficult to quantify with any certainty. On Goldman Sachs estimates, if the current account balances of south-east Asian countries and newly industrialised economies improve in aggregate by 4% of GDP — a reasonable central assumption — the negative impact on OECD growth this year will be about 0.6 of a percentage point while that for the world as a whole will be just over 1 percentage point. The UK, along with the rest of the

European Union, is likely to fare better than average but GDP growth could still be hit by around 0.4 of a percentage point this year.



The Asian shock, coupled with the substantial appreciation in sterling over the past two years, means that net trade volumes are likely to exert a considerable drag on the economy in coming quarters. Business surveys reported a sharp fall in export optimism and order books during 1997 to levels only previously plumbed during the depths of the ERM crisis and during the early years of Mrs Thatcher's government. After a prolonged period in which export volume growth held up remarkably well, there are tentative signs in official data that exporters are now finding the going much tougher. In the three months to October 1997, non-oil export volumes increased at an annualised rate of only 2.5% compared with the previous three months. With import volumes on the same basis growing at 10.5% over the same period, the stage is set for a fairly marked worsening in the trade balance during 1998. Goldman Sachs expects net trade volumes to curb GDP growth by around 1.2 percentage points in 1998. The current account may move from a surplus of 0.5% of GDP in 1997 to a deficit of a similar magnitude this year.

Fiscal policy will also continue to exert a significant drag on the economy. So far, at least, Gordon Brown has stuck successfully to the very tough public spending plans he inherited from Ken Clarke. He shows every intention of doing the same in 1998-99, in which case there will be no real growth in public spending over 1997 or 1998. Like net exports, this will be a strong dampener on economic

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growth. If the public spending plans are hit, 40% of GDP will show no real growth this year. (The prospects for public spending are discussed in Chapter 9.)

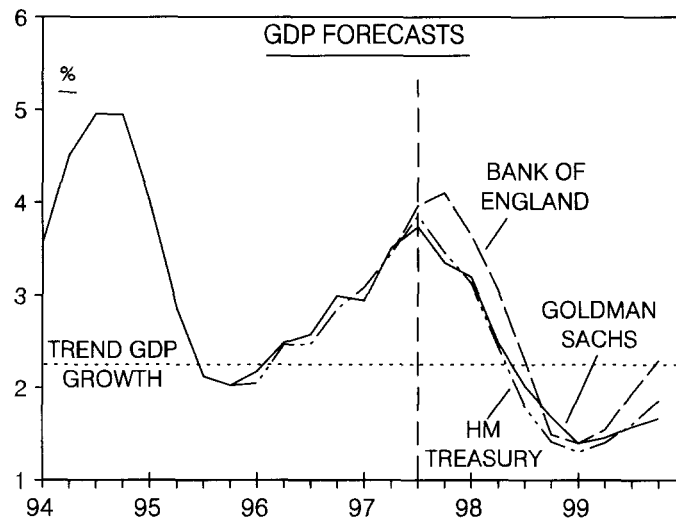
Despite the rise in sterling, the down draught from Asia and the tightness of fiscal policy, there is still a severe danger that buoyant consumer spending will keep the boom going this year. Consumer confidence has fallen from its peak but it remains at levels that are historically high. Unless confidence continues to drop, past relationships suggest that real consumer spending growth could be maintained at an annualised rate of around 5%. A further stimulus to growth this year is also likely to come from investment as firms respond to rising capacity utilisation. Until business and consumer confidence falls further, it will be difficult for the Monetary Policy Committee of the Bank of England to be confident that base rates are high enough to slow the economy to a sustainable rate.

**Table 2.1. Demand prospects**

<i>(Annual percentage change, volume)</i>	1996	1997	1998
<b>Private consumption</b>			
HMT		4.5	3.5-3.75
Goldman Sachs	3.6	4.2	4.1
Consensus		4.5	3.6
<b>Total fixed investment</b>			
HMT		3.75	6.0-6.25
Goldman Sachs	1.8	3.2	4.4
Consensus		4.3	5.4
<b>Exports of goods and services</b>			
HMT		7.5	5-5.25
Goldman Sachs	6.8	8.2	4.8
Consensus		6.7	4.5
<b>Imports of goods and services</b>			
HMT		8.0	7.75-8
Goldman Sachs	8.4	8.2	7.9
Consensus		7.5	6.7
<b>Real GDP</b>			
HMT		3.5	2.25-2.75
Goldman Sachs	2.6	3.4	2.3
Consensus		3.5	2.5

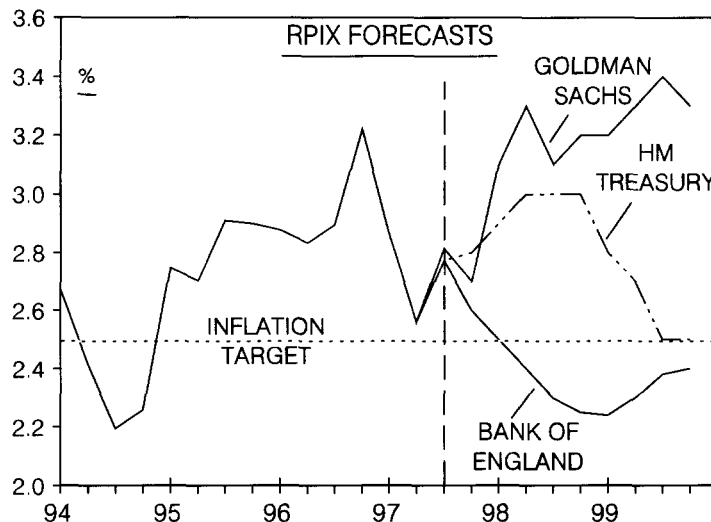
Sources: HMT — HM Treasury Pre-Budget Report, November 1997.  
 Goldman Sachs — The UK *Economics Analyst*, January/February 1998.  
 Consensus — HM Treasury, December 1997.

Taking all these factors together, the Goldman Sachs judgement is that GDP growth will slow progressively during 1998, taking the annual growth rate down to around 1.7% by the end of the year. For the calendar year as a whole, this implies growth of around 2.3% in 1998. This is broadly in line with recent forecasts from the Treasury and Bank of England. Outside forecasts range from 1.5% to 3.6% for GDP growth in 1998.



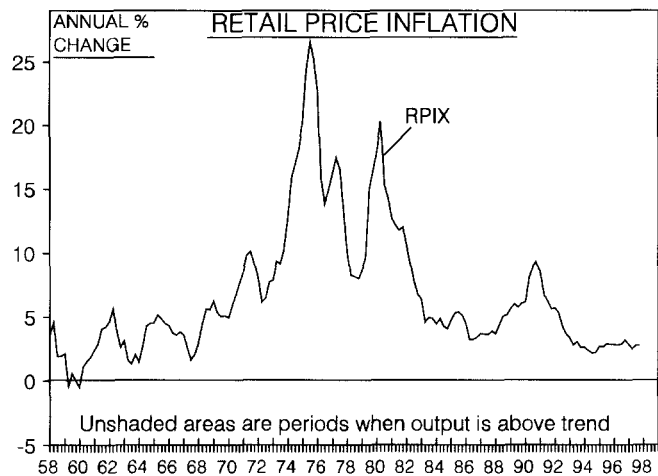
## 2.2 How much does growth need to slow?

While there is broad agreement that growth will slow significantly in 1998, there is less consensus on what this means for inflation. Despite having similar growth paths, the latest Bank of England forecast showed underlying retail price inflation (RPIX) falling to about 2.3% by the end of this year; the Treasury, on the other hand, forecast inflation to pick up to 3%.



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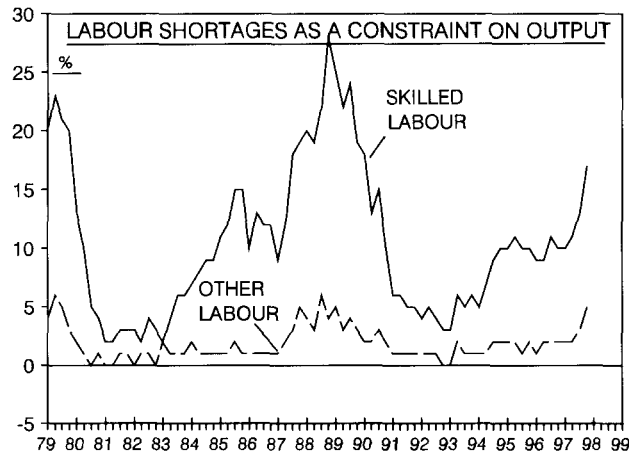
The prospects for inflation depend to a large extent on where the economy is relative to potential. This follows from four stylised facts in the UK economy. First, inflation pressures tend to rise for as long as output is above trend. Second, inflation only tends to stabilise when output gets back to trend. Third, inflation only eases when output moves below trend. Fourth, to keep inflation stable on average, the cumulative output gap needs to be approximately zero. These stylised facts are illustrated in the following graph. On average, inflation has stabilised within one quarter of the economy getting back to trend — this applies equally during periods of above- and below-trend output. During periods of below-trend output, there has generally been a steady easing in inflation, while inflation has risen continuously during periods of above-trend output.



At any point in time, it is impossible to know precisely where the economy is relative to trend for the simple reason that potential output is not directly observable. However, business survey evidence on capacity utilisation and on conditions in the labour market clearly suggests that output is now above potential. In particular, the October 1997 CBI Industrial Trends Survey reported a sharp increase in the number of firms reporting skilled labour shortages. The last time they rose this rapidly was during 1987 and this was a precursor of marked upward pressure on pay and inflation more generally. The pick-up in average earnings growth to 4<sup>3</sup>/<sub>4</sub>% in November is a clear indication that the labour market has become too tight to be consistent with stable inflation.

In the government's Pre-Budget Report last November, the Treasury stated that the economy probably moved above trend in early 1997 and output was forecast to be about <sup>3</sup>/<sub>4</sub>% above potential GDP by the end of last year. This is in line with the Goldman Sachs view. To avoid overheating, it is essential, according to the first stylised fact, that the economy moves back to trend as soon as possible since inflation pressures will tend to go on building until that time. It is therefore not sufficient for the economy to slow merely to a trend rate of growth, since this will leave the level of output permanently above trend. A period of below-trend GDP

growth is required to get output back to trend. Moreover, the longer it takes to slow the economy, the greater the eventual slowdown will need to be. If GDP was  $\frac{3}{4}\%$  above potential at the end of last year, then inflation will only stabilise if growth slows to about  $1\frac{1}{2}\%$  this year. To achieve this, the economy would need to grow by no more than about 0.35% a quarter in each quarter of 1998.



Suppose the economy does grow by only 0.35% a quarter during 1998; inflation would stabilise but it would probably still persist above  $2\frac{1}{2}\%$  reflecting the cumulative period during 1997 and 1998 when output was above trend. According to the third stylised fact, output would need to move below trend to bring inflation down again. To get it back to  $2\frac{1}{2}\%$ , the fourth stylised fact says that the cumulative output gap must be zero. To achieve this, growth in the economy might need to be restricted to only 0.3–0.4% a quarter through 1999 as well. It is hard to get away from this unpleasant arithmetic unless there has been a supply-side improvement such that the economy is able to grow faster than  $2\frac{1}{4}\%$  a year on average.

In its Pre-Budget Report, the Treasury left open the question of how fast the underlying trend rate of growth now is, estimating it at somewhere between 2% and 3% a year. Depending on the extent of any supply side improvement, particularly in the labour market, GDP is projected to grow by  $2\frac{1}{4}$ – $2\frac{3}{4}\%$  in 1998,  $1\frac{1}{2}$ –2% in 1999 and  $2\frac{1}{4}$ – $2\frac{3}{4}\%$  in 2000. On the Treasury's central assumption that trend output is  $2\frac{1}{4}\%$  a year — again in line with Goldman Sachs estimates — GDP growth would need to slow to around  $2\frac{1}{4}\%$  in 1998 and  $1\frac{1}{2}\%$  in 1999 in order to create an output gap and so keep inflation firmly under control. Although global inflation pressures should remain extremely benign this year, the key to how fast the economy can grow is the labour market. For the economy to be able to grow faster than its long-term growth rate, wage inflation needs to remain benign in the face of a further tightening in the labour market. This lies behind the Chancellor's pleas for wage moderation. Historical experience at similar points in the economic cycle suggests that these pleas are likely to fall on deaf ears. Pay settlements appear to have moved up to around 4%, consistent with average

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earnings growth in excess of 5% during 1998.

The Monetary Policy Committee (MPC) of the Bank of England will have to judge the prospects for inflation on a month-by-month basis in the light of 'new' economic news. It will be difficult for the MPC to declare a definitive pause in interest rate increases until there is clear evidence that leading indicators of inflation — such as monetary growth, business and consumer confidence and labour market conditions — are easing, even if this risks a sharp downturn in economic activity. GDP growth may slow — indeed it would be a major concern if it does not — but if pay settlements pick up in response to the tightness in the labour market and RPIX remains persistently above the government's target, the MPC will be obliged to raise interest rates further. Ultimately, the risks of doing too little on interest rates at this point in the economic cycle are much greater than those of doing too much. A peak in base rates is likely to be seen in the next few months but about 0.5 percentage points higher than currently.

In this environment, sterling should remain well supported in the early part of 1998. The Bank of England is, after all, the only major central bank currently tightening monetary policy and a re-test of DM/£ 3 is quite feasible. However, according to the Goldman Sachs equilibrium exchange rate model, sterling is already about 20% overvalued against the D-Mark, which of course helps to explain why export orders are so subdued. Eventually, sterling will be undermined by a combination of this overvaluation, slower growth, rising inflation and a worsening in the balance of payments. On a 6-12-month view, Goldman Sachs expects the pound to fall back to around 2.60-2.70 against the D-Mark, while remaining broadly stable against the US dollar.

In summary, the UK economy is set to slow quite sharply in coming quarters but probably not by enough to keep underlying inflation firmly on target. The past couple of years have been characterised by pleasant surprises on growth and inflation. The outlook is unlikely to be so serene in 1998 and 1999. A summary of Goldman Sachs' main economic forecasts is shown in Tables 2.1 and 2.2.

**Table 2.2. Other key indicators**

	1996Q4	1997Q4	1998Q2	1998Q4
<b>Price inflation (%)<sup>a</sup></b>				
HMT		2.75	3.0	3.0
Goldman Sachs	3.2	2.8	3.1	3.1
Consensus		2.7	—	2.9
	1996Q4	1997Q4	1998Q2	1998Q4
<b>Unemployment (million)</b>				
Goldman Sachs	1.95	1.44	1.37	1.39
Consensus		1.43	—	1.30
	1995	1996	1997	1998
<b>Current account (£ billion)</b>				
HMT			2.3	-7.3
Goldman Sachs	-3.7	-1.9	4.0	-3.8
Consensus			0.6	-6.5

<sup>a</sup>RPI excluding mortgage interest payments.

Sources: As Table 2.1.



## 3. An audit of the public finances

The government has stressed the importance of having a transparent framework for the conduct of fiscal policy. Its proposed Code for Fiscal Stability will require this, and all future, governments to state fiscal policy objectives clearly and to demonstrate how these will be achieved. In this chapter, we provide an audit of the public finances in the context of these rules. Our main conclusion is that the public finances have now been put on a sustainable footing. This would remain the case even if the Chancellor raised public spending or cut taxes by around £3 billion in the Budget. However, the economic case for an easier fiscal stance than that currently planned is much less clear. On balance, we expect the fiscal adjustment in the Budget to be close to zero.

### 3.1 The fiscal rules

In the July Budget, the government announced the adoption of two strict fiscal rules:

- (i) the ‘golden rule’ — over the economic cycle, the government will borrow only to invest and not to fund current expenditure; and
- (ii) a stable and prudent public debt ratio — the ratio of public debt to GDP will be held at a stable and prudent level over the economic cycle.

The principle behind the golden rule is that the government should avoid increasing its liabilities more rapidly than its assets. Failure to do so would saddle future generations with meeting the cost of policies that primarily benefit the current generation. Related to the golden rule is a requirement that any borrowing for public investment is conducted responsibly, preventing the current generation from running up an excessive stock of public debt to be financed by future generations. In a European context, the ratio of general government gross debt to GDP should be stabilised no higher than 60% to comply with the Maastricht Treaty criteria for economic and monetary union.

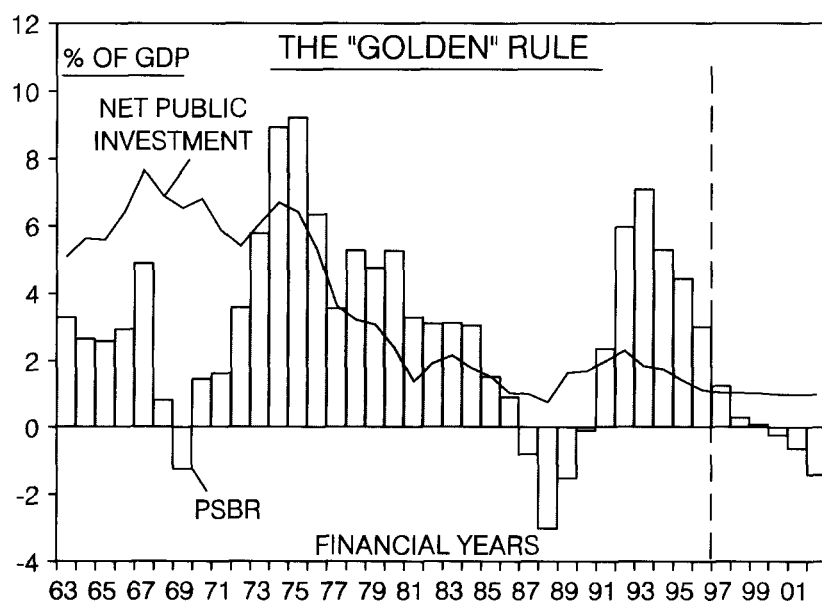
While these are by no means the only rules that could be chosen to guide fiscal policy, we have argued in successive Green Budgets that these two rules, if adhered to consistently, would ensure the sustainability of fiscal policy. If the fiscal rules are applied as an average over the economic cycle, they recognise the significant effect of cyclical fluctuations on the public finances. In this way, the automatic stabilisers are allowed to work which can contribute to general economic stability.

There is also a third consideration, namely European Monetary Union (EMU). Under the terms of the Stability and Growth Pact, EMU members must aim for a medium-term government budget of close to balance or a surplus. This is a tougher requirement than either of the government’s two fiscal rules and it will become an important consideration if the UK joins the single currency in the next parliament.

### 3.2 Performance against the fiscal rules

As yet, full information is only available about the out-turn for 1996–97 when the PSBR was £22.7 billion (£0.1 billion worse than in the Pre-Budget Report) or 3.0% of GDP. This was consistent with a slight fall in the public debt ratio from 54.8% to 54.3%, thereby satisfying the second, less onerous, fiscal rule. However, the golden rule was missed by a long way. The current balance was in deficit by £19.2 billion or 2.5% of GDP.

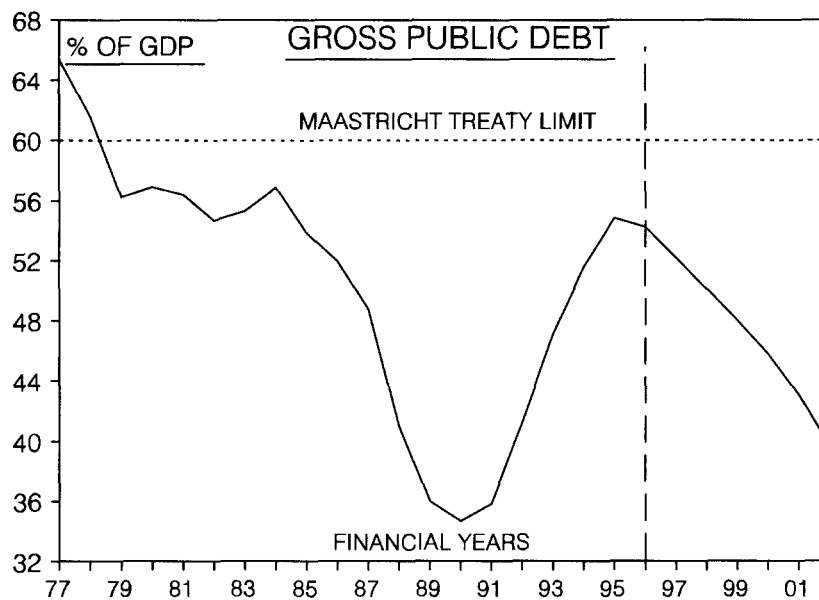
There has been a substantial improvement in the PSBR and current balance in 1997–98. Excluding privatisation proceeds, the PSBR was £6.6 billion in the first eight months of 1997–98, down from £17.9 billion in the same period last year. Much of the improvement is on the spending side. Central government outlays are down 1.2% in cash terms so far this year compared with a forecast increase of 1.0% in the Pre-Budget Report. Even allowing for the £1 billion boost to interest payments in December, spending remains comfortably on track to hit the Treasury’s forecast. Receipts are running a little lower than expected, although there is considerable growth since last year. In the first eight months of 1997–98, tax receipts were up 5.2% compared with a year earlier. This is lower than the Treasury’s forecast of 7.8% for the year as a whole, although it does not take into account the £2.6 billion boost in December from the windfall tax on the privatised utilities. On the basis of the information available so far, we expect general government receipts to undershoot the latest Treasury forecast by around £½ billion this year, mainly as a result of a shortfall in income tax receipts. This would result in a PSBR excluding the windfall tax and associated spending of £12.4 billion (1.6% of GDP), £0.5 billion higher than the latest Treasury forecast. Table 3.1 shows a detailed breakdown of the IFS/Goldman Sachs PSBR forecast for the current financial year alongside the Treasury’s.



**Table 3.1. Public finances in 1997–98 and 1998–99**

	<i>July 1997 FSBR 1997–98</i>	<i>Pre-Budget Report 1997–98</i>	<i>IFS forecast 1997–98</i>	<i>IFS forecast 1998–99</i>
Income tax	76.5	75.5	74.4	84.5
Corporation tax	30.1	30.3	31.0	31.6
Windfall tax	2.6	2.6	2.6	2.6
Petroleum revenue tax	1.3	1.2	1.2	1.2
Capital gains tax	1.3	1.3	1.3	1.4
Inheritance tax	1.6	1.6	1.6	1.6
Stamp duties	3.3	3.4	3.4	3.8
<b>Total Inland Revenue</b>	<b>116.7</b>	<b>115.9</b>	<b>115.5</b>	<b>126.7</b>
VAT	50.0	50.1	49.8	52.7
Fuel duties	19.2	18.7	18.7	20.3
Tobacco duties	8.5	8.3	8.3	9.0
Alcohol duties	5.8	5.9	5.9	6.3
Betting and gaming duties	1.5	1.6	1.6	1.7
Air passenger duty	0.5	0.5	0.5	0.8
Insurance premium tax	1.1	1.1	1.1	1.4
Landfill tax	0.4	0.4	0.4	0.5
Customs duties and levies	2.1	1.9	1.9	1.7
<b>Total Customs and Excise</b>	<b>89.2</b>	<b>88.6</b>	<b>88.2</b>	<b>94.3</b>
Vehicle excise duty	4.4	4.5	4.5	4.8
Oil royalties	0.6	0.5	0.5	0.5
Business rates	14.5	14.6	14.6	14.6
National Insurance contributions	49.5	49.5	50.0	52.9
Council tax	10.6	10.5	10.5	11.0
Other taxes and royalties	7.5	8.0	8.0	7.8
<b>Total taxes and NI contributions</b>	<b>293.0</b>	<b>292.2</b>	<b>291.8</b>	<b>312.6</b>
Interest and dividends	5.0	4.9	4.9	5.0
Gross trading surplus and rent	4.9	4.9	4.9	5.0
Other receipts	5.4	6.4	6.4	6.6
<b>General government receipts</b>	<b>308.3</b>	<b>308.4</b>	<b>308.0</b>	<b>329.3</b>
Control total	266.4	265.8	265.8	274.2
Welfare-to-Work spending	0.2	0.2	0.2	1.2
LA spending under Capital Receipts Initiative	0.2	0.2	0.2	0.7
Cyclical social security	13.7	12.7	12.7	12.6
Central government debt interest	24.6	24.6	24.6	25.1
Accounting adjustments	10.1	11.1	11.1	11.5
<b>GGE(X)</b>	<b>315.3</b>	<b>314.6</b>	<b>314.6</b>	<b>325.3</b>
Privatisation proceeds	-2.0	-2.0	-2.0	0.0
Other adjustments	6.2	6.1	6.1	6.6
<b>GGE</b>	<b>319.4</b>	<b>318.7</b>	<b>318.7</b>	<b>332.0</b>
General government borrowing requirement	11.1	10.3	10.7	2.7
Public corporation market / overseas borrowing	-0.2	-0.8	-0.8	-0.2
<b>PSBR</b>	<b>10.9</b>	<b>9.5</b>	<b>9.9</b>	<b>2.5</b>

Despite this improvement in the PSBR, the current balance will remain in deficit in 1997–98. On the government's latest forecast, net capital spending will be £8.3 billion this year. With privatisation proceeds and other financial transactions totalling £2.5 billion, the public sector current balance (excluding windfalls) is forecast to be in deficit by £6.6 billion or 0.8% of GDP. Thus the golden rule will be missed again this year by some margin. The public debt ratio, though, will fall by about 2 percentage points to 52.2% of GDP.



### 3.3 Medium-term sustainability

An accurate assessment of the government's performance in achieving its fiscal rules can only be made over a complete economic cycle — measured either from peak to peak in economic activity or from trough to trough. At any point in the economic cycle, cyclically adjusted estimates of the budget deficit can be helpful but these can never be conclusive if the average growth rate of GDP varies from cycle to cycle or if the upswing or downswing phases of the cycle are of different length or strength. This is compounded by the difficulty in knowing at any point in time precisely where in the cycle the economy is. A further problem is that the cycle in tax revenue tends to lag the economic cycle by about a year. On the Treasury's rule of thumb, a 1% increase in output relative to trend will reduce the PSBR after one year by approximately  $\frac{3}{4}\%$  of GDP.

In the government's Pre-Budget Report, the Treasury argued that the economy probably moved slightly above trend in early 1997 and output was forecast to be about  $\frac{3}{4}\%$  above potential GDP by the end of last year. This accords with the IFS/Goldman Sachs central estimates (see Chapter 2) and suggests that output was about  $\frac{1}{2}\%$  below trend on average in 1996–97 and  $\frac{3}{4}\%$  above trend on average in 1997–98. Our main-case medium-term fiscal projections assume an underlying trend growth rate in GDP of  $2\frac{1}{4}\%$  a year and that the cumulative

output gap will be zero over the period from 1997–98 onwards. These economic assumptions are summarised in Table 3.2; more details are contained in Appendix A. On our cyclically adjusted estimates, the PSBR is likely to be just over 1% of GDP this year. This is only fractionally higher than the level of borrowing consistent with meeting the golden rule over the economic cycle.

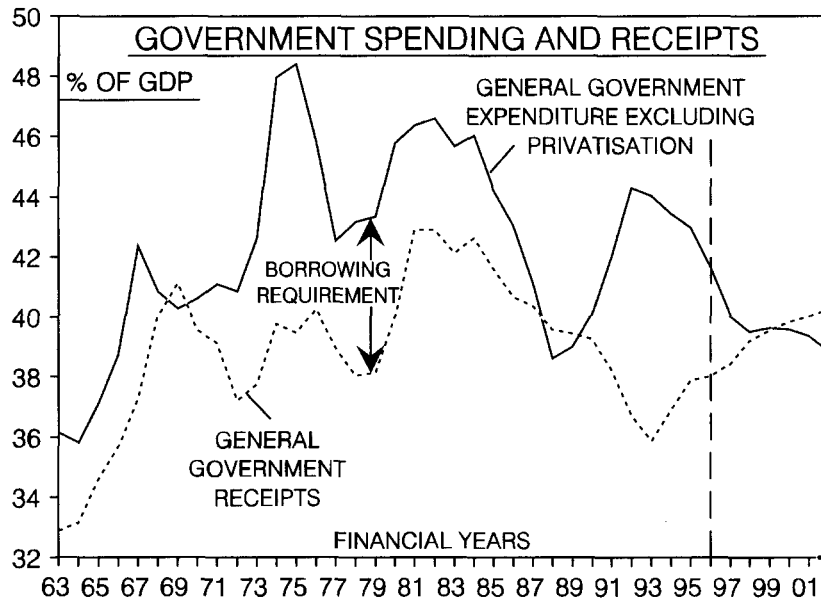


Table 3.2. Main economic assumptions

Annual % change	1996–97	1997–98	1998–99	1999–00	2000–01	2001–02	2002–03
<b>Real GDP</b>							
Nov. 97 Pre-Budget Report	2 <sup>3</sup> / <sub>4</sub>	3 <sup>1</sup> / <sub>2</sub>	1 <sup>3</sup> / <sub>4</sub>	1 <sup>3</sup> / <sub>4</sub>	2 <sup>1</sup> / <sub>4</sub>	2 <sup>1</sup> / <sub>4</sub>	2 <sup>1</sup> / <sub>4</sub>
IFS/Goldman Sachs	2 <sup>3</sup> / <sub>4</sub>	3 <sup>3</sup> / <sub>4</sub>	2	1 <sup>3</sup> / <sub>4</sub>	1 <sup>3</sup> / <sub>4</sub>	2 <sup>1</sup> / <sub>4</sub>	2 <sup>1</sup> / <sub>4</sub>
<b>GDP deflator</b>							
Nov. 97 Pre-Budget Report	2 <sup>3</sup> / <sub>4</sub>	2 <sup>3</sup> / <sub>4</sub>	2 <sup>3</sup> / <sub>4</sub>	2 <sup>1</sup> / <sub>2</sub>	2 <sup>1</sup> / <sub>2</sub>	2 <sup>1</sup> / <sub>2</sub>	2 <sup>1</sup> / <sub>2</sub>
IFS/Goldman Sachs	2 <sup>3</sup> / <sub>4</sub>	2 <sup>3</sup> / <sub>4</sub>	2 <sup>3</sup> / <sub>4</sub>	2 <sup>3</sup> / <sub>4</sub>	2 <sup>1</sup> / <sub>2</sub>	2 <sup>1</sup> / <sub>2</sub>	2 <sup>1</sup> / <sub>2</sub>
<b>Money GDP</b>							
Nov. 97 Pre-Budget Report	5 <sup>1</sup> / <sub>2</sub>	6 <sup>1</sup> / <sub>4</sub>	4 <sup>1</sup> / <sub>2</sub>	4 <sup>1</sup> / <sub>4</sub>	4 <sup>3</sup> / <sub>4</sub>	4 <sup>3</sup> / <sub>4</sub>	4 <sup>3</sup> / <sub>4</sub>
IFS/Goldman Sachs	5 <sup>1</sup> / <sub>2</sub>	6 <sup>1</sup> / <sub>2</sub>	5	5 <sup>1</sup> / <sub>2</sub>	4 <sup>1</sup> / <sub>4</sub>	4 <sup>3</sup> / <sub>4</sub>	4 <sup>3</sup> / <sub>4</sub>
<b>Money GDP (£bn)</b>							
Nov. 97 Pre-Budget Report	752.0	800.1	836.9	873.0	915.0	960.0	1006.0
IFS/Goldman Sachs	752.0	800.7	839.5	877.6	915.3	958.8	1004.3

Further progress in reducing public borrowing will be made next year even if the Chancellor does nothing in the forthcoming Budget. The government is committed to the previous administration’s plans for the public spending control total in 1998–99 which imply no real growth in control total spending next year. Coupled with the tax increases announced in last July’s Budget, we expect the PSBR excluding the windfall tax to fall to £3.9 billion in 1998–99 (0.5% of GDP). This is £2 billion lower than the latest Treasury forecast. The current balance excluding windfalls will move into a surplus of £4.6 billion (0.5% of GDP), satisfying the golden rule for the first time in eight years. The public debt ratio will fall to 50.1%.

Thereafter the path for the PSBR is crucially dependent on the assumed growth rate in public spending. This is currently the subject of the government's Comprehensive Spending Review, the results of which will not be known until the summer. In last July's Budget and the November Pre-Budget Report, the Treasury showed the profile for public borrowing on three different assumed growth paths for control total spending from 1999-00 onwards: (i) real growth of  $\frac{3}{4}\%$  a year—the real growth assumed from 2000-01 onwards in the 1996 Budget; (ii) real growth of  $1\frac{1}{2}\%$  a year — roughly the average over the past 20 years; and (iii) real growth of  $2\frac{1}{4}\%$  a year — the same as the estimated trend rate of economic growth. In our main-case forecast, we assume that the government will opt for (iii), the most lenient of these assumptions, giving average growth of just under  $1\frac{1}{2}\%$  a year between 1997-98 and 2002-03. The pressures on public spending are discussed at greater length in Chapter 9.

Table 3.3 summarises the main fiscal projections on these assumptions. By the end of the period, the PSBR moves into a surplus of 1.4% of GDP while the current balance is in surplus by 2.4% of GDP. Not only is the golden rule comfortably met but the public debt ratio declines to under 40%. Taking the whole period from 1996-97 to 2002-03, the economy is projected to be broadly at trend on average. Over this period, the surplus on the current balance will average 0.5% of GDP while the debt ratio will average 48%. On this central forecast, it is reasonable to conclude that the government's fiscal rules will be met over the economic cycle. On these projections, the surplus on the PSBR in the early part of the next parliament would satisfy the requirements of the Stability and Growth Pact should the UK opt to join EMU.

**Table 3.3. Main fiscal projections**

£ billion	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03
General govt expenditure	308.7	318.7	332.0	348.0	362.5	377.6	390.3
General govt receipts	286.1	308.0	329.3	347.2	364.8	383.8	404.5
<b>General govt borrowing</b>	22.7	10.8	2.7	0.8	-2.3	-6.2	-14.3
Public corporation borrowing	0.0	-0.8	-0.2	0.0	0.0	0.0	0.0
<b>PSBR</b>	22.7	9.9	2.5	0.8	-2.3	-6.2	-14.3
Windfall tax less spending	0.0	2.4	1.4	-1.3	-1.3	-1.2	0.0
<b>PSBR excl. windfall tax</b>	22.7	12.4	3.9	-0.5	-3.5	-7.4	-14.3
<i>Treasury forecast</i>	22.6	11.9	6.0	—	—	—	—
Privatisation proceeds <sup>a</sup>	4.9	2.5	0.2	0.0	0.0	0.0	0.0
Net capital spending	8.4	8.3	8.7	9.0	9.0	9.5	10.0
<b>Current bal. excl. windfall tax</b>	-19.2	-6.6	4.6	9.5	12.5	16.9	24.3
<b>% of GDP</b>							
GGE (X) <sup>b</sup>	40.9	39.3	38.7	38.9	38.8	38.7	38.2
General govt receipts	38.0	38.5	39.2	39.6	39.9	40.0	40.3
<b>PSBR excl. windfall tax</b>	3.0	1.6	0.5	-0.1	-0.4	-0.8	-1.4
<i>Treasury forecast</i>	3.0	1.5	0.7	- $\frac{1}{4}$ to $\frac{1}{4}$	- $\frac{1}{4}$ to - $\frac{1}{4}$	- $\frac{2}{4}$ to - $\frac{1}{2}$	- $\frac{3}{4}$ to -1
Cyclically adj. PSBR <sup>c</sup>	2.0	1.1	0.5	-0.1	-0.5	-0.9	-1.3
<b>Current bal. excl. windfall tax</b>	-2.5	-0.8	0.5	1.1	1.4	1.8	2.4
<b>Gross government debt</b>	54.3	52.2	50.1	48.0	45.8	43.1	39.7

<sup>a</sup>And other financial transactions.

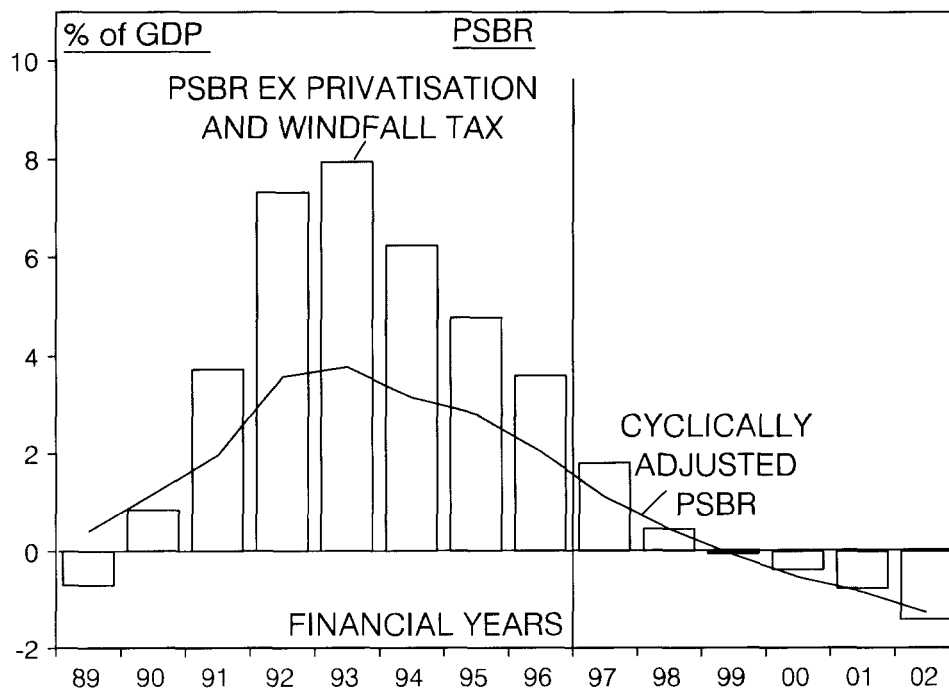
<sup>b</sup>General government expenditure excluding privatisation proceeds and Lottery-financed spending, net of interest and dividend receipt.

<sup>c</sup>Excluding privatisation receipts, windfall tax and associated spending.

The decline in the PSBR is due both to a decline in the share of public spending in GDP and a rise in the tax ratio. Between 1997-98 and 2002-03, the PSBR improves by 3 percentage points. This reflects a decline in public spending by just over 1% of GDP (GGE(X) falls from 39.3% of GDP to 38.2%) while general government receipts rise from 38.5% of GDP to 40.3%. The latter is slightly more optimistic than the latest Treasury forecast. This showed the tax ratio rising to 39.8% over this period. The difference is mainly attributable to a more optimistic assessment of the growth in income tax receipts. Real fiscal drag (i.e. the fact that tax revenues grow faster than GDP on unchanged tax policies) is an important factor behind the tax ratio. However, as Table 3.4 shows, there are also substantial tax increases in the pipeline. By the end of the parliament, the government can expect to raise £6.2 billion in additional income tax revenue, notably from ending the repayment of dividend tax credits to pension funds and certain companies. By 2001-02, £5.5 billion extra will also be raised annually from petrol duties and £1.8 billion from cigarette duties. Real fiscal drag, particularly in years of relatively high inflation, accounts for most of the remaining increases in receipts.

**Table 3.4. Reasons for increased tax as a share of GDP**

	1997-98	1998-99	1999-00	2000-01	2001-02
GGR / GDP (%)	38.5	39.2	39.6	39.9	40.0
Change since 1996-97 (%)	0.6	1.3	1.7	2.0	2.1
<b>Equivalent in £bn</b>	<b>4.4</b>	<b>10.7</b>	<b>13.9</b>	<b>15.6</b>	<b>17.1</b>
<i>£bn attributable to</i>					
Income tax	0.6	4.1	6.2	6.2	6.2
Corporation tax	0.2	-1.3	0.3	-0.1	0.1
Windfall tax	2.6	2.6	0.0	0.0	0.0
Petrol duties	1.0	2.0	3.3	4.4	5.5
Cigarette duties	0.4	0.8	1.1	1.4	1.8
Other tax changes	-0.6	-0.3	-0.4	-0.4	-0.2
Fiscal drag	0.2	2.8	3.4	4.0	3.7



### 3.4 Risks and uncertainties

Forecasts of the PSBR are subject to a wide margin of error. This is hardly surprising, given that the PSBR is the difference between two aggregates — spending and receipts — each more than £300 billion in size. Small changes in the economic outlook can have a very large impact on the PSBR. The biggest factor is economic growth. The other major uncertainty — inflation — is broadly neutral for the public finances over time. In this section, we consider two alternative economic scenarios: (i) a ‘new paradigm’ in which the UK is able to sustain a trend growth rate of 2.5% a year from 1998–99 — by the end of the period the level of output is about 2.5% higher than in our central forecast; and (ii) a ‘mild overheating’ scenario in which output is eventually found to be about 1.5% above trend in 1997–98, the economy slows by less initially than in our central forecast and then suffers a harder landing. Both scenarios assume that the real control total grows by 2¼% a year from 1999–00.

The paths for the PSBR on these alternative scenarios are shown in Table 3.5. By the end of the horizon, the PSBR ranges from a surplus of 0.5% of GDP on the ‘mild overheating’ scenario to a surplus of 2.2% of GDP on the ‘new paradigm’ forecast. Our central forecast is almost half-way in between. Even on the more pessimistic scenario, the government’s fiscal rules are comfortably hit.

**Table 3.5. Public finances on alternative economic scenarios**

% of GDP	1996–97	1997–98	1998–99	1999–00	2000–01	2001–02	2002–03
<b>Central forecast</b>							
PSBR excl. windfall tax	3.0	1.6	0.5	-0.1	-0.4	-0.8	-1.4
Current bal. excl. windfall tax	-2.5	-0.8	0.5	1.1	1.4	1.8	2.4
Gross public debt	54.3	52.2	50.1	48.0	45.8	43.1	39.7
<b>‘New paradigm’</b>							
PSBR excl. windfall tax	3.0	1.6	0.5	-0.3	-0.9	-1.4	-2.2
Current bal. excl. windfall tax	-2.5	-0.8	0.5	1.3	1.9	2.4	3.2
Gross public debt	54.3	52.2	50.1	47.5	44.5	41.1	36.9
<b>‘Mild overheating’</b>							
PSBR excl. windfall tax	3.0	1.6	0.4	0.0	0.1	0.2	-0.5
Current bal. excl. windfall tax	-2.5	-0.8	0.6	1.1	0.9	0.8	1.5
Gross public debt	54.3	52.2	49.7	47.5	45.6	43.8	41.3

One final simulation is to ask how much public spending can rise by in order to hit the golden rule in each year of the current parliament. On our central assumptions for economic growth, there is scope for the control total to rise by around 3% a year in real terms from 1998–99. Thus even if the government were to choose to increase real public spending by 3% for a year or two, the public finances would still be left on a reasonable footing. Over the course of the parliament, this growth of public spending would not be significantly higher than growth in previous parliaments. The tax-raising measures announced last July, the decision to overindex road fuel and tobacco duties, and the determination to abide by the Conservatives’ public spending plans for the first two years of the parliament have left the public finances in a very



healthy state even if the economy is subject to a number of adverse economic shocks in the years ahead.

### **3.5 The budget judgement**

On the above analysis, the government has scope to loosen the fiscal reins a little in the forthcoming Budget. It seems unnecessarily restrictive from the point of view of fiscal sustainability to hold constant the public spending control total in real terms next year. A £3 billion increase in public spending, or for that matter a £3 billion tax cut, would enable the golden rule to be hit in 1998-99. On our estimates, the fiscal stance would still tighten by around 0.3% of GDP (instead of 0.6%). However, the economic case for an easier fiscal stance than that currently planned is less clear. Economic activity remains too strong for comfort and the pattern of growth in 1998 is likely to be heavily skewed in favour of private consumption and against net exports. Maintaining a tight fiscal stance would help to prevent the economy from becoming too unbalanced this year and take away some of the upward pressure on interest rates, although there is little likelihood of any net additional fiscal tightening over and above that already planned. On balance, we expect any fiscal adjustment in the Budget to be close to zero.

# 4. Direct taxes, benefits and Welfare-to-Work

## 4.1 Introduction

The arrival of the new government has been accompanied by a complete review of the system of direct taxes and benefits. In its early stages, it seemed that virtually every area of the system could potentially be changed. Over the last eight months, the government has honed in on certain areas. This chapter examines the areas in which the government is likely to take action in the coming Budget. We also suggest areas that are likely to remain in need of reform after the Budget.

We start, in Section 4.2, by looking at the potential changes that are primarily concerned with the income tax system. The government aims to introduce a 10% tax rate. Mortgage interest tax relief was restricted in last July's Budget and further changes in this area are possible. We also discuss the parameters of the current debate on joint versus independent taxation.

Section 4.3 examines the changes that the government is likely to introduce as part of its Welfare-to-Work policy. We examine how the working families' tax credit could be introduced coherently into the UK tax and benefit system. We then look at how in-work support might be restructured in order to improve work incentives. Next we explain how the government may alter the tax and benefit system in an attempt to pass more of the benefits from the 10% tax rate to those on low incomes.

Also in Section 4.3 we examine potential reforms to the National Insurance system. We consider two alternative directions for reform. The first is to move toward the integration of National Insurance with income tax. The second is to concentrate on removing the distortions that National Insurance causes in the labour market.

Section 4.4 considers the provision of childcare and the options for including childcare subsidies in the other tax and benefit reforms. Finally, in Section 4.5, we consider the suggestion that the under-25s be excluded from the national minimum wage.

## 4.2 Changes to the direct tax system

### The 10% starting rate of income tax

The Pre-Budget Report reaffirmed that a 10% starting rate would be introduced 'when it is prudent to do so'. In this section, we examine some of the issues raised by this decision.<sup>1</sup>

#### *Implementation*

The government could move toward a 10% rate by lowering the current 20% rate. This would cost the Treasury just under £1 billion for each percentage point cut. But it seems more likely that the government will introduce an actual 10% band covering a smaller range of income than the current 20% band. In this case, the 20% band could either be retained or be abolished.<sup>2</sup> Table 4.1 shows the cost to the Treasury of creating 10% bands of various widths under both of these scenarios. If the current 20% band were abolished, then a 10% band with a width of less than £850 would leave the government with increased revenue. The table shows that a band with a width of £500, combined with the abolition of the 20% band, would increase government revenue by £1 billion. For a 10% band of width £4,100, the costs of the two means of introduction converge at £9 billion, as at this point the 20% band has been entirely replaced.

**Table 4.1. The cost of introducing a 10% starting rate of income tax**

<i>Width of 10% band</i>	<i>Cost if 20% band abolished (£bn)</i>	<i>Cost if 20% band maintained (£bn)</i>
£500	-1	1.25
£1,000	0.5	2.5
£2,000	3.5	4.5
£4,100	9	9

#### *Welfare-to-Work and targeting*

One of the central aims of the government's Welfare-to-Work strategy is to increase the financial gains from working for those with low actual or potential wages. The Pre-Budget Report highlighted the 10% starting rate as a part of this strategy to make work pay. The crucial factor in determining the returns to employment for those on low pay is, however, the benefit system. Means-tested benefits are calculated on income net of tax and National Insurance, meaning most of the gain from reduced taxes for the low-paid will be lost in reduced benefit entitlement. For example, for those on the family credit taper, the benefit is reduced at a rate of 70% as income net of tax

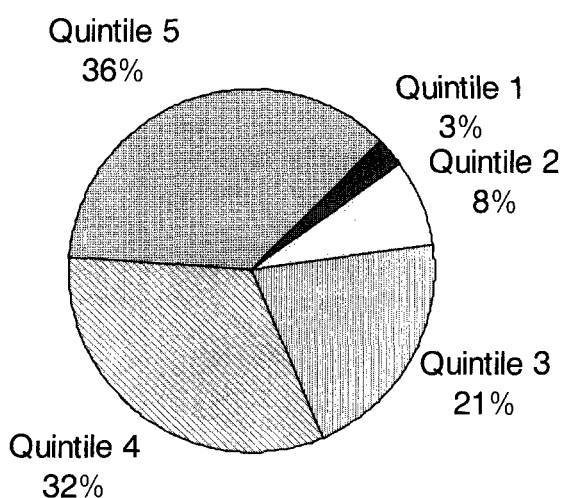
<sup>1</sup>For a more detailed discussion of the issues raised in this section, see the Summer 1997 Green Budget.

<sup>2</sup>If the 20% band is retained, we assume that it will cover taxable income from the end of the new 10% band up to £4,100, the current limit on the 20% band.

increases. In other words, if someone's income tax bill falls by £1, the amount of family credit received will fall by 70p, leaving the person only 30p better off. Some groups who are on other means-tested benefits, such as housing benefit and council tax benefit, will see an even higher proportion of any gains being lost in reduced benefit entitlements.

The 10% rate would be a particularly badly targeted measure as part of a Welfare-to-Work strategy. This can be seen from Figure 4.1, which shows how the cash gains from reducing the 20% rate to 10% would be distributed. It divides households into five equal-sized groups, known as quintiles, based on income.<sup>3</sup> The great bulk of the cash gains would go to households in the richest three quintiles. Barely 10% of the gains go to the poorest 40% of households.

**Figure 4.1. Cash gains from a 10% rate by equivalised income quintile**



There are means by which the government may seek to improve the targeting of the 10% rate. One possibility would be to ensure that no higher-rate taxpayers gained from the new rate. This could be achieved by cutting the point at which people start paying higher-rate tax — the basic-rate limit — at the same time as introducing the 10% band. In addition to improving the progressivity of the 10% band, this would reduce the cost of implementation. For example, if the 20% rate were reduced to 10%, then reducing the basic-rate limit from £26,100 to £23,700 would prevent any current higher-rate taxpayers gaining from the introduction of the 10% rate, but this would only

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<sup>3</sup>The income is equivalised to reflect differences in household size.

reduce the £9 billion exchequer cost of this reform by £1 billion. The change would also produce more higher-rate taxpayers.<sup>4</sup>

### ***Additional complexity***

Perhaps the greatest disadvantage of a 10% starting rate is that it increases the complexity of the income tax system. In particular, having numerous marginal rates of tax makes the treatment of taxation at source, especially of savings, more difficult. The rate of income tax for interest on cash deposits is currently 20% for basic- and lower-rate taxpayers. Banks and building societies deduct income tax at this rate from their customers.

Introducing a 10% band would complicate the tax treatment of savings because taxpayers with a 10% marginal rate would be eligible for a tax refund. To avoid this, the government could leave the tax treatment of savings unaltered, so starting-rate taxpayers would still pay tax on their savings at 20%. This might, however, seem inequitable for savers who would face a 10% rate on other income.

Rather than further complication, the tax system is probably in need of simplification. This need is highlighted by the interaction of a 10% tax rate and the married couple's allowance (MCA). If the 10% band has a width of less than £2,745, then anyone receiving the MCA will never pay tax at a marginal rate of 10%. This would happen despite the fact that a formal 10% band had been introduced. Instead, the 10% band will increase the effective size of the allowance produced by the MCA.<sup>5</sup>

### ***Alternatives***

In terms of the key goal of improving work incentives, it is clear that the introduction of a 10% tax rate is an expensive way of achieving little. It is also clear that an income tax system with a 10% band is likely to increase the complexity of the tax system. We have argued elsewhere that the tax system could be reformed for equivalent cost, yet with more progressive results and without the introduction of additional complexity, by an increase in personal allowances.<sup>6</sup> But if one wants to improve work incentives of the unwaged and the low paid then one needs to look directly at the benefit system rather than the tax system.

## **Mortgage interest tax relief**

In the July Budget, Gordon Brown announced that from April 1998 the rate of mortgage interest tax relief (MITR) would be restricted from 15% to 10%.

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<sup>4</sup>It would be possible for the government to use the abolition of the 20% band to prevent basic-rate as well as higher-rate taxpayers gaining from the introduction of the 10% starting rate. However, the only straightforward way to do this is to set the 10% band's width to £945. If the band is widened beyond this point, it would be difficult to prevent basic-rate taxpayers gaining.

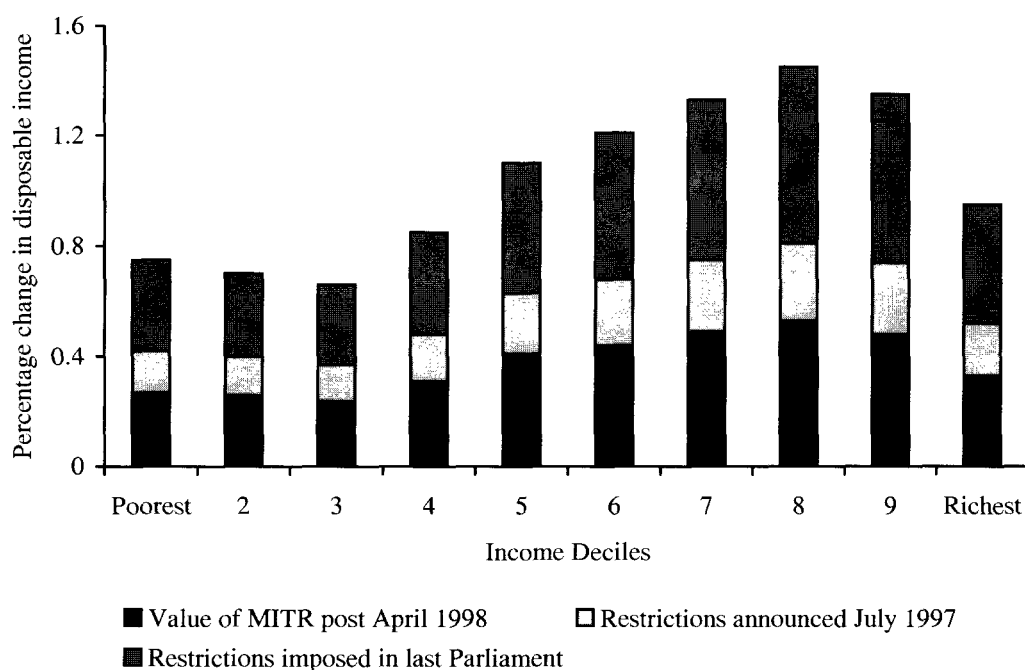
<sup>5</sup>For a full discussion of this and related issues, see J. McCrae, 'Simplifying the formal structure of UK income tax', *Fiscal Studies*, vol. 18, pp. 319-34, August 1997.

<sup>6</sup>See the Summer 1997 Green Budget.

This was a continuation of Conservative policy. During the last parliament, the real value of MITR fell from £5.75 billion to £2.4 billion in 1996–97 prices.<sup>7</sup> As well as reflecting lower interest rates, the fall in the value of the relief was caused by two policies. First, the £30,000 cap on the amount of outstanding principal that qualifies for the relief was not uprated for inflation.<sup>8</sup> Second, over the last parliament, the government cut the rate of tax to which the relief was restricted. In 1992, relief was available at 25%, the basic rate at the time. By the 1997 general election, the rate of relief was just 15%.

The cross-party consensus on the restriction of MITR respects an economic rationale. MITR introduces a bias into the asset-holding decision in favour of owner-occupation.<sup>9</sup> In addition, the capitalisation of the relief, through higher house prices, prevents new home-buyers from gaining fully from it. While MITR cuts the effective rate of interest, higher property prices increase the size of mortgages, meaning that the total amount of interest payable for a new home-buyer might be just as high as in an undistorted market.

**Figure 4.2. Distributional effects of actual and potential reductions in MITR**



None the less, the reduction in the value of MITR certainly creates losers — those who own property lose from reduced house prices and those with mortgages face increased repayments as well. Figure 4.2 shows the cumulative effect of the erosion of MITR on household income. The total height of the bars shows the percentage of household income that MITR would account for

<sup>7</sup>*Inland Revenue Statistics 1997.*

<sup>8</sup>It was last increased, from £25,000 to £30,000, in the 1983 Budget.

<sup>9</sup>See Table 6.1 for more details.

now had the 1992 value of the ceiling been indexed and the rate of relief been left unchanged. The dark grey blocks represent the effects of the last parliament's cuts, whilst the light grey blocks represent the additional restrictions announced in July.

It is apparent that the value of MITR is already well under half what it would have been if there had been no new restrictions since 1992. The black blocks show the remaining value of MITR as a percentage of household income. This is also the distributional effect of abolishing the relief altogether. As Labour's first Budget continued the reductions in the value of MITR, it is reasonable to expect further reductions in the future.

### **Joint versus independent taxation**

In 1990, the UK moved to a system of independent taxation.<sup>10</sup> Eight years later, there is a degree of speculation about a return to joint taxation. The issues involved in deciding which unit of assessment to use in a tax system are many and varied. We do not intend to go into a detailed discussion of them here, primarily because it seems unlikely that any move away from independent taxation will occur in this Budget.

However, the current debate has highlighted two major issues that need to be commented on. The first is that this subject is often discussed as if there were two, and only two, clearly defined alternatives — namely, a joint tax system or an independent tax system. But there is a vast range of possible tax systems that could be implemented. Table 4.2 illustrates this point, and there are many other possibilities.<sup>11</sup>

The second point is that there has been a tendency to focus on one argument in favour of change while ignoring other issues. Pure systems of independent or joint taxation have sometimes been advocated as the solution to particular problems without considering the other questions raised when changing the unit of assessment.<sup>12</sup>

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<sup>10</sup>Two elements — the married couple's allowance (MCA) paid to married couples and the additional personal allowance (APA) paid to cohabiting couples with children and lone parents — remained under joint assessment.

<sup>11</sup>For example, the Conservatives at the last election proposed a partially transferable personal allowance restricted on transfer to the basic rate.

<sup>12</sup>The most notable example recently is the claim that joint taxation would allow child benefit to be increased and taxed on the father's income. In this case, while joint taxation is a possible solution, a more direct response to this distributional issue would be to raise revenue explicitly from those on higher incomes through changes in tax rates and bands.

**Table 4.2. Illustrative variants of independent and joint tax systems**

Reform	Brief outline of change	Groups gaining/losing relative to current system	Comments	Change in Revenue (p.a.)
Full independent system	Abolish MCA and APA.	Married couples, lone parents and cohabiting couples with children lose.	The value of the MCA and APA has been steadily reduced since 1990.	+£3bn
Independent system with joint elements	Current system.	N/A	While there are joint elements in the current system, these do not require joint assessment of income.	N/A
Combined independent and joint system	Make personal allowance fully transferable but keep individual bands.	Largest gains go to couples with only one earner. Also helps two-earner couples where marginal tax rates are different.	Second earners face tax on first £ earned. Tax-efficient allocation of allowances would produce large redistribution of income within couples.	-£4bn
Full joint system	Couples receive joint allowance and bands. The width of personal allowances and bands doubled for couples.	Single-earner couples gain the most. Two-earner couples where both earn at the same marginal rate unaffected.	Second earners pay on first £ at partner's marginal rate.	-£6bn



Some of the major issues on which one must come to a conclusion in deciding on the merits of different tax systems are

- Should ability to pay tax be thought of as a family or individual issue?
- How are second earners to be treated and how would their work incentives be affected?
- Will the system favour marriage or treat marriage and cohabitation identically?
- What are the administrative complications involved when one person's tax liability becomes dependent on the income of others?

Without addressing these questions, no debate on joint versus independent taxation is complete.

### **4.3 Reforming the Welfare State**

The Chancellor stated in his Pre-Budget Report that 'to help people move from benefits to wages, nothing less than a comprehensive tax and benefit reform and the modernisation of the welfare state is required'. In terms of the integration of the tax and benefit system, the accompanying documentation set out three areas on which the government intended to focus:

- a working families' tax credit;
- a 10% starting rate of income tax and associated adjustments to benefit tapers;
- National Insurance reform.

In this section, we begin by examining the proposals for a working families' tax credit. We discuss how such a credit could be implemented and integrated with the current tax and benefit system. In addition, we look at how the system of in-work support could be restructured to generate increased financial returns to working.

We have already discussed the 10% starting rate in Section 4.2. The Pre-Budget Report linked this reform with other potential changes to the benefit system. We explain what these reforms might be and why the government feels they are necessary.

On National Insurance, we assess two reforms. The first of these concentrates on further integrating National Insurance with income tax. The other focuses on reducing the distortions in the labour market that are caused by National Insurance.

We conclude this section by examining how welfare reform could be continued in a coherent manner. We argue that it will be necessary for the government to continue to build on any reforms introduced in this Budget.

#### **The working families' tax credit**

The notion of using the tax system to subsidise people's incomes, rather than simply as a means of raising revenue, has a long history. It has been proposed

twice before in Green Papers, in 1972 and 1985.<sup>13</sup> On both occasions, the plans were rejected — in 1972 no legislation was brought forward, while in 1985 the provisions in the subsequent Bill were defeated in the House of Lords. The current interest in such proposals has derived mainly from a scheme in the US. There, the earned income tax credit provides a means of subsidising the incomes of low-paid families.

The UK's version of the earned income tax credit is to be known as the working families' tax credit (WFTC). In the Chancellor's own words, this would be 'cash paid through the wage packet directly to families on low incomes.... The proposal would build on the successful elements of family credit'.

However, the UK income tax and social security system is very different from that that exists in the US. A large number of questions need to be addressed if the US scheme is to be imported successfully. We address the most important of these here. These questions are highly interrelated and lead to two coherent ways of developing the WFTC.

***Is the WFTC intended to be an addition to or a replacement of current elements of the benefit system?***

One of the main differences between the US and the UK is that the UK already has a benefit system that provides support to working families. We know that the WFTC is intended to 'build on' the successes of family credit. This could mean that the credit is intended to form part of the system of providing in-work support to working families, operating alongside family credit, housing benefit, council tax benefit and disability working allowance. On the other hand, it could be intended to replace some or all of these benefits as the primary means of providing in-work support.

***Will eligibility to the credit be based on joint or independent earnings?***

The answer to the last question has a large influence on our second question — will the WFTC for couples be assessed on independent or joint income? If the WFTC is intended to replace current in-work benefits, then it is certain that eligibility for the credit will be based on joint income. The alternative — an independently assessed WFTC — would transfer resources to two-earner families where one partner has a relatively high income and the other a low income.

If the WFTC is intended as an addition to the current system, it is possible that it could be organised on an individual basis. Here, the emphasis could be on the WFTC as a reward for working rather than as an income maintenance measure. In such a circumstance, it is possible that the government would be prepared to see some of the gains from the credit go to relatively well-off families.

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<sup>13</sup>*Proposals for a Tax Credit System*, October 1972; *Reform of Social Security*, vol. 1, June 1985.

***How closely will the WFTC be integrated with the rest of the tax system?***

The answer to the above question again influences this one. If the WFTC were based on individual assessment, then it would be fairly straightforward to integrate the credit with the current income tax system. But real problems arise if the credit is based on joint assessment. It has been suggested in the media that this would necessitate a return to joint taxation as it is impossible to write a single tax schedule that combined a jointly assessed WFTC and the current individual tax system. This would only be necessary if the WFTC is to be fully integrated with the rest of the tax system. If the WFTC is not fully integrated into the tax system, a jointly assessed WFTC could sit happily alongside an individually assessed income tax schedule, although a separate claiming procedure similar to that for family credit would be needed.

The main argument in favour of closely integrating the WFTC with the income tax system is that it might be possible to simplify the procedures for claiming the credit. This might well increase the take-up of the tax credit beyond that of current in-work benefits. However, it is not clear that increasing the take-up of in-work benefits (which already stands at 80% by expenditure for family credit) justifies a major alteration to the tax system faced by 26 million taxpayers. Additionally, the administrative complexity of such a change would, in all probability, mean that the system could only be up and running towards the end of this parliament at the earliest. The move from joint to independent taxation started with a Green Paper in 1986; the final decision was announced in 1988 and implemented in 1990. A substantially shorter time scale for a move back to joint taxation seems unlikely.

***Alternative strategies for a WFTC***

From this discussion, two alternative strategies for the WFTC emerge. The first emphasises the link between the WFTC and the income tax system — the WFTC is a reward for working individuals that would come virtually automatically through the PAYE system. To achieve this in a relatively straightforward manner, the WFTC would need to be based on individual assessment, which in itself would lead to the credit being an addition to the current system rather than a replacement of it.

The major problem for such a tax credit would be how it integrated with the rest of the tax and benefit system and, in particular, how the WFTC would be withdrawn as earnings rise. In Section 4.2, we saw that much of the gain from a 10% starting rate of tax for low-income families is eroded through reduced benefit entitlement. Clearly, the Chancellor would prefer that the gains from an individualised WFTC were not similarly eroded through reduced benefit entitlement. But the reason taxes and benefits are structured in this way is to prevent marginal rates in excess of 100%. The design of the tax credit would have to pay particular attention to these issues.

An alternative strategy would be a WFTC that replaced some or all of the current system of in-work support. This seems to be the more likely option for the government to pursue. In this case, the WFTC would be jointly assessed and integration with the tax system would be in name only. At its most simplistic, such a WFTC could simply be a 're-badging' of family credit (FC).

Claimants would still have to make a claim to some agency,<sup>14</sup> presumably part of the Inland Revenue, which would assess the claim and decide on the amount of the tax credit. The agency would then issue a new tax code to the employer who would make payments on its behalf. The only difference from the current system would be that the money involved would pass through employers' accounts and the 'wage packet' before reaching families rather than being paid directly to the families by the agency.

There are a number of issues that need to be considered even under this minimal change. The first is the psychological issues that arise. These take a number of forms. Examples are

1. As the WFTC would pass through employers' accounts before being paid to claimants, it might have a more direct relationship with working and therefore strengthen individuals' attachment to employment.
2. As the WFTC would officially be part of the tax system rather than the benefit system, increasing its generosity might be made easier by portraying the change as a tax reduction as opposed to a benefit increase.<sup>15</sup>
3. If people did not regard the WFTC as a welfare benefit, it might reduce the stigma associated with receiving transfer payments and so increase take-up.
4. As employers and potentially work colleagues would observe the WFTC, it might increase the stigma associated with receiving transfer payments and so decrease take-up.
5. As employers would directly observe the level of WFTC payments being made to their employees, they might be more likely to lower gross wages in response to these transfers.

There is no hard evidence about the importance of any of these effects; the weight placed on these arguments will depend only on one's beliefs about the likely reactions of welfare claimants, employers, voters and politicians to the introduction of a WFTC.

Aside from changes in take-up, family income would not be affected by the re-badging of FC. There would, however, be a redistribution of income within couples. Currently, FC is paid to the woman in a couple. A WFTC would, by necessity, be paid to the principal earner, which in over 75% of couples in receipt of FC is the man. For the couples affected by the re-badging, women

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<sup>14</sup>It seems unlikely that employers would be involved in gathering or processing the information necessary to implement a jointly assessed WFTC. Employers would be unwilling to take on the additional administrative burden and employees would have large concerns over confidentiality.

<sup>15</sup>In the public accounts, the part of a WFTC that offset current tax liabilities could be included as a tax reduction. However, standard conventions for international comparisons would mean that any 'negative income tax' paid by the government would appear as an expenditure item. This treatment is currently applied to mortgage interest tax relief paid to non-taxpayers. Aside from psychological considerations, the labelling of cash flows is, of course, irrelevant. The overall level of redistribution performed by the government is what matters and this is unaltered by the naming of cash flows.

would see their individual income fall on average by £40 per week, with a corresponding rise for men.

Re-badged FC would also involve employers as effective payment agents. For most employers, this is unlikely to be a major problem — the cost of the WFTC payments would be netted off the main income tax liability paid by the firm to the Inland Revenue on behalf of employees. Problems could arise for employers with large numbers of WFTC recipients and few non-recipients. In these cases, the company might be owed money by the Inland Revenue each month. To avoid serious cash-flow problems, the system of payment from the Revenue to firms would have to be extremely efficient.

### **Increasing the generosity of in-work support**

It seems likely that the Chancellor will want to do more than simply ‘re-badging’ an element of the benefit system in this Budget. Indeed, starting by looking at a WFTC can almost be seen as addressing the last issue first — how any ‘in-work support’ is to be paid. Before that, we need to consider how large that support should be and how it is to be withdrawn as income rises.

Two concepts — the unemployment trap and the poverty trap — are useful for analysing changes in the structure of in-work support. The unemployment trap refers to the situation where people are little or no better off in work than they would be remaining on benefits. A measure of the unemployment trap is the replacement ratio, which measures income out of work as a percentage of in-work income. Other things being equal, we would expect a person to be more likely to take up employment if income in work is high relative to income out of work, i.e. if they have a low replacement ratio.

The second concept we use is the poverty trap. For people in work, a poverty trap can arise where increases in gross income result in much smaller changes in their disposable income. The usual measure of the poverty trap is the effective marginal tax rate. This is the rate at which disposable income increases in response to a £1 increase in gross income. The difference between the two will be accounted for by increases in tax or National Insurance payments and by reductions in benefits. Table 4.3 shows the marginal tax rates produced by the interaction between various taxes and benefits.

**Table 4.3. Effective marginal tax rates in the UK for a lower-rate taxpayer**

<i>Tax and benefit combinations</i>	<i>Effective marginal tax rate</i>
National Insurance (NI)	10%
Income tax (IT)	20%
NI + IT	30%
Family credit (FC)	70%
Housing benefit (HB)	65%
NI + IT + FC	79%
NI + IT + HB	75.5%
NI + IT + FC + HB	92.7%

The effective marginal tax rate is the amount by which tax and NI payments increase and benefit entitlement decreases for a £1 increase in gross income. In the UK system, marginal tax rates can be well over 70%, meaning that for every £1 increase in gross income, over 70p is removed from the family through a reduction in benefit payments and/or increased taxation.

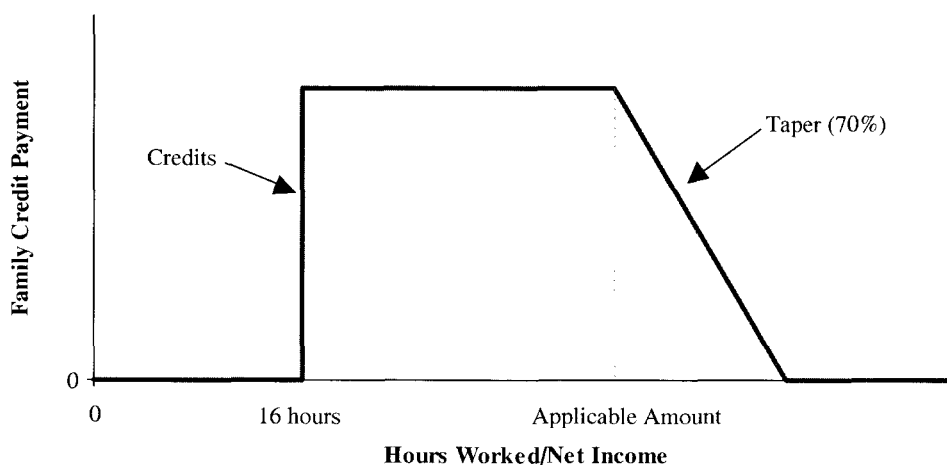
There is a trade-off involved in designing a system of in-work support. Increasing the level of payments reduces replacement ratios, thereby alleviating the unemployment trap. At some stage, these additional benefits have to be withdrawn, which increases marginal tax rates and thereby worsens the poverty trap over that range of income.

***Changing the current system of in-work support***

In order to examine how these trade-offs operate in the UK, we need to look at actual reforms to the structure of in-work support. As an example, we will consider three ways to reform the family credit system without changing its basic structure.<sup>16</sup> Before looking at the reforms, we explain briefly how the family credit system works.

Figure 4.3 shows a simplified version of the family credit system. When an individual in a family with children works more than 16 hours, the family becomes entitled to FC. The maximum amount that can be received is equal to the total credits for that type of family. For example, this would be £71.75 for a family with two children aged under 11. The aim of FC is to increase the family's net income at 16 hours. As this increases in-work income but does not affect out-of-work income, it causes a reduction in the replacement ratio.

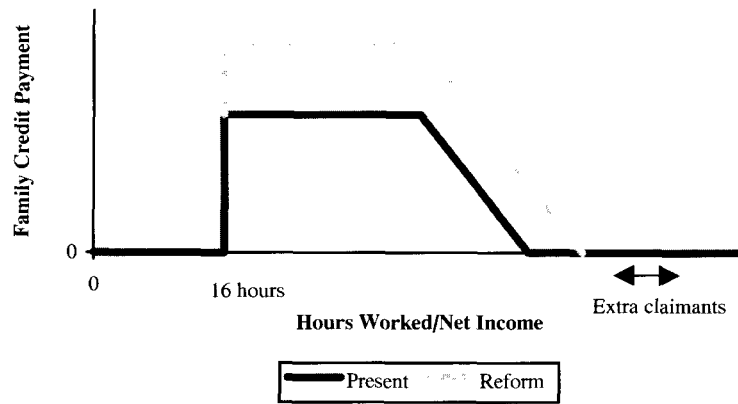
**Figure 4.3. Simplified version of family credit system**



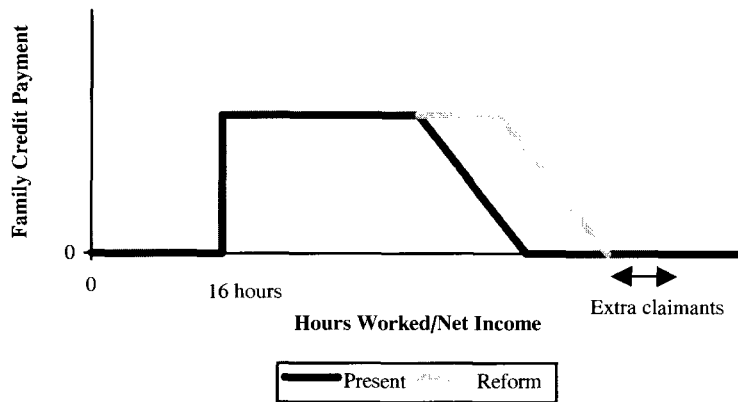
<sup>16</sup>These reforms would, of course, equally apply to a WFTC that was a re-badging of family credit.

Figure 4.4. Effect of reforms on stylised family credit structure

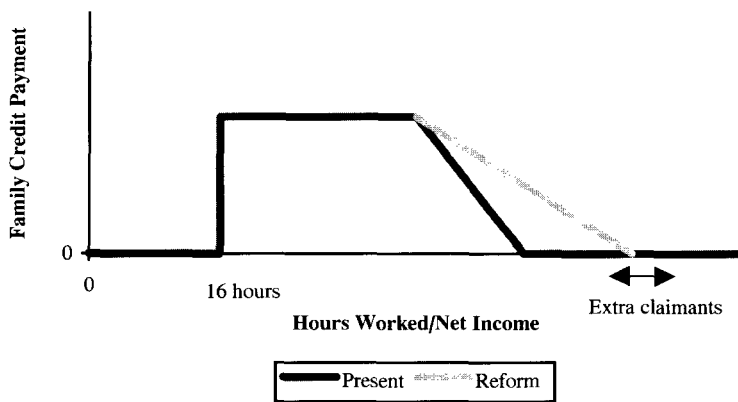
1) Credit reform



2) Applicable amount reform



3) Taper reform



FC continues to be paid at the maximum amount until income net of income tax and National Insurance exceeds a fixed level. This level is known as the applicable amount and is currently £77.15 per week. After this level, the amount of FC is reduced, or tapered, as income rises. The rate at which it is tapered is currently 70%, which means that for a £1 increase in net income, there will be a 70p reduction in the family credit payment. While family credit is being tapered, families face very high marginal rates, as was shown in Table 4.3.

We now consider three reforms that would increase the generosity of in-work support by around £1 billion. The reforms are

1. an increase in the adult credit from £47.65 to £71;
2. an increase in the applicable amount from £77.15 to £120;
3. a reduction in the taper from 70% to 45%.

The effects of each of these changes on our simplified description of the family credit system are shown in Figure 4.4. Increasing the adult credit raises the maximum FC payment. This in turn means that it takes longer to taper away the FC. Increasing the applicable amount means that the FC payment does not start to be tapered away until the family reaches a higher level of net income. The taper reform reduces the rate at which FC is withdrawn. This means that the withdrawal of FC is spread over a larger range of income.

The initial groups to benefit from the changes differ between the three reforms. In particular, the only case where all existing FC claimants gain is the credit reform. Under the other two options, only those already on the taper would benefit. Raising the applicable amount spreads the gains relatively evenly across those on the taper, while the taper reform would concentrate the gains on those towards the end of the current taper.

In making the system more generous, all three reforms would increase the number of families receiving FC because the end of the taper would move up the earnings scale. Table 4.4 shows the percentage rise in entitlement to FC that would follow from each of the reforms. The taper reform increases the number of FC claimants by 70% while the credit reform only increases the numbers by 30%.

**Table 4.4. Increase in eligibility for family credit**

Reform	Extra FC claimants (% increase)
Credit reform	30%
Applicable amount reform	40%
Taper reform	70%

Table 4.5 shows the changes in replacement ratios for employees that would result from the reforms. The table is confined to those with initial replacement ratios above 60%. Of the reforms considered, the credit reform has the greatest effect in reducing lone parents' replacement ratios while the taper reform has the greatest effect for those in couples. This is due to the fact that the credit reform focuses on those with lower incomes than the taper reform, who are



more likely to be lone parents working part-time. In contrast, the taper reform reduces replacement ratios for more men and women in couples than the other reforms. The change to the applicable amount tends to have the largest impact on the replacement ratios of those who are actually affected by the reforms.

**Table 4.5. Changes in replacement ratios from family credit reforms for those with initial ratios above 60 %**

	<i>Lone parents</i>	<i>Men in couples</i>	<i>Women in couples</i>
<b>Reduced</b>			
<i>Individuals affected</i>			
Credit reform	250,000	350,000	100,000
App. amt reform	150,000	400,000	125,000
Taper reform	175,000	500,000	175,000
<i>Average % point change for those affected</i>			
Credit reform	-6%	-6%	-6%
App. amt reform	-6%	-7%	-7%
Taper reform	-4%	-5%	-4%
<b>Increased</b>			
<i>Individuals affected</i>			
Credit reform	-	150,000	475,000
App. amt reform	-	100,000	475,000
Taper reform	-	75,000	575,000
<i>Average % point change for those affected</i>			
Credit reform	-	6%	6%
App. amt reform	-	7%	7%
Taper reform	-	4%	6%

While normally we think of increases in in-work benefits as lowering replacement ratios, for two-earner couples we can get an opposite effect. A second earner might see their replacement ratio rise, making work financially less attractive. If the primary earner's income alone entitled the couple to FC, then this would form part of out-of-work income for the second earner. An increase in the generosity of FC can therefore act as an increase in out-of-work income for second earners without necessarily increasing in-work income. This causes an increase in the replacement ratio. As Table 4.5 shows, all three reforms would increase the replacement ratios of a large number of women employees in two-earner couples. This effect might worry a government that wants to use in-work support to encourage employment.

Table 4.6 shows the effects of the changes on marginal tax rates. The increased generosity of FC under all the reforms lowers marginal tax rates by floating people off other benefits such as housing benefit. In addition, both the taper and applicable amount reforms reduce the withdrawal rate of FC for certain groups. The reduction in the taper rate lowers marginal tax rates for more people than the other reforms as it reduces marginal tax rates for all those on the current FC taper. The applicable amount lowers the marginal tax rate of those who are moved onto 100% FC.

**Table 4.6. Changes in marginal tax rates from family credit reforms**

	<i>Lone parents</i>	<i>Men in couples</i>	<i>Women in couples</i>
<b>Reduced</b>			
<i>Individuals affected</i>			
Credit reform	75,000	50,000	50,000
App. amt reform	75,000	75,000	50,000
Taper reform	200,000	225,000	125,000
<i>Average % point change for those affected</i>			
Credit reform	-24%	-12%	-13%
App. amt reform	-46%	-28%	-34%
Taper reform	-17%	-17%	-20%
<b>Increased</b>			
<i>Individuals affected</i>			
Credit reform	50,000	175,000	100,000
App. amt reform	50,000	200,000	125,000
Taper reform	75,000	375,000	225,000
<i>Average % point change for those affected</i>			
Credit reform	47%	47%	58%
App. amt reform	46%	46%	59%
Taper reform	30%	30%	37%

While the taper reform reduces the marginal tax rates of the largest number of people, it also increases marginal tax rates for the largest number. This is because it brings more families into FC. The increase in marginal tax rates may lead to certain groups, particularly second earners in couples, reducing the hours that they work as the cost of doing so is no longer as large as it was. In all three reforms, more people see increases in their marginal tax rates than see reductions.

We have looked at three possible reforms of the structure of in-work support. There are, of course, other possible strategies, the full discussion of which we do not have space to pursue here. The key point is that the generosity of in-work payments and the rate at which they are withdrawn is the subject of a number of trade-offs — there is no perfect system waiting to be discovered.

### **The 10% tax rate and alterations to benefit tapers**

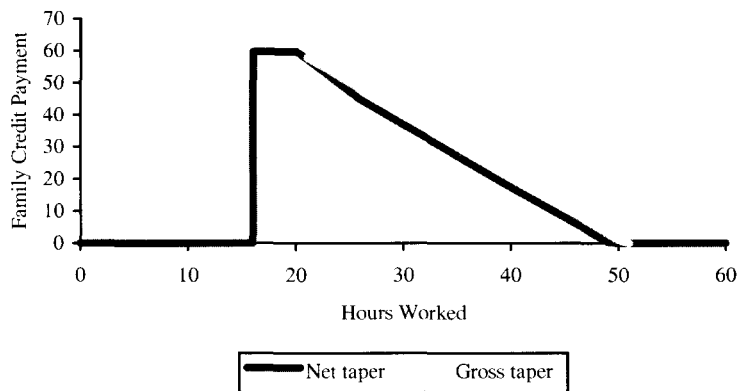
While considering what will happen to the structure of in-work support in the coming Budget, we need to examine one further issue. We have already seen in Section 4.2 that a 10% starting rate is a particularly bad way of targeting support for working families on low incomes. The government is clearly aware of this problem. The Pre-Budget Report stated that

*the government is determined that the working poor should benefit from the 10p rate.... It is therefore considering what action is necessary on tapers ... to ensure that the lower starting rate of income tax benefits all the low paid.*

We also saw in Section 4.2 that the gains from a 10% tax rate were eroded for those on means-tested benefits. So how could the government prevent this from happening?

The problem arises because benefits are withdrawn as *net* income rises. So as a tax cut increases net income, it can also cause benefits to be withdrawn. The obvious way to get around this is to base the withdrawal of benefits on gross income, which would not be affected by an income tax cut. It is relatively easy to change the taper for a single benefit from net income to gross income and produce a broadly similar benefit structure. In the case of family credit, this could be achieved by having a gross taper at a rate of 49% and increasing the applicable amount to £80.22.<sup>17</sup> Figure 4.5 compares the FC payments under the current net taper with those calculated under the gross taper for a family in which only one adult has an income. While there are slight differences, the overall pattern is fairly similar.

**Figure 4.5. Comparison of a net and a gross taper for family credit for a family with a single income**



While implementing a gross taper on one benefit is certainly possible, there are additional complications that need to be considered. The most obvious is that there is more than one in-work benefit in the UK. In particular, if we moved to a gross taper on both family credit and housing benefit, it would be difficult to avoid generating marginal tax rates over 100%. The reason net tapers were introduced in the first place was precisely to avoid this possibility.

The second problem is that the assumption underlying Figure 4.5 is that only one person in the family has any income. If both partners had individual sources of income, they would gain much more from a move to a taper based on gross income. The reason for this is that their combined net income would be higher than that of a couple with the same total gross income but where only one had earnings (due to the couple being able to use two income tax allowances) and hence, with tapers based on net income, their receipt of FC

<sup>17</sup>Again, such a reform would equally apply to a WFTC that was a re-badging of family credit.

would be lower. So the move to a gross taper favours couples where both have an income. It would be difficult to get around this.

In conclusion, there is little reason to move to a gross taper in one part of the system of in-work support if net tapers are to be maintained elsewhere. But the government may well introduce such a taper if it persists in its determination to introduce the 10% tax rate.

## **The National Insurance system**

In the Pre-Budget Report, the government expressed concern about National Insurance (NI). The report stated that National Insurance

*places a heavy burden on low-paid workers and risks distorting the labour market. There is scope for bringing National Insurance structure more into line with income tax to ease the administrative burden on employers, to improve work incentives and to encourage the hiring of additional employees.*<sup>18</sup>

Here we begin by outlining the way in which the current system works and looking briefly at the problems that it causes. We then consider two sets of reforms. The first, following on from the government's comments, moves the NI system towards integration with income tax. The second reform focuses on ways to make NI less distorting to the labour market.

### ***The structure of National Insurance***

National Insurance is a tax on labour, with separate contributions formally being made by employers and employees. On the employee side, contributions become due when gross earnings reach the lower earnings limit (LEL), currently £62 per week. At this point, an 'entry fee' is charged, which is 2% of income up to the LEL. In addition, the employee is liable to pay 10% of any earnings in excess of the LEL up to the upper earnings limit (UEL), currently £465 per week.<sup>19</sup> There are no additional contributions for earnings above the UEL.

The employer also begins to make NI contributions when gross income reaches the LEL. The rate at which contributions are made depends on the level of gross income. These rates are shown in Table 4.7. For employees who are not contracted out, the relevant rate is applied to *all* income. Thus each time the rate increases, there is a jump in the level of employer contributions. These jumps are shown in Figure 4.6. For those contracted out of SERPS, lower rates apply on income between the LEL and the UEL. For earnings below the LEL and above the UEL, the employer still pays contributions at the standard rate that would apply to those not contracted out. Unlike employee contributions, employer contributions are not capped by the UEL.

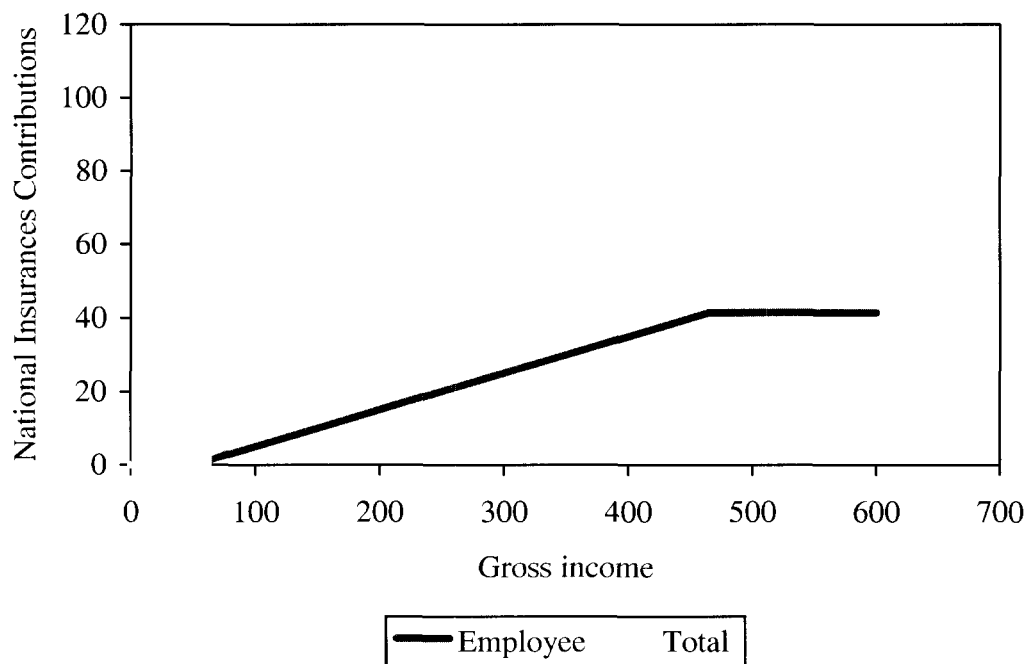
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<sup>18</sup>HM Treasury Pre-Budget Report, November 1997.

<sup>19</sup>For those contracted out of SERPS, the rate for 1997-98 is 8.4%.

**Table 4.7. Employer NI contribution rates, 1997–98**

<i>Gross income (p.w.)</i>	<i>Not contracted out</i>	<i>Contracted out (salary related)</i>
£62 (LEL) – £109.99	3%	0%
£110 – £154.99	5%	2%
£155 – £209.99	7%	4%
£210 – £464.99	10%	7%
Over £465 (UEL)	10%	10%

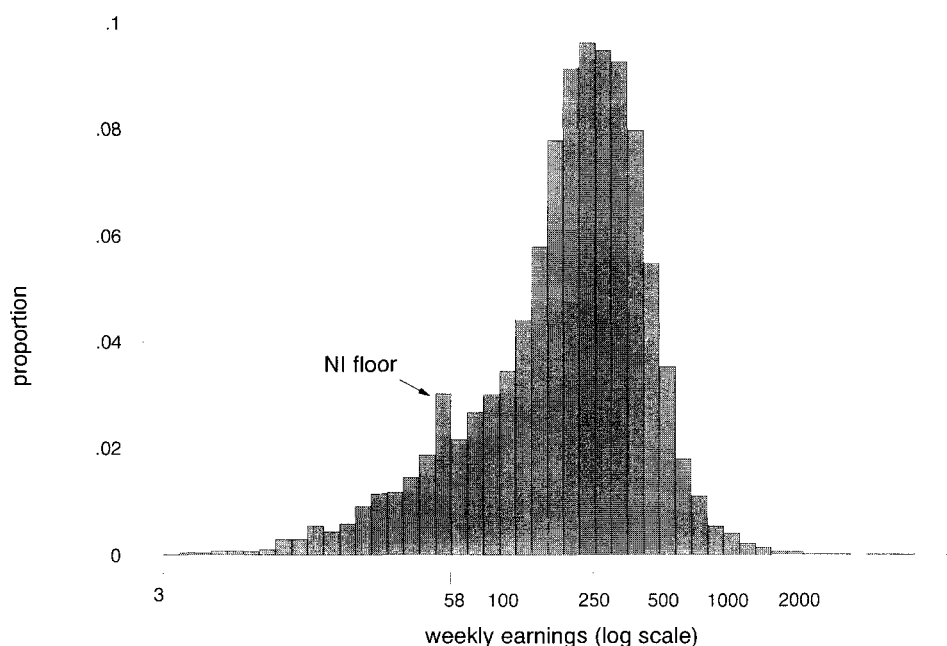
**Figure 4.6. NI contributions for employees not contracted out of SERPS**

### *Problems with National Insurance*

The Pre-Budget Statement raised two objections to the current system — that it represents a burden on the low-paid and that it distorts the labour market. Relative to income tax, NI does indeed place a greater burden on the low-paid in that it becomes payable at £62 per week, equivalent to £3,224 per annum. This is less than the personal allowance of £4,045 per annum, which is the point at which income tax becomes payable for a single person. Furthermore, at the LEL, the total NI contribution jumps from nothing to £3.10 per week for employees who are not contracted out. This is 5% of the gross earnings at that point. For a single person, income tax liability will be below 5% of gross earnings until earnings exceed £104 per week.

The kink in NI contributions produces a large distortion in the labour market. As Figure 4.7 shows, there is an obvious cluster of people earning just below the LEL in the earnings distribution. This distortion has three causes. First, there is the entry fee for employee contributions. Second, there is the increase in employer contributions. Finally, there are the costs associated with entry into the administrative system.

**Figure 4.7. The National Insurance distortion in the distribution of earnings**



Source: Family Resources Survey 1995/96

Note: The data are for 1995–96, when the LEL was £58 per week.

### ***Integrating National Insurance with income tax***

The first approach to reform, and one that the Chancellor has stressed, would be to align NI more closely with income tax. One reform that would take the system in this direction would be to increase the LEL for employee contributions to £78, the weekly level of the personal allowance. Those with weekly earnings between £62 and £78 would stop paying NI altogether. For those with earnings above £78, the amount of employee NI paid would fall by a fixed amount — £1.28 in the case of those not contracted out. Increasing the LEL for employees to £78 would cost the Treasury just over £1 billion in lost receipts.

As a logical extension of moving the LEL, the government might consider increasing the UEL for employee contributions to £580, the weekly level of the point at which higher-rate tax becomes due. This change would increase NI for people not contracted out of SERPS and earning £580 per week or more by £11.50 per week. It would also fund the increase in the LEL, with the combined reform increasing NI receipts by £300 million. The distributional effects of these changes to the LEL and UEL are shown in Figure 4.8. Increasing the LEL would give the largest gains, as a percentage of income, to those in the seventh and eighth deciles. Increasing the UEL at the same time would, on average, redistribute income from the richest two deciles to the rest of the population.

**Figure 4.8. Distributional effects of reforming NI to resemble income tax**

The impact on revenue of increasing the LEL for employer contributions to £78 per week is ambiguous. On the one hand, it would take some people out of the system altogether, costing the exchequer money. At the same time, for those contracted out of SERPS, the change would increase employer contributions. This is because the range of income over which the reduced rates are available — the UEL minus the LEL — is reduced. An increase in the UEL for employer NI will unambiguously cost the government money. This is because it would extend the range for which the reduced rate applies for those contracted out of SERPS.

While we have seen many steps toward integrating NI and income tax in the past 13 years, moving the LEL and UEL to correspond with income tax thresholds would still leave us some way short of effective integration. NI would still maintain a different starting-point from income tax for a large proportion of taxpayers. In particular, those in receipt of the married couple's allowance do not start paying income tax until their income exceeds £5,417.50. In addition, income tax and NI would retain different income bases and periods of assessment. NI is only due on earned income, and this income is assessed weekly or monthly rather than on an annual basis. In contrast, income tax is payable on most sources of income and is assessed on an annual basis.

The administrative savings from such a move are therefore likely to be limited. Additionally, because increasing the LEL stops people paying contributions, it removes entitlement to contributory benefits at the same time. To avoid this, the government may well have to consider introducing new administrative procedures that would allow such people to maintain their entitlement to contributory benefits.

Although the full integration of NI and income tax would be a positive move, this is not the stated long-term aim of the government. If National Insurance is to continue to have an independent existence, it may be more sensible to concentrate on reducing the distortions that affect the labour market.

**Removing distortions from the National Insurance structure**

If we want to reduce the degree to which NI distorts the labour market, we should concentrate on removing the jumps in payment levels from the system. For employee contributions, there is only one jump in the level of payment — the ‘entry fee’ at the LEL. This could be abolished at an expense of just over £1 billion. It would save all contributors £1.24 per week. As this is a flat-rate gain, it would represent a greater proportion of earnings for the low-paid. The distribution of these gains across households is shown in Figure 4.9.

**Figure 4.9. Distributional effects of removing the employee entry fee**



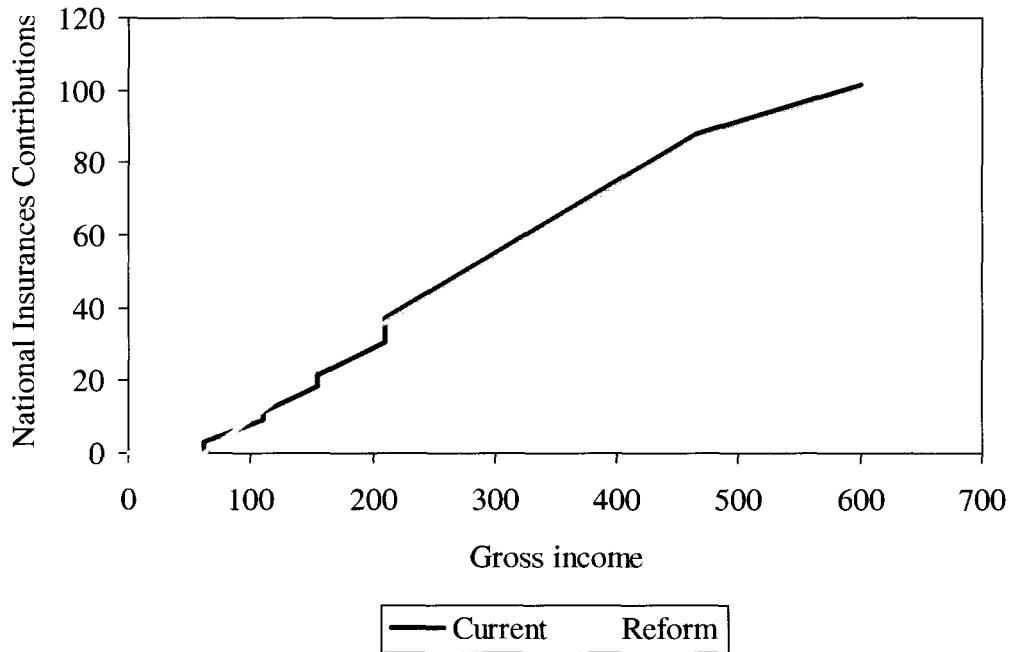
On the employer side, there are four separate spikes. The obvious way to remove them would be to ensure that NI is increased *only at the margin* as one moves up through the brackets. In combination with the abolition of the entry fee, if the current rates were maintained the reform would cost over £11 billion. This is clearly too large a loss of revenue for the government to contemplate without raising additional revenue to compensate.

The obvious way in which to do this is to ‘iron out’ the kinks in employer contributions by having a higher rate of contributions charged only at the margin. This could be achieved by charging contributions at a rate of 15% for earnings between the LEL and £186 with a 10% rate applying to earnings above £186. Assuming that the entry fee on employee NI were abolished at the same time, the resulting structure of total employee and employer NI contributions is shown in Figure 4.10. Those with earnings above £210 per



week gain £1.24 from the removal of the entry fee from employee contributions. They would pay the same level of employer contributions. While the combined reform would be revenue-neutral, there would be a small degree of redistribution between individuals. NI contributions would fall for over 60% of employees, while they would rise for about 25%.

**Figure 4.10. NI contributions for employees not contracted out of SERPS if kinks removed from NI system**



**Strategies for improving in-work support**

The above discussion of the WFTC, the 10% starting rate and proposed alterations to benefit tapers highlights one problem with any tax and benefit reform — the need for a coherent strategy linking the various measures. Without such a strategy, it is easy to get bogged down in the detail, and changes to the tax and benefit system risk pushing the system in opposing directions.

*Simplifying the structure of in-work support*

One obvious strategy that the government might well wish to pursue is the simplification of the system for providing support to working families. Family credit is one of four in-work benefits that families can potentially receive. The other three are housing benefit (HB), council tax benefit (CTB) and disability working allowance. Each of these benefits has its own means test and its own taper. This makes the calculation of potential in-work income highly complex.

A potentially rewarding strategy would be to bring these benefits together into a single system. One way of achieving this would be to include payments

covering rent and council tax for working families with children in the FC system.<sup>20</sup> HB and CTB for these families could then be abolished. Under the current system, which has three means tests, an increase in FC leads to a reduction in HB and CTB eligibility. The reform prevents this from happening, so the jump in FC at 16 hours would not be eroded by reductions in HB and CTB. The reform would therefore benefit those with high rents and council tax bills the most. To prevent large numbers losing under this reform, the taper rate would have to be set at 50% of gross income. This leaves virtually no families losing from the change but has an exchequer cost of £1.5 billion.

An alternative tack would be for the system of in-work support to ignore rent and Council Tax. Instead, support for these payments could be provided through an income maintenance benefit which guaranteed a minimum level of income regardless of whether people were working or not. In-work support could then be based solely on the level of earnings. For an example of such a system, see Duncan and Giles (1997).<sup>21</sup>

### ***Further problems to be addressed***

A combined system of in-work support is certainly possible. However, above we have glossed over a number of important technical questions that apply to any system that might be envisaged. For instance, HB and CTB are assessed on a weekly basis. Any change in circumstances in a given week can alter the level of entitlement. FC payments, on the other hand, are fixed for six months. During this time, changes in circumstances do not affect the level of the payment. Any combination of these benefits would have to be assessed for a common time period.

Another issue is whether payment would be in cash, through either a benefit giro or the wage packet, or by reductions in the relevant bills. For example, HB for local authority tenants takes the form of a rent reduction rather than a cash payment. It would be possible for the transfer payment to cover rent and council tax bills initially, with any remaining transfer being paid in cash. An alternative policy would be to make the entire transfer in cash. This could be seen as promoting financial responsibility, as families would then have to make their full rent and council tax payments themselves from their available resources rather than having the state do it for them.

Finally, the major outstanding issue in the benefit system is housing benefit. This has been criticised on a number of counts — delays in payment, the

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<sup>20</sup>Our proposed combined benefit is based on the following formula, which is similar to that used for FC:

$$\text{payment} = \text{needs} - \text{taper \% (gross income - applicable amount)}$$

Needs are calculated as the sum of the FC adult and child credits plus the eligible rent for HB and as the council tax for CTB. As in FC, we have fixed the applicable amount at £77.15. Rather than use income net of income tax and National Insurance, we have based the calculation on gross income. This means that the overall marginal tax rate will be the sum of the taper rate, the income tax rate and the NI rate.

<sup>21</sup>A. Duncan and C. Giles, 'Alternatives to family credit: an evaluation of tax credits in a UK context', IFS mimeo, 1997.

potential for fraudulent claims, driving up rent levels and its interaction with other in-work benefits. Until the issue of housing support is addressed, no reform of the benefit system will be complete.

## **4.4 Childcare**

The issue of subsidising childcare has moved high up the political agenda in recent years. One need, repeatedly highlighted by the current Labour government, is to improve the ability of parents to move from welfare into work and to stay in work when they get there. In particular, the government is concerned to help lone mothers balance childcare responsibilities with a desire to engage in paid employment. The costs of childcare mean that the financial returns to working are reduced for individuals who have childcare responsibilities, and so the incentive to go out to work or to work longer hours is dampened.

The government might also want to subsidise childcare for equity and educational reasons. Equity concerns arise predominantly because low-income families are often unable to afford to buy suitable childcare, and linked to this are educational concerns that it is increasingly recognised that good-quality childcare with some educational content is beneficial to pre-school-age children. Amongst others, these factors have led to an increased focus by this government on the subsidy of childcare and an increase in the explicit link between childcare subsidy and other Welfare-to-Work policies.

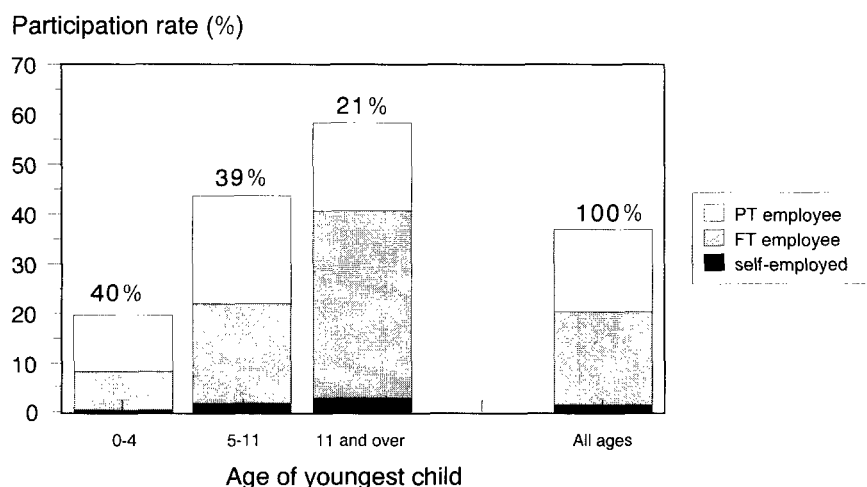
### **Measures announced since May 1997**

In his Pre-Budget Statement last November, the Chancellor announced a £300 million Lottery-financed package to provide 'out-of-school childcare for every community in Britain', providing childcare out of school hours and during school holidays. It is hoped this will provide an additional 30,000 out-of-school clubs for 1 million children as part of the government's national childcare strategy.<sup>22</sup> However, this £300 million is to be provided over a five-year period, which equates to less than £1.20 per week per child, and, though it will provide valuable money to start up these clubs, it will therefore provide little ongoing funding.

The main beneficiaries of out-of-school clubs are those parents of primary-school-age children already in work who might be able to increase their hours. Figure 4.11 shows that there is a low proportion of full-time working amongst lone parents of children with a youngest child of primary-school age and the increase in places in out-of-school clubs will substantially improve the opportunity to work full-time for many of these parents. But the government is unlikely to find that out-of-school clubs will offer a substantially improved route from welfare into work. They will have only a limited impact on the financial incentives for unwaged parents of school-age children and will not help parents, and particularly lone parents, with pre-school-age children.

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<sup>22</sup>Another initiative as part of this strategy is to give young unemployed people the chance to train for careers in childcare as part of the Welfare-to-Work programme.

**Figure 4.11. Lone parent participation rates by age of youngest child**

Note: percentages show lone parents with youngest child in each age group

A second increase in subsidy available for childcare was the increase in the value of the childcare disregard in family credit (and other related benefits), announced in the July 1997 Budget. This disregard was introduced by the Conservatives in October 1994 and enables low-income families to deduct childcare expenses (up to a maximum)<sup>23</sup> from their income in the calculation of certain means-tested benefits. Only families where both partners are working, or one in the case of lone parents, can claim extra benefits for childcare.

The other major childcare initiative of this new government has been the scrapping of the childcare voucher scheme for four-year-olds introduced at the end of the previous government. Labour claimed that the voucher system resulted in damaging competition between providers and in unnecessary bureaucracy. The scheme that replaces the vouchers is based on partnership and co-operation between local education authorities (LEAs) and private and voluntary nursery education providers.

Under the new arrangements, LEAs are required to ensure that there is an adequate supply of nursery education, day care and out-of-school care for all four-year-olds. These places may be in local authority schools or grant maintained schools or supplied by eligible private or voluntary providers, and are available for the three terms before the child reaches compulsory school age. Places are financed by central government grant out of existing funding, including the resources allocated to the nursery education voucher scheme. Parents sending their four-year-old to an approved private sector place will find that the place is partly subsidised by the LEA, and by a similar amount as under the voucher scheme, but, of course, without the vouchers. The aim is to

<sup>23</sup>The maximum disregard was initially £40 per week, increasing to £60 in July 1996. In the July 1997 Budget, the limit was raised to £100 a week for a family paying approved childcare charges for two or more children (the age limit was also increased in the Budget from 11 to 12).

establish these places by April 1999, with entitlement extended to three-year-olds over time. Parents might be required to contribute towards the costs of day care, but will not have to pay additional fees for education in state schools.

### **Who receives childcare disregards in means-tested benefits?**

If the intention is to target lone parents, then, in one sense, the current system of childcare disregards in family credit is very successful — lone parents make up 96% of all recipients. But take-up is much lower than the government expected when this measure was introduced. According to the Department of Social Security's quarterly statistics on FC, in May 1997 there were 35,600 families with an allowable claim for the childcare expenditure disregard, compared with an expected 150,000 recipients.

The extent to which the disregard provides real help with childcare costs is limited by two elements inherent in the current system.<sup>24</sup> First, families cannot claim more than the maximum amount of FC available to those who do not have childcare costs, which means that families entitled to full FC anyway get no extra help to pay for childcare (this currently affects 5,200 claimants).<sup>25</sup> Even those who do not have full entitlement before childcare costs can only claim back 70% of their childcare costs and this amount will be further limited by the fact that, when they reach maximum FC, their benefit will be capped at this level. According to figures for February 1997, 8,900 families have their additional help restricted in this way. In fact, only just over 50%, rather than 70%, of average childcare costs are met by FC for those with an allowable claim.

In addition to help through FC, families are also able to disregard childcare costs in the means test for housing benefit and council tax benefit.<sup>26</sup> The latest figures available to us (May 1996) show that around 8,000 families were receiving help with childcare costs through housing benefit (7,000 of these also received FC) and 6,000 through council tax benefit.<sup>27</sup> Claiming help through housing benefit and/or council tax benefit therefore enables families to 'top up' help with their childcare if the amount they can claim through the FC system is restricted in the ways discussed above.

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<sup>24</sup>The current formula for calculating FC entitlements is

$$FC = \text{credits} - 0.7 \% (\text{net income} - \text{childcare costs} - \text{applicable amount}),$$

where 'credits' are based on hours of work and number and age of children. This means that only 70% of childcare costs can be offset against income, up to the maximum amount (£60, or £100 for families with two or more children).

<sup>25</sup>DSS Family Credit Quarterly Statistical Enquiry, May 1997.

<sup>26</sup>Help is also provided through disability working allowance, but the numbers are very small and no published figures are available.

<sup>27</sup>Department of Social Security Housing Benefit Management System, May 1996.

## Is the use of childcare growing?

Tables 4.8 to 4.10 show the availability of certain forms of childcare places in England for all children under the age of 8, as at 31 March 1996.<sup>28</sup> The range of childcare facilities varies according to the age of the child; a brief description of each is provided below.

- *Day nurseries* — available for under-fives for the length of the adult working day; run by the local authority, voluntary or private individuals or groups, or employers.
- *Playgroups* — provide sessional care for children aged between three and five, attended for a morning or afternoon, not all day.
- *Childminders* — look after children aged under five and also school-age children out of school hours (including school holidays).
- *Other provision for school-age children* — out-of-school clubs provide sessional care before and after school, whilst holiday schemes provide care during school holidays for the entire adult working day.

**Table 4.8. Childcare places for pre-school-age children**

	Day nurseries		Playgroups	
	Total number of places	% local authority provided	Total number of places	% local authority provided
1986	57,659	50.16	412,391	0.64
1991	106,068	25.49	428,420	0.45
1996	178,300	11.16	397,700	0.30

**Table 4.9. Number of places with registered childminders**

	Total number of places	% local authority provided
1986	137,732	1.12
1991	233,258	0.78
1996	376,200	0.61

**Table 4.10. Childcare places for school-age children**

	Out-of-school clubs		Holiday schemes	
	Total number of places	% local authority provided	Total number of places	% local authority provided
1992	11,900	72.27	47,500	27.58
1996	70,000	16.57	205,900	17.53

<sup>28</sup>Children's Day Care Facilities at 31 March 1996, England, Department of Health, Personal Social Services Local Authority Statistics.

The figures show that the overall availability of childcare has increased dramatically during the 1990s (although places at playgroups have declined slightly), with private and voluntary provision growing rapidly at the expense of local authority places. In particular, the number of childcare places available for school-age children has increased almost fivefold and it highlights the increased demand arising from higher paid-employment rates particularly amongst mothers. The government's plan to provide an additional 1 million places at out-of-school clubs will undoubtedly increase the supply further, but the issue of affordability is a crucial one, particularly if lone parents currently dependent on benefits are to be encouraged to go out to work or to work longer hours.

### **Options for increased state support for childcare in the tax and benefit system**

In the first Pre-Budget Report, the government declared its aim to '... improve further the support given for childcare'. This could come from increased government spending on subsidised childcare places but the Chancellor also indicated that it was most likely that increased childcare support would be delivered through the tax and benefit system. What options are possible?

If there is no radical reform of the current system of family in-work benefits, then there are two straightforward ways in which this aim might be achieved. First, childcare disregards could be increased further, but this would do little to help those families who receive maximum family credit. Another approach would be to replace the current disregard with a childcare 'credit' which would cover all childcare costs (or a proportion thereof) payable on top of basic family credit.

Alternatively, help could come through the tax system via tax relief for childcare expenditures, thus reducing an individual's tax bill by reducing taxable income. This would not be well targeted on the groups causing most concern. Previous research<sup>29</sup> has shown that tax relieving childcare costs delivers the greatest benefit to those at the higher end of the income distribution, with the largest gains going to two-earner couples already in employment.

If, as seems likely, the government introduces a working families' tax credit, the likelihood is that support for childcare will form a specific part of the new tax credit. If the WFTC is simply family credit re-badged (as is discussed earlier in this chapter), then the options for additional support are identical to those in family credit: either disregard childcare expenses from the WFTC means test or add specific childcare credits to the WFTC parameters.

If the structure of the WFTC resembled the US earned income tax credit, it would be difficult to integrate a childcare disregard with the 'phase-in' part of the WFTC. This is because the disregard acts to reduce income from the family credit or WFTC means test. In the phase-in rate, the amount of credit is increased with additional income and disregarding childcare expenditure

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<sup>29</sup>A. Duncan, C. Giles and S. Webb, *The Impact of Subsidising Childcare*, Equal Opportunities Commission, Manchester, 1995.

would reduce payments. Alleviating this problem would be complicated. Specific childcare credits would be much easier to introduce alongside a WFTC that resembled the American earned income tax credit.

We have already seen that the current system might be discouraging take-up (the actual number of recipients of the childcare disregard is much lower than was anticipated), and the two options considered here would be subject to the same difficulties — claimants would still have to prove that they were spending their money on childcare and that this childcare was ‘approved’. These two reforms would also fly in the face of seeking a simpler tax and benefit system, as different people would be phased out at different points depending on how much they spend on childcare. A more straightforward approach might be to introduce a fixed allowance for childcare as part of a WFTC (or indeed family credit), which would still require a test for paid formal childcare use but would not necessarily be linked to actual costs. Whilst this would clearly oversubsidise those who have very low childcare expenditures, the reduced administrative burden of claiming the help might improve take-up and potentially increase employment amongst those for whom childcare costs act as a limiting barrier to paid employment.

## **4.5 Minimum wages and young employees**

The distributional effects of a minimum wage and the implications for government finances have been discussed at length in earlier work published in the last Green Budget and in *Fiscal Studies*.<sup>30</sup> The general picture is that, in the UK, non-employment rather than low wages is the primary cause of low household income among those of working age. A minimum wage is therefore not a good way to redistribute income from the rich to the poor. And as a result of its failure to target low-income households or to float families off in-work benefits, it would be largely unsuccessful in reducing the exchequer costs of in-work benefits or improving financial returns to employment for the majority who might benefit. In this section, we examine whether restricting the coverage of a minimum wage to the over-25s changes this picture significantly.

The argument for restricting the coverage of a minimum wage to the over-25s is primarily based on the observation that the number of workers receiving low wages falls rapidly as they reach their mid-20s. This probably reflects the fact that they are less valuable to employers until they have had a few years of work experience. Introducing a minimum wage for all would therefore risk generating significant levels of unemployment amongst young people if it were set at a relatively high level or have little effect on older people if it were set at a low level.

Figure 4.12 shows quite clearly the rationale for this argument. It plots the proportions of men earning below £4.50, £4.00, £3.50 and £3.00 an hour. To the left of the arrow (those under 25), it shows that even a minimum wage of

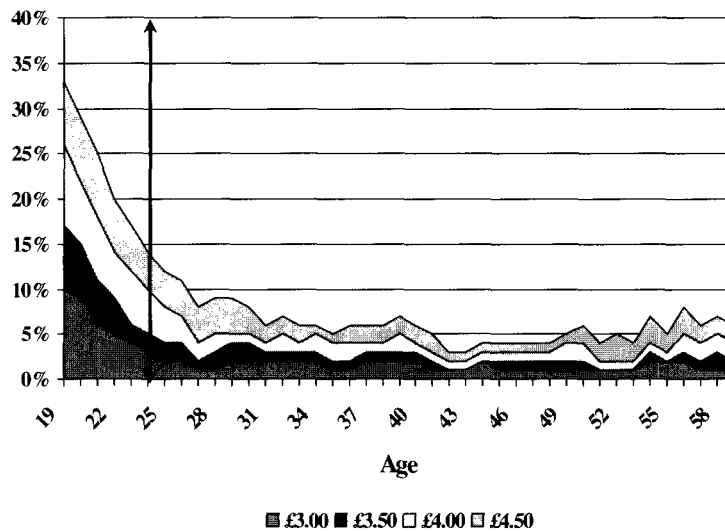
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<sup>30</sup>A. Gosling, ‘Minimum wages: possible effects on the distribution of income’, *Fiscal Studies*, vol. 17, no. 4, pp. 31–48, November 1996.



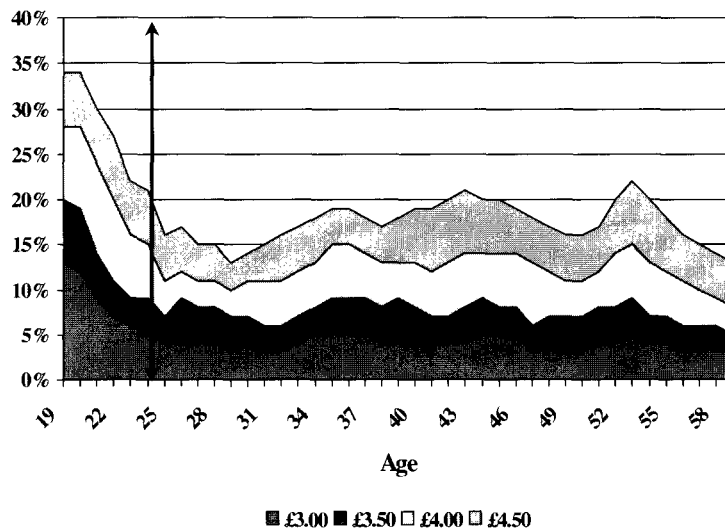
£3.00 will affect a significant proportion of younger workers. To the right (those over 25), it shows that, although there is a rump of low-paid adult workers, these numbers are much smaller in comparison. Restricting coverage to older workers therefore might make a higher minimum wage feasible and desirable. A second potential benefit of restricting a minimum wage to those over 25 would be that firms might be more willing to provide on-the-job training for younger employees if they were allowed to subsidise this through lower wages.

**Figure 4.12. Percentage of male workers affected by a minimum wage, by age**



Source: Family Resources Survey, 1995-96.

**Figure 4.13. Percentage of female workers affected by a minimum wage, by age**



Source: Family Resources Survey, 1995-96.

But there are problems with this argument. First, there is the danger that restricting a minimum wage to the over-25s would result in higher unemployment amongst older workers as firms attempt to substitute for them with cheaper young employees. Figure 4.13 shows that this is potentially a real worry. It shows the same proportions for women as Figure 4.12 gave for men. For women, not only are the numbers affected much larger, but there is not so much of a difference between younger and older workers. Older women employees have typically received less education than men, have had fewer opportunities for on-the-job training and have less work experience often due to long breaks from paid employment whilst bringing up their children. The fact that many women aged over 25 would still gain implies that it would be difficult for the minimum wage level to be higher if the under-25s are excluded.

A second problem of excluding the under-25s from the minimum wage legislation is that, once one reason has been accepted for not having a uniform minimum wage, it is difficult not to accept other potential variations from a uniform minimum, such as variations by region or industry.

### **Distributional issues**

One factor that might affect the decision about whether to restrict minimum wages to the over-25s is the effect that it would have on the distributional consequences of a minimum wage. Our earlier work has shown that many of the richer households that benefit from a minimum wage are those that have other working adults (usually the children of the household head) living at home. If they were excluded, it might improve the distributional outcome. Figure 4.14 shows this point quite clearly. The group most likely to be affected by a minimum wage is younger benefit units living with older ones (usually their parents).<sup>31</sup> This implies that restricting the coverage of a minimum wage to the over-25s would mean that such households would receive less of the financial gain.

Figure 4.15 shows the impact on the overall income distribution of both types of minimum wage. Excluding the under-25s does not significantly alter the overall distributional picture. The bulk of the gains still go to those in the top half of the income distribution, primarily because people with low earnings usually live with others earning significantly more and therefore are willing to take low-wage employment. This means that excluding the under-25s will not significantly improve the effectiveness of a minimum wage in cutting the costs of in-work benefits, or tax credits once we have a working families' tax credit. But it would provide a floor to wages which would prevent firms receiving the benefit of the tax credit.

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<sup>31</sup>A benefit unit is defined as a single person, or a married couple, together with any children they might have.

Figure 4.14. Proportion affected by a minimum wage, by type of tax unit

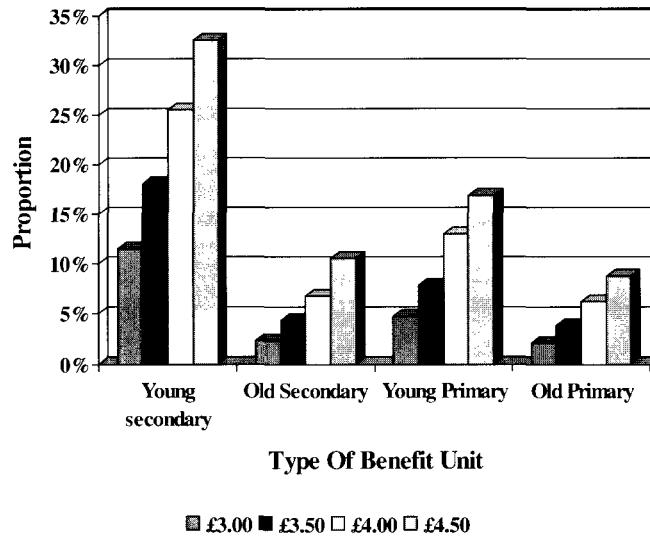


Figure 4.15. Proportion of households with increased incomes after the introduction of a minimum wage of £4.50 an hour, by decile and regime



## 4.6 Conclusions

The government has embarked on a series of major reforms to the structure of the tax and benefit system. Many of these reforms are to be welcomed. In particular, changes to the National Insurance system are long overdue. The possible increase in the generosity of in-work benefits will certainly improve the financial returns to working for those currently on benefit. But it is

important to bear in mind that in-work benefits can also have negative effects on work incentives, particularly in the case of second earners. The government is also right to attempt to address subsidies for childcare within the reforms to the tax and benefit system. Initially focusing on out-of-school clubs that will enable a few parents to work longer hours was a good start. There are many options for increased subsidy for childcare within the working families' tax credit and a key issue to their success will be whether they are simple and generous enough to have reasonably high take-up. This would, of course, make them significantly more expensive than the current childcare disregards in family credit.

There are other areas on which the government has focused where positive arguments for the change are less forthcoming. The most obvious case is that of the 10% tax rate, which is difficult to justify either as a reform to the income tax system or as part of a Welfare-to-Work strategy. On the working families' tax credit, if this were implemented as a re-badging of an existing benefit, it would be desirable if the government could provide some hard evidence as to the advantages of such a move. We have also shown again that a minimum wage is of secondary importance for work incentives because it is poorly targeted on low-income households with poor financial returns to employment. Restricting the minimum wage to the over-25s does little to change this fact.

No process of benefit reform is ever complete. There are areas that the government has not yet had time to address. We have briefly mentioned some of these areas here. In particular, we believe that it would be desirable if priority were given to the simplification of the system of in-work support. It would be unfortunate if the momentum generated by the government for welfare reform were wasted on issues that are not of central importance.

## 5. The new Individual Savings Account

In December last year, the government launched a consultation document setting out its proposals for a new Individual Savings Account (ISA) to be introduced in April 1999 to replace the current tax-free savings schemes — Tax-Exempt Special Savings Accounts (TESSAs) and Personal Equity Plans (PEPs).

The current proposals for the ISA, summarised in Box 5.1, have several attractions relative to TESSAs and PEPs. The ISA represents a move towards a more neutral tax treatment of different forms of saving and reduces the potential distortion of people's choices between different assets which should improve economic efficiency. From the point of view of fairness, the ISA is likely to have greater appeal to small savers than TESSAs and PEPs and should extend tax-free saving further down the income and age distributions.

### Box 5.1. The main features of the new ISA

- A 'one-stop account' to shelter cash, stocks and shares, National Savings<sup>a</sup> and life insurance.
- An annual contribution limit of £5,000 plus separate £1,000 contribution limits for cash and life insurance within the £5,000 limit.
- An overall contribution limit of £50,000.
- Returns free of income tax and capital gains tax.
- A 10% tax credit paid for five years on dividends from UK shares.
- No minimum investment amount and no minimum holding period.
- A monthly prize draw paying £1,000 to 50 ISA holders.
- A six-month transition period for PEP holders to transfer their capital into an ISA during which time existing reliefs will remain in place.
- Live TESSAs can run until maturity when the capital can be transferred into the cash component of an ISA.

<sup>a</sup>This applies to National Savings products that do not currently enjoy tax-free returns, such as National Savings Ordinary and Investment Accounts. These will be included as part of the cash component of an ISA.

But many of the details of the administration of the scheme, and the administration of contribution limits in particular, are yet to be worked out fully. Also, there is a more fundamental question as to whether the ISA will really meet government's stated goal of encouraging 'those on more moderate

incomes to save'.<sup>1</sup> The size of the incentive offered by the ISA to basic- or lower-rate taxpayers is small, and, of course, will be nothing to the many non-savers on moderate incomes who do not pay tax at all. We discuss these issues in more detail in this chapter.

## 5.1 The tax treatment of savings in the UK

Any form of saving typically has three components — initial payments, income accrual and withdrawal — and each of these is a possible target for taxation. In fact, the current tax system varies widely across different assets in choosing which components to tax. A brief description of the tax treatment of saving is given in Table 5.1. The final column summarises the tax paid, according to the point at which it is levied. Thus the EET regime is 'exempt-exempt-taxed', implying no tax on initial savings and no tax on fund income but taxation on withdrawal.

**Table 5.1. Current tax treatment of savings**

<i>Asset</i>	<i>Summary of treatment</i>	<i>Tax paid</i>
Pensions	Tax relief on contributions No tax on fund income, but payment of tax credit on dividends abolished in July 1997 Budget Taxed withdrawal and tax-free lump sum	< EET
TESSAs and PEPs	Saving out of taxed income No tax on fund income, but payment of tax credit on dividends held in PEPs No tax on withdrawal	TEE
Owner-occupied housing	Saving mainly out of taxed income (MITR being withdrawn) No tax on imputed income from owner-occupation No capital gains tax	< TEE
Interest-bearing accounts	Saving out of taxed income All nominal interest income taxed No tax on withdrawal	> TTE
Life assurance	Saving out of taxed income (post-1984) Some tax on fund income No tax on withdrawal	< TTE
Stocks and shares	Saving out of taxed income Income tax on all dividends Capital gains tax on real gains over £6,500 p.a.	< TTE

Prior to the changes announced in the July Budget, private pensions were arguably the most tax-favoured form of saving, with a regime of the form EET except for the exemption from tax of a lump-sum benefit broadly up to a

<sup>1</sup>*The New Individual Savings Account*, Consultative Document, Inland Revenue, 1997.

maximum of one-quarter of the accumulated fund.<sup>2</sup> There is also the possibility of tax-rate smoothing — that is, getting relief when working at 40 per cent and only paying tax when retired at 25 per cent. Housing is subsidised to the extent that mortgage interest tax relief (MITR) provides a tax subsidy on the acquisition of a capital asset. None of the returns to owner-occupied housing, whether in the form of imputed income from occupation or capital gains, is taxed by central government, although the council tax might be seen as a tax on housing consumption.<sup>3</sup>

PEPs and TESSAs are taxed under a TEE regime, as will be ISAs. Interest-bearing accounts, unless held as TESSAs, stand out as being heavily taxed. If inflation were zero, the tax regime would be precisely TTE. As soon as inflation is positive, the tax regime is harsher than TTE, bringing the post-tax rate of return below that implied even by a comprehensive income tax. Direct investment in stocks and shares is less favourably taxed than pensions, PEPs, TESSAs or housing, but does not suffer a full TTE regime since there is a relatively large (£6,500 per person per year) tax exemption on real capital gains.

In an ideal world, the tax treatment of savings should not distort choices regarding the form in which to save. In the UK over the last two decades, we have moved to a more uniform system of taxation (predominantly of the EET/TEE type) across most assets through reductions in MITR, the introduction of personal private pensions and schemes such as TESSAs and PEPs. The continued taxation of full nominal interest income is a distortion only partially offset by the existence of TESSAs. This is an anomaly which the ISA will go some way towards correcting.

## **5.2 The distribution of savings in the UK**

The particular aim of the ISA is to ‘encourage those on more moderate incomes to save’.<sup>4</sup> The 1995–96 Family Expenditure Survey shows that more than one-third of households have no financial assets (either an interest-bearing account or stocks and shares).<sup>5</sup> This proportion is higher among younger households and among poorer households, as Figure 5.1 shows.

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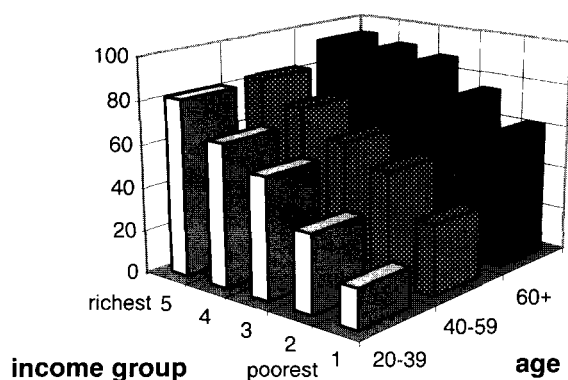
<sup>2</sup>Under the new system, pension funds will continue to have no capital gains tax liability on gains, or tax liability on dividends received. In the past, they have been able to reclaim the tax credits on dividends, as have tax-exempt individuals holding shares directly. But the 1997 Budget announced the abolition of the right to claim this tax credit. As a consequence, pension funds will be worse off, but still have no tax liability directly on their income and gains. This highlights the difficulty caused by treating the personal and corporate tax systems separately, as we do here.

<sup>3</sup>The imputed income from owner-occupation was taxed under Schedule A income tax until 1963.

<sup>4</sup>*The New Individual Savings Account*, Consultative Document, Inland Revenue, 1997.

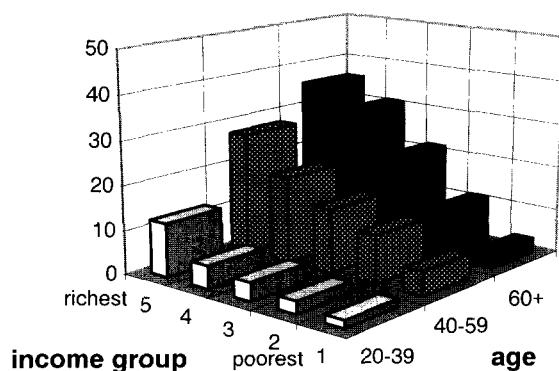
<sup>5</sup>See J. Banks, A. Dilnot and S. Tanner, *Taxing Household Saving: What Role for the New Individual Savings Account?*, IFS Commentary no. 66, 1997, for further details.

**Figure 5.1. Percentage of households with financial assets**



Source: Family Expenditure Survey 1995-96.

**Figure 5.2. Percentage of households with a TESSA**



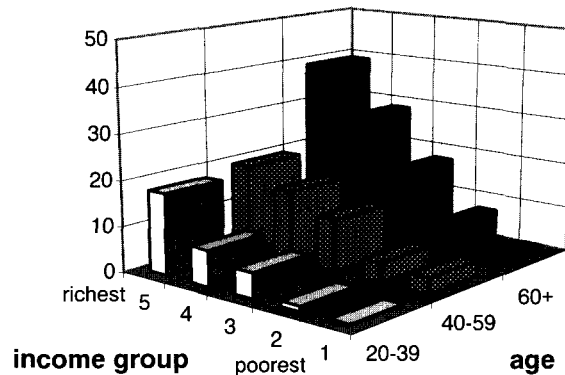
Source: Family Expenditure Survey 1995-96.

PEPs and, particularly, TESSAs were heralded as attempts to encourage saving among those with moderate incomes. Both have attracted substantial flows of savings. As of April 1996, £35 billion was held in PEPs by around 3 million people, and, at the end of 1996, over £26 billion was held in TESSAs by 4.5 million people. But TESSAs and PEPs have not penetrated to the bottom of the savings distribution. TESSA and PEP holders are, on average, older and richer than non-holders and older and richer than the typical household with any financial assets (see Figures 5.2 and 5.3). In the case of PEPs, there is an issue about the extent to which low-income households are able to bear the risk associated with equity investment (and about them being able to invest enough to cover the administration charges). In the case of TESSAs, the minimum holding period may act as a disincentive to those with varying consumption needs (particularly households with young children). By



removing the minimum holding period requirement and allowing people to hold a broad range of assets, the ISA should be more attractive than TESSAs and PEPS to small savers, provided that there are no high administration charges, and should extend tax-favoured saving further down the income and age distributions.

**Figure 5.3 Percentage of households with a PEP**



Source: British Household Panel Survey 1995.

## 5.3 Implementation issues

Following the announcement of the ISA, there has been considerable debate about the appropriateness of a £50,000 lifetime cap on contributions. The government has said that the annual and lifetime contribution caps are intended 'to bring the new ISA scheme within the overall cost of TESSAs and PEPs'.<sup>6</sup> Having no contribution limits at all would cost the government at least all revenue from income tax on interest from bank and building society accounts (£2.2 billion in 1996-97 and estimated to be £2.8 billion in 1997-98). The use of annual limits would avoid immediate cash-flow problems for the government and focus the gains from ISAs on less-wealthy households.

The case for an overall contribution limit is less convincing. The administration of lifetime contribution limits is likely to prove very complex. In any one year, people will be able to take out one ISA with a single provider. But they will be able to take out separate ISAs with different providers in different years (although how this will work in practice with the life insurance component of an ISA is unclear). In order to keep track of overall contributions, there may need to be a central register of ISA holders and their contributions. There is a further question of whether the overall contribution limit will be raised in line with inflation, although, ultimately, whether the

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<sup>6</sup>*The New Individual Savings Account*, Consultative Document, Inland Revenue, 1997.

overall contribution limit is 'too low' depends critically on future changes to the pension system and the form of the new stakeholder pension.

The question of whether there should be an overall contribution limit has also become an issue about whether there should be a limit on the amount that individuals can transfer into an ISA from existing TESSAs and PEPs. In practice, the government is proposing to use the overall contribution limit of £50,000 as a cap on the amount that can be transferred from TESSAs and PEPs. This is expected to affect between 10 and 15 per cent of the 3 million current PEP holders, according to Inland Revenue estimates. There is no reason why the limit on overall contributions should be the same as the limit on transfers (although to have a limit on overall contributions and not on transfers would not be sensible, not least since it would set off a PEP- and TESSA-buying frenzy).

One possibility that the government might have considered at the outset is a limit on the amount that could be transferred but no overall contribution limit. This would have avoided the potential administrative problems associated with an overall contribution limit, while sending out a clear message that the ISA is targeted at those with moderate incomes.

A further argument, albeit not a very convincing one, for imposing an initial transfer limit may have been to achieve revenue neutrality (or even, as the Treasury has recently admitted, to achieve some 'modest savings'). By imposing a limit on the amount of money that can be transferred from PEPs and TESSAs, the government may hope to raise revenue to cover the additional cost of more ISA holders than the current 6.5 million people with TESSAs and PEPs. But it is almost certainly not the case that the government will be able to raise a lot of revenue by capping PEP transfers. Any argument that imposing a transfer limit will raise additional revenue assumes that current PEP holders will invest the excess that cannot be transferred into ISAs in taxed forms of savings (such as unit trusts or direct holdings of equities). It seems more likely that investors will put their money into other tax-favoured forms of saving, such as pensions, housing or National Savings products. In this case, predicting what will happen to tax revenues from imposing a transfer limit becomes a very uncertain business indeed.

There are other details of the administration of the ISA which have not gained as much attention as the issue of overall contribution limits but which do need to be thought through more fully. One of these is the separate £1,000 annual limit placed on cash contributions into an ISA. One of the aims is clearly to reduce the loss of tax revenue from interest income. However, there is a danger that investors will be able to circumvent the cash limit fairly easily by holding investments in the stocks and shares component which are essentially cash substitutes. In the consultation document, the government promises 'detailed rules' to prevent this happening.

A further set of issues surrounds the question of how to deal with withdrawals from ISAs. The government has announced that it 'does not wish to prevent investors who wish to withdraw money from their ISAs from putting their money back into an ISA'.<sup>7</sup> This suggests that withdrawals will be netted out of

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<sup>7</sup>*The New Individual Savings Account*, Consultative Document, Inland Revenue, 1997.

the annual and total contribution limits. Things could become complicated if ISA holders withdraw part of their returns rather than the capital. For example, what if an ISA holder has invested up to the overall limit of £50,000? If the value of his investments increases to £55,000 and the investor decides to withdraw £5,000, can the £5,000 be reinvested in the future, or is it only withdrawals of the capital that can be replaced? And if the individual decides to withdraw more than £5,000, can the full amount be reinvested at once, or does the £5,000 annual limit apply to reinvestments as well as original deposits? None of these problems is insurmountable. But the danger is that if the ISA becomes too complex, then the charges required to cover the costs of administration will far outweigh the financial incentive provided by the tax exemption.

## 5.4 Promoting new saving

The ISA will have potentially more to offer small savers than current TESSAs and PEPs. If those with moderate incomes do save, then, typically, they will want to hold their money in an easily accessible form and at no risk. But this is not to say that the ISA will necessarily encourage much new saving among those who do not currently save at all. The additional incentive being offered by the ISA is small to basic- or lower-rate taxpayers and is worth nothing at all to those who pay no tax. Table 5.2 shows the amount of tax paid on interest from bank and building society accounts and on dividends from stocks and shares. If the government were to exempt all interest and dividend income from tax, the median gain would be £2.24 a year for taxpayers with a bank account, £19.92 a year for taxpayers with a building society account and £34.68 for taxpayers with stocks and shares.

**Table 5.2. Interest received and tax paid on savings, 1995–96**

	% with	<i>Total interest received (per year)</i>		<i>Total tax paid (per year)</i>	
		Median (>0)	Mean (>0)	Median (>0)	Mean (>0)
Bank account	29.8	£44.20	£296.04	£2.24	£44.99
Building society account	39.3	£74.88	£418.19	£19.92	£145.03
Stocks and shares	17.9	£140.04	£1,075.79	£34.68	£273.41

Source: Family Expenditure Survey 1995–96.

Of course, the gain from an ISA will be lower than these figures suggest since there will be contribution caps. Also, if ISA investors are allowed instant access to the money in their account, the rates of return that will be offered on the cash component are likely to be fairly low. The rate of interest currently being offered on instant access accounts (the form of saving that will have the most appeal to potential savers on low incomes) is around 3 per cent. On a cash investment of £1,000, the gain from an ISA would be less than £7 a year for a basic- or lower-rate taxpayer.

And, of course, for non-taxpayers, there will be no gain at all from tax exemptions on saving. Evidence from the 1995-96 Family Expenditure Survey shows that non-taxpayers are over-represented among those currently without a savings account — 52 per cent of those without an interest-bearing account compared with 32 per cent of all individuals. As an additional incentive, the government has proposed a monthly prize draw, which will give £1,000 to 50 ISA investors. Unlike premium bonds, the proposal for the ISA is for the money for the prize draw to come directly from the government, rather than being part of the pooled returns from the scheme itself. It will increase the expected return on an ISA compared with an ordinary bank or building society account and, unlike the tax relief, this will be true for non-taxpayers as well as taxpayers. Having a prize draw is one way of ensuring fairly wide take-up of the ISA since it will be worth everyone's while to put in 1p (although it provides no incentive to put in more than 1p). It is not necessarily the right way of getting people to think seriously about their savings choices.

As well as the direct inducements to save provided by the tax relief and by the prize draw, there is a further, more indirect, effect that the ISA could have on people's decisions to save through the publicity that surrounds its introduction. Recent evidence points to the impact that the availability of information can have on people's decisions to save,<sup>8</sup> and if the ISA produces more informed debate about saving, so much the better. However, potential savers will also wish to be reassured that the ISA provides a stable regime for their investments. The disappearance of TESSAs and PEPs will have made some savers anxious that the same will happen to ISAs in a few years' time. This is particularly so since the government may already be creating need for future reform by introducing an overall investment limit and promising payment of the 10% tax credit for only five years.

Finally, we wish briefly to address the question of whether the government should be trying to encourage people to save more. Moving towards a more uniform tax treatment of saving is desirable from the point of view of economic efficiency. But is it the case that the government should also be aiming, with the ISA, to increase the level of saving? One argument might be that more saving is desirable from a macroeconomic perspective since savings are a source of funds for investment. But evidence on this is mixed. For a small open economy such as the UK, it is unlikely that the level of domestic savings acts as a constraint on the level of investment. A further issue is whether individuals are saving enough for their own needs. One-third of households do not have either a savings account or stocks and shares. But many of those who have little or no savings (such as those with young children) have low incomes and high consumption needs.

It has frequently been argued that people are not saving enough for their retirement or for the possibility of having to finance long-term care. This may or may not be the case, but even if it were, the right approach to tackling the problem would be through reforming either the pension system or the

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<sup>8</sup>See D. Bernheim and D. Garrett (1996), 'The determinants and consequences of financial education in the workplace: evidence from a survey of households', mimeo, Stanford University, 1996.

financing of long-term care. Reforms to both these are currently under consideration, although any link between ISAs and the new stakeholder pensions has not been explicitly acknowledged by the government in its consultation document. This is a pity. Clearly, any future reforms to pension provision will have a big impact on people's decision to save in an ISA.

## **6. Issues in the taxation of companies**

The last 12 months have produced more substantive announcements surrounding the shape of corporate taxation in the UK than had the previous 12 years. The result of all this activity is that one tax has been abolished and large companies will move to a new system for paying corporation tax by 2003–04. The changes set out as part of the Chancellor's Pre-Budget Report (PBR), together with those announced in the Budget of July 1997, amount to a small long-run increase in annual taxes on business source income, combined with a substantial one-off increase. They also remove a long-standing distortion in the treatment of profits earned by UK companies abroad and reduce the role of tax in companies' decisions over dividend payments and share repurchases. The changes already implemented, and those waiting in the wings, represent a significant upheaval in company taxation, so that companies should feel entitled to a period of stability in their tax treatment in the foreseeable future. Section 6.1 discusses these recent developments, including the changes announced in the July Budget, describes the new system proposed in the PBR and comments on the differences between old and new.

While it appears that the government's main plans for corporate taxation have now been set out, a particular complication of company taxation is that large companies can operate across many national borders. The way in which different countries' tax systems interact can lead to external pressures for change, pressures that might result in further adjustments to the UK system in the medium term. Section 6.2 examines some of the effects of increasing globalisation on corporate income taxes and points out some possible areas of future development for the taxation of company profits.

Finally, there is a particular group of companies that faces additional uncertainty over its tax treatment: those companies involved in the production of oil and gas. The government is currently carrying out a review of the taxation of oil and gas, and Section 6.3 briefly addresses some of the issues that should be considered.

### **6.1 Recent developments in company taxation**

Prior to July 1997, companies paid one tax — advance corporation tax (ACT) — when they paid a dividend, and another tax — mainstream corporation tax — some nine months after the end of the year in which those profits were earned. By 2003, no company will have to pay ACT, but large companies will pay their tax in quarterly instalments, the bulk of which will be paid significantly earlier than before. The main rate of corporation tax will have fallen to 30% from 33% at the beginning of 1997, and since July most tax-exempt shareholders, including pension funds, are no longer able to reclaim

any of the tax paid by companies on their dividend payments. Overall, the combination of a Budget in July which raised about £3 billion a year from the corporate sector, and a budget package in the PBR which brings a long-run reduction in revenue of £2 billion a year, has led to a long-run increase in tax revenue raised from company profits of about £1 billion a year, or 3% of corporation tax revenues. In addition, a one-off revenue increase of £7 billion is likely to be raised during the transition to the new quarterly payment system.

In the short term, the changes are likely to lead to tax planning by companies in order, for example, to minimise the payment of ACT before its abolition in 1999 (perhaps by postponing some dividend payments until after April 1999), to utilise as much surplus ACT as possible and to minimise the impact on cash flows of moving to the new payment system. In the long run, the changes set out should lead to some improvement in the neutrality of the corporate tax system. The abolition of the repayment of the tax credit on dividend income to some types of tax-exempt shareholders — namely companies and pension funds — removes the incentive that companies previously faced to pay out profits as dividends to these shareholders. The abolition of ACT reduces the bias against UK-owned companies investing abroad created by the existence of surplus ACT. The abolition of ACT also reduces the role of tax in company decisions over the level of dividend payments, since the total amount of tax paid at the company level will not be potentially affected by the size of the company's dividend payment.

The new quarterly payments system for large and medium-sized companies brings the method used to determine how each company's tax liability is paid more closely into line with payment systems adopted in other countries, most of which require companies to pay their tax in several instalments. It has been designed to exclude smaller companies and to give medium-sized companies partial exemption, using size thresholds that already exist to distinguish between companies paying different rates of corporation tax. However, the need for companies to estimate their taxable profits based on incomplete information part-way through the year is likely to cause difficulties for many companies.

This section contains a discussion of the proposals set out in the PBR for a new payments system for companies. It is difficult to address these issues without some explanation of the system that currently exists, including recent changes made in the July Budget. Hence a brief description of the system prior to July 1997 and the July changes is set out first, before moving on to the proposals announced in November. Those already familiar with UK corporate taxation and the July Budget might want to skip ahead to the section relating to the November proposals. A summary of the important changes affecting the taxation of company profits being discussed here is given in Table 6.1.

**Table 6.1. Summary of recent announcements**

<b>Prior to the July 1997 Budget</b>	
Main rate of corporation tax (CT)	33%
Small companies' rate of CT	23%
Rate of advance corporation tax (ACT) <sup>a1</sup>	20%
Mainstream corporation tax paid nine months after end of accounting year	
Rates of tax on dividend income <sup>b2</sup>	0%, 20%, 40%
Rate of dividend tax credit	20%
<b>Changes introduced in July 1997</b>	
<i>With immediate effect:</i>	
Main rate of corporation tax cut 2 percentage points to	31%
Small companies' rate cut 2 percentage points to	21%
Repayment of dividend tax credits to pension funds and certain companies abolished	
<i>From April 1999:</i>	
Rates of tax on dividend income	0%, 10%, 32.5%
Rate of dividend tax credit	10%
Foreign income dividends (FIDs) abolished	
<b>Pre-Budget Report</b>	
<i>Announced changes</i>	
Main rate of CT cut 1 percentage point from April 1999 to	30%
Abolition of ACT from April 1999	
<i>Proposed changes</i>	
New system of corporation tax payments, including:	
<ul style="list-style-type: none"> <li>• large companies to pay CT in equal quarterly instalments in months 7, 10, 13 and 16;</li> <li>• medium-sized companies to pay half of CT in quarterly instalments, half nine months after end of accounting year;</li> <li>• small companies to pay CT nine months after end of accounting year;</li> <li>• four-year transition period to new system;</li> <li>• 'shadow ACT' system to operate for recovery of surplus ACT.</li> </ul>	

<sup>a1</sup>The rate of ACT is 20% of the gross dividend, or 20/80ths of the net dividend.

<sup>b2</sup>The rates are given for tax-exempt shareholders, basic- and lower-rate shareholders and top-rate shareholders respectively.



## The July Budget

Table 6.1 sets out some of the elements of the taxation of company profits prior to the new government's first Budget last July, and the changes that were announced by Gordon Brown. Before July 1997, companies were liable to tax at a rate of 33% on their taxable profits (reduced to 23% for small companies), but two types of tax payment were made. If the company paid a dividend to shareholders out of its profits, advance corporation tax (ACT) was payable at a rate of 20/80ths of the actual dividend (known as the net or cash dividend), or 20% of the dividend plus the ACT paid (known as the grossed-up or gross dividend). The company had to pay ACT soon after it made the dividend payment, but that ACT could normally be subtracted from its total corporation tax (CT) liability when it came to settle up with the Inland Revenue later. The tax payment due after ACT had been subtracted, or offset, was known as mainstream corporation tax (MCT), and was usually paid nine months after the end of the company's accounting year.

Shareholders receiving a dividend also usually received a tax credit of equal value to the ACT paid by the company on that same dividend, to set against their individual income tax liability. For example, if a shareholder received a cash dividend of £1, ACT of 25p had already been paid by the company (20/80ths of £1). Hence a dividend tax credit of 20% of the gross dividend (the cash dividend *plus* the tax credit) was given to the shareholder, which is equivalent to the rate of tax on (gross) dividend income for basic- and lower-rate taxpayers. Therefore those shareholders owed no additional tax to the Inland Revenue. Higher-rate taxpayers had to pay an extra 25p in income tax, making their total tax payment 50p (40% of the gross dividend), while tax-exempt shareholders received a refund of 25p from the Inland Revenue.

The July Budget brought an immediate reduction in the main and small companies' rates of corporation tax by 2 percentage points, to 31% and 21% respectively, and in addition repayment of dividend tax credit was abolished for some tax-exempt shareholders, namely pension funds and other UK companies such as unit trusts.<sup>1</sup> From July 1997 onwards, this meant that instead of receiving £1.25 for every £1 of dividend income, pension funds receive £1. This reduction in the amount of tax being repaid to tax-exempt shareholders was estimated to raise revenue of £5.4 billion by 1999-00. By contrast, the cut in corporation tax rates cost revenue, of about £2.2 billion by 1999-00, so that there was a long-run increase in revenue from the immediate changes to the taxation of company profits of about £3 billion a year.

As is clear from Table 6.1, some measures were announced in the July Budget that will not take effect until April 1999. Two pre-announced measures were that the rate of the dividend tax credit would be reduced from 20% to 10% from April 1999, and that the rates of income tax on dividend income would fall to reflect this change. Hence basic- and lower-rate taxpayers would face a 10% tax rate on dividend income, while top-rate taxpayers would be charged

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<sup>1</sup>Charities receive compensation for the loss of income as a result of the abolition of these credits, compensation which will be phased out between 1999-00 and 2003-04.

32.5%, ensuring that the fall in the value of the tax credit will not lead to higher taxes on dividend income for taxpayers.<sup>2</sup>

The Chancellor also pre-announced the abolition of the Foreign Income Dividend (FID) scheme, with effect from April 1999. FIDs were originally introduced to reduce the problem of surplus ACT, which acts like an additional layer of tax for companies with a high level of earnings from abroad.<sup>3</sup> Companies paying FIDs receive repayment from the Inland Revenue of any surplus ACT created by that dividend, but shareholders do not receive a repayable credit with their dividend. Companies have been able to pay FIDs since 1994, but prior to July last year they were only taken up by a relatively small number of companies. In 1996, 69 companies paid FIDs, while for 1997 over 140 companies paid FIDs, more than three-quarters of which were paid after July. This is largely due to the fact that, before July, each £1 of ordinary dividend had been worth £1.25 in the hands of tax-exempt shareholders because of the repayable dividend tax credit, but after July it was worth only £1 — exactly the same amount as a FID.

The stated aim of the changes to the tax treatment of companies and their shareholders in the July Budget was to promote investment by companies. The withdrawal of payable tax credits from companies and pension funds was designed to remove a distortion in the tax system which made the distribution of profits, in the form of an ordinary dividend, to tax-exempt shareholders more valuable to those shareholders than their retention in the firm. To the extent that this distortion affected the ability of firms to finance their investment spending from internal sources, this change is helpful for firms. However, the fact that even after a reduction in the rate of corporation tax, revenue of £3 billion a year was raised by the package of measures makes it difficult to see how these changes as a whole promote company investment.

In addition, the overall tax situation for some companies after the July Budget was unsatisfactory, for the following reason. Although ACT was still in place, the main rationale for its existence (the fact that the Inland Revenue needed tax revenue to pay to tax-exempt shareholders their dividend tax credits) had been largely abolished. This left international companies based in the UK facing the prospect of continuing to pay ACT, while no longer being able to avoid paying surplus ACT after the abolition of FIDs in April 1999. The anomalous situation arose in which a UK-owned multinational would pay more tax than an almost-identical multinational owned outside the UK, leading to some reports of threats to relocate abroad by UK-based companies with high levels of foreign income.<sup>4</sup>

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<sup>2</sup>When the tax credit falls to 10%, the fact that the value of the gross dividend has fallen has no effect on lower- and basic-rate taxpayers if their tax rate on dividend income is also reduced to 10%, since they still receive £1 for every £1 in dividend income. Top-rate taxpayers will pay 36p tax on their gross dividend income of £1.11 when their tax rate is 32.5%, leaving after-tax income of 75p, exactly the same income after tax as the current situation (where they pay tax of 50p on a gross dividend of £1.25).

<sup>3</sup>Surplus ACT is explained and discussed further in the subsection 'Surplus ACT and its shadow'.

<sup>4</sup>See, for example, 'Foreign income dividends: minister responds to criticism', *Financial Times*, 8 July 1997. This anomaly arose because, although FIDs were to be abolished, the

## The Pre-Budget Report

The Chancellor's first Pre-Budget Statement contained both advance announcements of concrete measures, such as the abolition of ACT and another reduction in the main rate of corporation tax (to 30%), and the announcement that a 'modern system of corporation tax payments' was to be introduced. A consultative document sets out the proposed format of the new system, which is intended to provide a new, stable regime of tax payments for companies.<sup>5</sup> Although the long-run revenue effect of all the changes announced in the Pre-Budget Report will be to reduce company taxation by almost £2 billion a year, the short-run effect of the changes is to raise revenue of about £7 billion over a transitional period from 1999-00 to 2002-03. The measures are summarised briefly in the bottom panel of Table 6.1.

This section sets out the proposals in more detail, explaining how different types of company are to make tax payments and discussing some of the problems that might arise under the new system. It also describes the transition period, and the particular issues that arise from the fact that the transition is projected to raise a significant amount of additional revenue. The arrangements for surplus ACT are discussed, and finally the potential effects of the whole package of measures are examined.

### *The proposals*

The consultative document proposes a new payment system for large and medium-sized companies. Under the new system, ACT will no longer be paid and larger companies will be required to make quarterly tax payments, based on an estimate of their total taxable profits for the current year. This quarterly payment system, or payment on account, will bring forward large companies' tax payments, so that instalments will be paid in months 7, 10, 13 and 16 (counting from the start of the company's accounting year).<sup>6</sup> Table 6.2 gives an example of payments under the new system for a company whose year ends on 31 December 2003, which earns £2 million of taxable profits during that year. It will be liable for corporation tax of £600,000, and it pays out a final dividend of £1 million. The first column shows the months in which tax payments are due, the second shows how much should be paid at each date (a quarter of the final amount, £150,000).

The last column of the table shows the payments that would be made by the same company if the old system had remained intact (but using the new corporate tax rate of 30%). It is clear from this that the old system allowed companies to pay a significant part of the tax later, while the exact timing of the tax payments depended on the size and date of their dividend payments. Whereas previously companies only paid tax in advance of the MCT payment

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equivalent scheme for non-UK companies — the International Headquarter Companies scheme — was not.

<sup>5</sup>A modern system for corporation tax payments', Inland Revenue, November 1997.

<sup>6</sup>Hence if a company starts its accounts each year on 1 January, payments will be made in July, October (of that year), January and April (of the following year), while if it starts on 1 April, payments will be made in October of that year and January, April and July of the following year.

if and when they paid a dividend (or made some other payment that was treated as a distribution of income), under the new system the entire CT liability will be paid earlier. This acceleration of tax payments increases the effective tax rate faced by companies, i.e. the tax rate that takes into account the value of delaying tax payments increases because the delay has been reduced. This increase is broadly offset by the reduction in the CT rate that comes into effect with the new system.<sup>7</sup>

**Table 6.2. Example corporate tax payments for profits earned in 2003**

<i>Date</i>	<i>Tax payment</i>	
	New system	Old system
July 2003	£150,000	
October 2003	£150,000	
January 2004	£150,000	£250,000
April 2004	£150,000	
July 2004		
October 2004		£350,000
<b>Total</b>	<b>£600,000</b>	<b>£600,000</b>

Note: These are example tax payments for a company whose year ends on 31 December 2003, whose taxable profits for 2003 are £2 million, paying a final dividend of £1 million. The corporate tax rate is 30% for both systems. The payment made in January 2004 under the old system is ACT, with an implied rate of ACT of 20/80ths. The payment in October 2004 is MCT.

This system will only apply to large companies, defined as those earning at least £1.5 million of taxable profits a year. Small companies, with taxable profits of up to £300,000 a year, will be left out of the new system, and will pay all of their tax at the small companies' rate of 21% nine months after the end of their accounting year. Medium-sized companies, defined as those whose taxable profits fall in between these two limits, will pay half of their tax in quarterly instalments and the other half nine months after their accounting year end.<sup>8</sup>

The advantage of having three different regimes for companies is that small companies (which are the most numerous type but which provide only 8% of total CT revenue) will pay tax as before. The only difference is that any small companies that previously paid dividends, and hence ACT, gain from postponing that part of their tax bill. Large companies, which provide the lion's share of CT revenue but are less numerous, will make all of their payments by instalments, smoothing the government's receipt of that revenue over the fiscal year. In order to avoid the abrupt transition from small to large, from no payment by instalments to full, a half-way house is proposed for

<sup>7</sup>Whether the fall in the statutory tax rate fully offsets the effective increase caused by the changes in timing depends upon the timing of individual companies' dividend payments (and the rate of interest each company faces).

<sup>8</sup>The size band for medium-sized companies corresponds to those companies that receive relief from the step increase in tax rates that occurs for companies moving from the small to the main rate of CT.

medium-sized companies, just as medium-sized companies are currently given some relief from the step increase between the small companies' CT rate and the main rate.

There are some details of the new system that remain to be ironed out during the consultation period, one of which is whether taxable profit is the most sensible measure to determine the size of a company. Taxable profits tend to be more sensitive to changes in the business cycle than other measures of company size, such as the number of employees, and tend to indicate whether a company is profitable in a particular year rather than whether it is large or small. For example, British Gas published pre-tax profits of about £0.9 million and £1.1 million in 1993 and 1995 respectively, but made a pre-tax *loss* of almost £0.5 million in 1994. During the same period, the total number of employees fluctuated less dramatically, falling from 85,000 to 70,000. Hence companies whose taxable profits fluctuate year on year are likely to switch between different regimes more often than would be the case if a more stable measure had been selected.

This change in status might not be such a problem for those moving down the size scale, since these companies will move from paying part or all of their tax by instalments to paying all or part after a nine-month delay. Companies moving in the other direction will find themselves with some (or, in the case of the move from small to medium, all) of the *previous* year's tax payment to make, while making payments of their *current* year's liability. An example of the tax payments made by a company that qualifies as small, i.e. one earning just under £300,000 of taxable profits in the year 2003, is compared with the payments for a company defined as medium-sized in Table 6.3. This acceleration of the tax payments alters the effective tax rate faced by companies changing size, in particular increasing the effective tax rate as a company grows from small to medium, and medium to large. This creates a disincentive for companies with taxable profits approaching £300,000 a year or £1.5 million a year to increase their taxable profits, which might result in a clustering of firms just below the two thresholds.

**Table 6.3. Example tax payments for a small and a medium-sized company**

Date	Tax payment	
	Small company	Medium-sized company
Jul 2003		£7,875
Oct 2003		£7,875
Jan 2004		£7,875
Apr 2004		£7,875
July 2004		
Oct 2004	£63,000	£31,500
<b>Total</b>	<b>£63,000</b>	<b>£63,000</b>

Notes: The small company earns taxable profits of £299,999 in 2003, while the medium-sized company earns taxable profits of £300,000 in 2003. The tax payments for the small company are rounded up to the nearest £1. The tax rate used is 21% for both the small and the medium-sized company for simplicity.

In addition, companies whose final profits for the year are uncertain, and therefore difficult to predict half-way through the year, are likely to be concerned about the need to assess their size based on an estimate of the current year's taxable profits. Companies might find they have failed to make the appropriate tax payments (or have paid more than is necessary) if their profits turn out to be much higher (or lower) than expected. The Revenue proposes to operate a mechanism to repay instalments that are too large, with interest, and charge interest (at a higher rate) on late payments for instalments that are too low. Some of the difficulty involved in estimating tax payments could be reduced if each company's size classification were to be based on the previous year's profits (which are known), rather than the current year's (which are not). This would still leave companies that cannot accurately predict their final taxable profits for the year facing interest penalties, but would mean that companies at least make the bulk of their tax payments at the right time.

### *The transition period*

The new system will not be introduced immediately, but will be phased in over a four-year period, beginning after July 1999. This is in order to avoid any company having to pay almost two years' tax in one year. Nevertheless, the transition does involve spreading up to an additional year's tax across four years, a one-off tax increase over and above the amount companies would have paid in the period. This could cause a temporary cash-flow problem for some companies, which in turn might have a knock-on effect on investment.

The sequence of tax payments during the transition period is illustrated in Figure 6.1. This shows the proportion of total corporate tax paid at each instalment for a company whose year again ends on 31 December and that pays a dividend of about half its taxable profits at the end of 1998. This leads to 40% of its tax bill being paid in ACT at the beginning of 1999, leaving the other 60% to be settled in October that year.<sup>9</sup> In July 1999, the first payment of 15% of the tax bill for 1999 is due under the new quarterly system, followed by another 15% in October, when the mainstream corporation tax payment due on the previous year's tax is also being paid.<sup>10</sup> For the first year of transition, only 60% of the tax bill will be paid by instalments (four payments of 15%), with the remaining 40% being paid at the usual date for MCT payments, in October 2000. The portion paid quarterly gradually increases (to 18%, 22% and finally 25%), and the portion paid the following October gradually decreases (to 28%, 12% and finally zero), until a quarter of the final tax bill is paid at each instalment.<sup>11</sup>

Figure 6.1 shows that during 1999, the company pays 100% of its tax bill for 1998 (under the old system), and 30% of its tax bill for 1999. If the company were required to move straight to the new system, it would pay 50% of its 1999 tax bill in 1999 (in addition to all of the 1998 bill), and would pay the remaining 50% a full six months before it would otherwise have expected to.

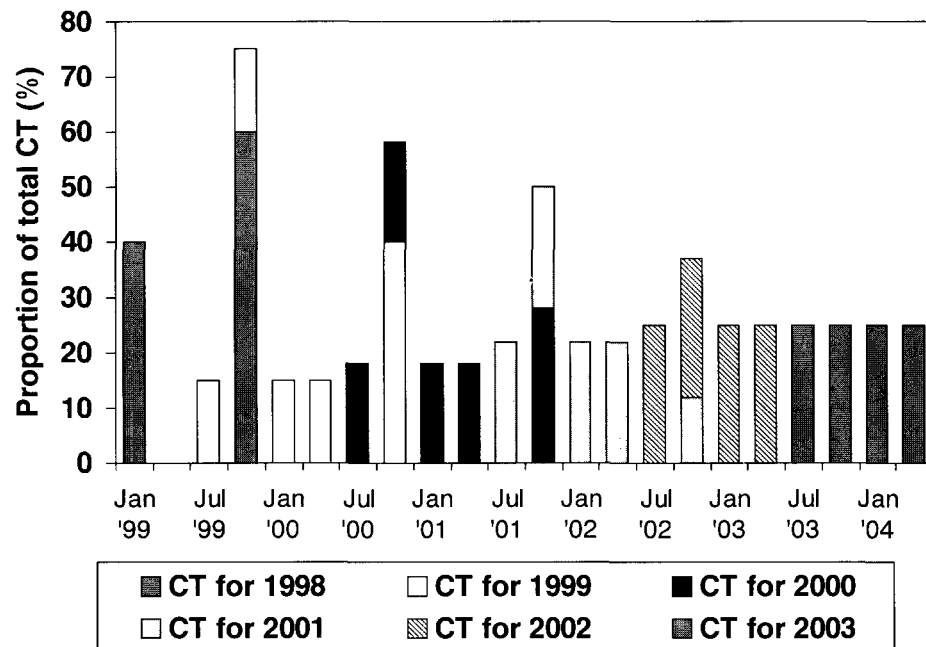
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<sup>9</sup>In 1996-97, about 40% of corporation tax revenue came from ACT, the rest from MCT.

<sup>10</sup>This is because the MCT is due nine months and a day after the accounting period finishes.

<sup>11</sup>The quarterly payments are halved for medium-sized companies.

Figure 6.1. Payments of corporation tax each quarter, 1999-2004



Notes: Example company with 31 December year-end, paying a final dividend of half its taxable profits for 1998, and making its first payment by instalment in July 1999.

This transition period will raise revenue of about £7 billion between 1999-00 and 2002-03, by the simple expedient of bringing forward part of the tax which would otherwise have been paid in the future. This is a one-off increase in tax payments which leads to a temporary reduction in cash flow of those companies affected by the change — large and medium-sized companies — at a point in the economic cycle when the economy is forecast to have slowed down. This fall in cash flows might have a negative effect on investment, if companies find it more expensive to raise funds from external sources to finance investment projects, and this increase in the cost makes some investment projects at the margins of profitability no longer profitable.

#### *Surplus ACT and its shadow*

Another aspect of the proposals is the operation of a 'shadow ACT' system. Although companies will no longer pay ACT when they make a dividend payment, the amount of ACT that would have been paid on that dividend (had ACT not been abolished) will be designated 'shadow ACT'. This is so that companies with a stock of surplus ACT can attempt to 'use up' that surplus (i.e. reduce their current tax payments) even after ACT is not being paid. The 'shadow ACT' system is designed to give companies the prospect of recovering some past surplus ACT, while at the same time 'preserving existing expectations' with regard to surplus ACT. In other words, companies will not be able to use up their stocks of surplus ACT any faster than they are able to under the current regime.

Surplus ACT arises when companies cannot deduct all of their ACT paid from their corporation tax owed in the current year, nor set it against tax payments made in previous years.<sup>12</sup> The current stock of surplus ACT is estimated by the Inland Revenue at about £7 billion, and has been built up by companies over time. It is a combination of both temporary and permanent, or structural, surplus ACT. Temporary surplus ACT tends to arise when a company's UK taxable profits are low relative to its dividend payments — for example, if profits have fallen and dividends have not been cut correspondingly. Companies in this position would expect to be able to recover their surplus ACT relatively quickly as profits recover, provided that they do not have other significant tax allowances to set against taxable profits (such as accumulated losses).

A surplus ACT position will be more persistent for a company paying dividends out of foreign earnings that have already borne tax overseas. The dividend payment would lead to a payment of ACT, which in the extreme might all be surplus ACT if there is no UK tax to pay after relief has been allowed for foreign taxes. This structural surplus ACT has been the source of more serious distortions in company behaviour, since it introduces an incentive for companies to shift costs overseas and to create profits in the UK, in order to reduce this additional layer of tax. These companies would not have expected to recover a significant amount of their stock of surplus ACT under the old regime, unless they purchased companies with high UK taxable profits or changed their dividend pay-out policy significantly. The shadow ACT regime is not intended to lead to the recovery of a greater proportion of the stock of permanent surplus ACT than would have occurred under the old regime. The advantage of the abolition of ACT for UK-based multinationals is that they will not be adding *new* surplus ACT to their current stocks, rather than providing them with any additional opportunity to recover the current stock. The loss of this surplus ACT will cost the government an estimated £1 billion a year.

It remains to be seen how long the 'shadow ACT' system will be left in place, since its existence reduces some of the compliance cost savings made from abolishing ACT itself. The shadow regime is unlikely to continue indefinitely, and might not last beyond the end of the transition period, when it could perhaps be argued that most temporary surpluses have been recovered and most structural surpluses would not have been recovered anyway.

### ***Concluding remarks***

Overall, the move to the quarterly payment system is a sensible one, particularly given the earlier changes made to company taxation in the Budget in July. Some of the details may need to be refined before it is actually put into operation, but this is clearly the blueprint for the shape of corporate tax payments for the foreseeable future. The combined changes announced last July and in the Pre-Budget Report lead to some reductions in the distortions of company investment decisions caused by the tax system, but at the same time

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<sup>12</sup>This happens because companies can only offset ACT of up to 20% of their UK taxable profits.



raise a significant amount of revenue from the corporate sector. During the transition to the new system, a one-off sum of about £7 billion is raised, while in the long run about £1 billion extra revenue will be raised each year. The reality of increases in the taxation of business source income contrasts strongly with assertions that the government is keen to encourage company investment, and continues a trend of seeking revenue from parts of the tax system that are least well understood by taxpayers.

## **6.2 International issues**

The proposed overhaul of the corporate tax system in the UK, described above, is designed to provide a new, stable environment for companies at the beginning of the new century. In this section, we consider what external pressures might be put on the UK tax system and whether any of these are likely to lead to further change in the corporate tax system. In particular, how is the increasing globalisation of corporate activity likely to affect UK tax policy? What impact will the package of measures recently agreed by the EU Committee chaired by Commissioner Mario Monti have on the UK? Will the payment of dividend tax credits to ISA holders raise any problems under the Treaty of Rome? These questions are considered in turn.

### **Globalisation of corporate activity**

The increasing globalisation of corporate activity is likely to put pressure on domestic tax systems in a number of ways. For example, the increasing power of the Internet and electronic trading means that firms can fragment their operations at much lower cost than previously and locate their operations in the most tax-efficient way.

An issue that has been raised in the EU, and will continue to be the subject of some debate, is the appropriate balance between different types of taxation. The Monti Committee, for example, has expressed concern about the balance between direct and indirect taxes and the different effects they may have on people's incentives to work, and about the balance between taxing personal versus corporate income. In the UK, there is likely to be some pressure from multinational firms to reform the way we tax foreign source income and for at least implicit harmonisation of some aspects of the tax base within the EU.

#### ***The balance between corporate income tax and other forms of taxation***

Many policymakers and commentators have expressed concern about the structure of taxation and whether we have the correct balance between direct and indirect taxes and between corporate and personal income taxes. For example, in recent EU communications on taxation, members of the Monti Committee expressed concern that tax competition between countries had led to lower taxes on profits and higher taxes on employment than we might otherwise like, and that this has had a negative impact on employment. The Monti Committee was concerned that higher labour taxes will result in lower employment and therefore argues that we should shift more of the burden of taxation onto consumption taxes and corporate income taxes.

Determining the optimal way of raising revenue — by taxing corporate income, personal income, or consumption — is a difficult issue. Consider the choice between direct and indirect taxes and what influence they have on people's work incentives. We have to remember that workers care about the real purchasing power of their wage, net of taxation. This can be written as

$$\frac{(\text{gross wage}) \times (1 - \text{personal income tax rate})}{(\text{price index}) \times (1 + \text{consumption tax rate})}$$

From this equation, it is clear to see that, aside from distributional issues, a change to either the personal income tax rate or the consumption tax rate will have a similar impact on the real purchasing power of the wage and thus a similar effect on workers' incentives.

What effect a change in either of these taxes will have on the number of hours worked is a different question. If the real purchasing power of a worker's earnings goes down, do they work more to make up the shortfall or work less because work is not paying as much? The evidence on this issue is inconclusive.

The impact of corporate income tax on workers' incentives is difficult to determine because we do not know who bears the final cost of a corporate income tax. Just because a tax is levied on the company does not mean that the company actually bears the cost of the tax. Either shareholders bear the burden of the tax through lower profits, or the cost of the tax is passed on to workers in the form of lower wages or to customers in the form of higher prices, or some combination of all three effects. We do not know how much of the burden of corporation tax falls on these different groups.<sup>13</sup>

It is not clear whether, or by how much, the tax burden has actually shifted from capital to labour in the EU countries. While the statutory tax rate on corporate income has fallen in many countries, the tax base has become larger at the same time. The net effect of these changes on the corporate tax burden is ambiguous. In many countries, these rate-reducing, base-broadening reforms have led to an increase in the tax bills faced by companies.<sup>14</sup> Corporate income taxes have clearly not fallen to zero, and the amount of revenue collected from corporate income taxes as a proportion of GDP has remained remarkably steady across the OECD over the past two decades,<sup>15</sup> although, as pointed out above, this does not tell us about who actually bears the cost of this tax.

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<sup>13</sup>In models where capital is assumed to be perfectly mobile, and the country is not big enough to influence the required rate of return (i.e. it is a price-taker on the world capital market), then the owners of capital will not bear the incidence of a corporate income tax. An increase in capital taxes will lead to an outflow of capital which will drive up the pre-tax rate of return within the country until the post-tax rate of return is again equal to that in other locations. This means that the incidence of the tax is not on the owners of mobile capital. Instead, as capital flows out of the country, the income of immobile factors of production declines, implying that the burden of capital taxation falls on these immobile factors.

<sup>14</sup>See L. Chennells and R. Griffith, *Taxing Profits in a Changing World*, IFS, September 1997, for a detailed analysis of recent tax changes in some of the major EU countries.

<sup>15</sup>See *Options for 1997: The Green Budget*, IFS Commentary no. 56, 1996, p. 92.

### *Taxation of foreign source income*

Now that debate over the taxation of dividends has largely been concluded by the abolition of ACT, the focus of multinational companies is likely to turn to the way foreign source income is treated. Currently when a parent company resident in the UK repatriates the profits of its foreign subsidiaries in the form of dividends, the UK Revenue taxes those dividends but grants a credit for the taxes that the subsidiaries have paid to other governments on their profits. The credit is calculated on a source-by-source basis. This means, for example, that if two subsidiaries each earn £100 of income in one of two foreign locations, one of which has a tax rate of 21% and the other a tax rate of 41%, the income taxed at 21% abroad would currently yield an additional tax liability in the UK of 10% (31% - 21%). The foreign income earned in the 41% tax rate country would not bring about any additional tax liability in the UK. However, the company would be left with an excess of 10% (41% - 31%) in credit that they would not be able to use.

Alternatives to a credit-by-source system are a world-wide credit system, an exemption system or a deduction system. In countries that operate a world-wide credit system (e.g. the US), firms are allowed to pool their income from different sources. In the example given above, this would mean that the company would be able to use the 10% excess as a credit against the 10% they owed the UK Revenue and end up owing no additional tax.<sup>16</sup> An exemption system simply exempts all foreign source income from taxation (in many cases subject to the condition that it has borne tax in the source country). Several countries, including France and Germany, exempt foreign source dividend income. Under a deduction system, the taxes paid abroad are deducted from taxable income.<sup>17</sup>

In a world with tax planning, companies may effectively turn a credit-by-source system into a world-wide credit system through operating mixer companies. Following on the example given above, the UK-based firm can channel both of its sources of foreign income through a subsidiary in a third country which operates an exemption system.

When the intermediary pays the dividends on to the UK, the underlying foreign tax on the two sources of dividends can be averaged to produce a 31% tax credit and eliminate any further UK tax liability. It may also be possible for companies with income from a low-tax location to buy in highly taxed foreign income from unrelated parties and mix it, thus using up their excess credit and reducing the total tax bill on the bought-in income. As the UK tax rate declines, excess foreign tax credit will increase, offering greater opportunities for such planning. Stopping this activity without affecting the taxation of ordinary foreign investment may be difficult. With the reduction in the UK corporate tax rate, the difference between an exemption system and a tax credit system diminishes. This may lead to some reconsideration of the current system.

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<sup>16</sup>In practice, these systems are far more complicated than in this simple example.

<sup>17</sup>No major country currently operates a deduction system for dividend income, although several operate a deduction system for interest income.

### ***Deductibility of interest payments***

An additional issue raised by the increasing amount of international investment is the treatment of interest payments on borrowing for foreign investment. Currently in the UK, firms can usually deduct all of their interest payments from taxable income, regardless of what the loan is used for. This means that the UK Revenue can end up providing relief on interest payments when there is no immediate tax liability from the income earned on that investment. For example, if a UK firm borrows money for an investment undertaken in Ireland, it is better for the firm to deduct the interest payments in the UK (since that deduction will be worth 31%) than in Ireland (where it will be worth 10%). In contrast to this, some countries only allow firms to deduct interest payments for borrowing that is invested domestically.

Whether or not we want to restrict the deduction of interest in this way is an issue that requires careful consideration. First of all, we need to be clear about how important this potential loophole is in terms of lost revenue. As our statutory tax rate declines, the benefit to firms from exploiting this loophole also declines. If tax rates are higher abroad, companies may prefer to borrow locally and deduct the financing costs at a higher effective tax rate. Second, we need to consider whether legislation that introduces distortions to firms' financing and investment decisions is desirable. In addition, enforcing compliance to this regime would be likely to incur some costs.

### ***Harmonisation of tax base***

As markets within the EU become more integrated, with the introduction of a common currency and greater approximation of accounting regulations, it will become increasingly difficult for countries to maintain major differences in their tax regimes. While the prospects for explicit harmonisation of either tax rate or tax bases within the EU seem slim, there is likely to be increasing pressure from companies for countries to tackle common issues, such as transfer pricing, relief for losses and compliance burdens. This may lead to some approximation of regimes, such as those on transfer pricing where, throughout the OECD, countries are effectively adopting a similar set of practices. Where differences between tax bases do exist, companies can often exploit these and this can put pressure on countries to bring their tax rules more closely in line.

## **EU package of measures**

In December, European Finance Ministers reached political agreement on a package of reforms proposed by Commissioner Monti. This package included measures relating to 'harmful' tax competition, the application of state aid rules, the taxation of savings and the taxation of cross-border interest and royalty payments. The only specific action taken was to agree the code of conduct. No specific action was taken on state aid rules, the taxation of savings and the taxation of cross-border interest and royalty payments, but the Commission resolved to carry the discussion forward.

### ***The code of conduct***

The agreed code of conduct is designed to tackle what the EU and the OECD have termed ‘harmful’ tax competition. Broadly speaking, the code is designed to stop countries from introducing tax regimes whose purpose is to exploit flaws or loopholes in another country’s tax system. An example is a country that sets up a tax-privileged regime that offers finance companies located there the opportunity to deduct the same financing costs in more than one jurisdiction or to keep profits outside the tax net altogether.

The Monti Committee’s proposals on direct taxation are unlikely to have any direct impact on the UK. In fact, it is unclear exactly which existing regimes within the EU they will apply to. The EU already has a set of rules in Articles 92–94 which prevent Member States giving unfair advantage to their own residents through state aids and can apply to special tax regimes. It is not yet clear what impact the code of conduct will have over and above these existing rules. The code will, however, inhibit the future development of new, favourable tax regimes.

### ***Taxation of interest and royalty payments***

The EU already operates the parent–subsidiary directive, which exempts from any withholding tax dividend payments made across borders between related companies. This could be extended in two ways — to include interest and royalty payments and to apply to payments between unrelated companies. Measures along these lines are not a Finance Bill matter as the next steps lie in agreeing a revised form of directive on the subject. In this respect, the initiative for a revised directive on royalty and interest payments currently lies with the UK during its Presidency of the EU.

### ***Payment to ISA holders***

The Inland Revenue’s consultative document, *The New Individual Savings Account*, proposes that a dividend tax credit of 10% will be payable on dividends from UK equities held within an ISA. This raises potential problems under the Treaty of Rome. UK investors will not receive a similar credit on dividends from foreign equities. Given that the Revenue believed that it would have been discriminatory to confine PEP investments to UK companies — which was the reason why PEPs encompassed European shares — it might be difficult for it to justify this subsidy given to investment in UK shares. Under our previous imputation system, the UK government could (and has tried in the European Court to) argue that the payment of a tax credit on dividends from UK equities arose as a structural feature of the UK tax system, but with the abolition of ACT it is less clear that it will be able to maintain this line of argument.

## **6.3 Taxing oil and gas**

The history of the fiscal regime for oil and gas in the UK is somewhat chequered. Broadly speaking, the regime has been characterised by an increase in the share of production taken in tax revenue as oil prices, and hence profitability, increased in the early to mid-1980s, followed by a strong

decrease in the late 1980s as oil prices fell. This decline levelled out in the early 1990s, to just over 20% of oil and gas domestic product (from its height of 60% in 1984-85). Revenue from taxes on oil and gas production has fallen from a high of £12 billion in 1984-85 (£21 billion in 1997-98 prices) to an estimated £4 billion for 1997-98, and oil prices are still low by comparison with the early 1980s. The government is currently carrying out a review of the taxation of oil and gas, following an announcement in the July Financial Statement and Budget Report that it wanted 'to ensure that an appropriate share of North Sea profits are being taxed while continuing to maintain a high level of oil industry interest in the future development of the UK's oil and gas reserves'. The UK has a low stock of reserves in relation to its current production, which explains the desire to maintain a healthy level of development of future production while attempting to ensure an appropriate tax take.

Since the first Oil Taxation Act of 1975, there have been three main layers of tax applied to companies earning profits extracting oil and gas from the North Sea. These are royalties (applied at 12.5% of production value for fields approved before April 1982), petroleum revenue tax (PRT, currently charged at 50% of profits, but not applied to new fields since 1993) and corporation tax (levied at 31% after deducting any liability to PRT). There have been many changes to this regime, particularly in the early 1980s, when additional taxes such as the gas levy, Supplementary Petroleum Duty and advance PRT were interwoven into the original structure. These additional taxes have gradually been whittled away, and as a result of a major overhaul in 1993, new fields are no longer liable to PRT. The new government is consulting over whether the system needs to be overhauled yet again.

There are two major considerations that the government should take into account when reaching a decision over the future tax regime for oil and gas production. The first is that the system should seek to tax the economic rents accruing to oil and gas, i.e. that return earned over and above the cost of financing the investment (the cost of capital). This is in order to avoid discouraging investment projects that only earn a return sufficient to cover the cost of capital before tax, and which become unprofitable after tax if the system does not give appropriate allowance for the cost of capital. Given the government's stated concern to maintain interest in the future development of UK reserves, it will have to take into account the possibility that some potential new projects become unprofitable under a regime that taxes the normal return to an investment, rather than just the economic rent.

The second major concern is that the tax structure should be relatively stable, to enable companies to make informed decisions about the potential development of new fields. Altering the current tax system to increase the revenue received from oilfields that are already established creates additional uncertainty about what changes might occur to the regime that will be in operation 10 or 20 years after the oil well has been sunk. For example, the government could choose to change the tax treatment of costs incurred in decommissioning oil platforms, which companies are legally required to carry out in an environmentally-friendly way. Most costs incurred in day-to-day business, such as employees' wages, can be deducted from taxable profits as they occur. The cost of breaking up an oil platform does not occur until the

business venture is effectively over, and so oil companies are currently allowed to carry back that expense to set against profits earned during the life of the field. This tax relief could be withdrawn, which would in effect be a one-off increase in the amount of tax oil companies pay, related to the cost of decommissioning oil platforms. It would be unlikely to raise a significant amount of extra revenue over the next five years, at the cost of an increase in the perceived risk attached to investing in new fields in the North Sea.

The unsettled nature of the oil and gas tax regime in the past suggests that both the government and the oil and gas industry would prefer to have a regime that works, in the sense of providing an appropriate share of the profits in tax revenue without introducing disincentives to new investment. If that can be achieved by this review, it will be welcome.

## 7. Taxation and the environment

Both the current and the previous governments have, on many occasions, pledged to investigate the possibility of using environmental taxes and charges. Gordon Brown's Pre-Budget Statement was no exception, declaring that 'in securing the long term, nothing is more important than the environment' and that the government would be 'looking at how the tax system can reflect our environmental objectives'. The principle of environmental taxation has long been established in economics and is a fairly simple idea. It is a solution to a wider class of problems known as 'externalities' which arise when consuming a good or carrying out an activity imposes costs on others (external costs) that are ignored in individual decisions. This will happen, for example, if individual decisions are governed solely by the market prices of goods and services and these prices do not reflect external costs. One solution is to impose a tax on the relevant goods or activities which reflects their environmental damage costs. In this chapter, we look at three areas where the government is considering introducing economic instruments or altering existing taxation for environmental purposes.

### 7.1 Transport

#### Road fuel duties

One tax increase we can be pretty sure of seeing in this Budget, and into the future, is an increase in excise duty on road fuels, such as petrol and diesel, since these increases have been pre-announced. In his July 1997 Budget speech, Gordon Brown said that 'Existing taxes, including our excise duties, must also advance the Government's environmental objectives' and pledged that 'in line with environmental objectives I have set down, road fuel duties will increase by an extra one per cent every year over and above the annual five per cent real rate of increase promised by the previous Government'.

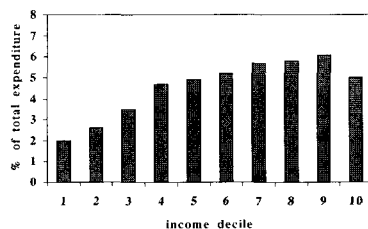
Road transport is associated with many environmental externalities and other types of social cost — for example, local noise and air pollution, carbon dioxide emissions which contribute to global warming, accidents and road damage costs. In principle, then, it might be desirable to tax these 'bads', but to do so we need to find a tax base that is well targeted towards the cost that is being addressed. For a fuel tax to be well targeted, the environmental cost would need to be linearly related to fuel use. For most of the external costs associated with road transport, this is not the case. For example, a tax to reduce congestion would need to be varied by time of day and place, whereas a fuel tax is paid whether the driver is in a congested city centre or driving along an isolated rural lane. The costs of local air pollution can also vary by time and location, and emissions of some pollutants per litre of fuel used can be reduced by fitting the vehicle with 'clean' equipment such as a catalytic converter, but, again, fuel taxes are paid regardless of time of day, place or equipment.



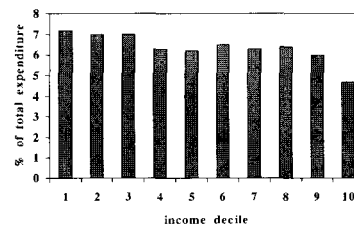
There is one of these costs that can be well addressed by a fuel tax, and that is the global warming costs of carbon dioxide emissions. Emissions of this gas are proportional to fuel use, their costs are largely independent of time or place of emission, and they cannot at present be technologically filtered out of emissions. Indeed, when the previous government first introduced the annual duty increases to road fuels, they were justified as being necessary to help us meet our Rio target for reductions to carbon dioxide emissions. But road transport is only responsible for around 20% of total carbon dioxide emissions in the UK, and we have to ask why these fairly substantial tax increases are being aimed at the transport sector, with no tax incentives being introduced for those who are responsible for the other 80% of emissions. One answer to this may be distributional effects — the introduction of VAT on domestic fuel was so unpopular because of its highly regressive nature. Of course, such distributional effects could be compensated for, but this needs to be made explicit at the time of introduction.

Figure 7.1 shows spending on road fuel as a percentage of total spending by income decile, and it is apparent from this that road fuel taxes do not have the same regressive effects overall as something like VAT on domestic fuel. This is because many poorer households do not own cars. If we look at spending across car-owners alone, though, a different pattern emerges, as can be seen in Figure 7.2. Spending on fuel as a proportion of total spending decreases somewhat as income increases, and the burden of increased road fuel taxes as a proportion of total spending will fall more heavily on the poor than the rich. The impact of a tax increase on households' welfare will also depend on how much they can respond and reduce their consumption of the taxed good. Rural dwellers may be much less able to respond than urban dwellers who have better access to public transport and whose amenities are less spatially dispersed. These issues point to the fact that, although road fuel taxes are not regressive overall, we may still be concerned about the effect they have on certain subsections of the population such as poor, rural dwellers. This does not mean that steps should not be taken to deal with any aspects associated with car use that are thought to raise problems, but that distributional effects that are felt to be unacceptable should be recognised and dealt with at the same time, for example by improving rural public transport.

**Figure 7.1. Spending on road fuels as a percentage of total spending across all households, by income decile**



**Figure 7.2. Spending on road fuels as a percentage of total spending across car-owners, by income decile**



Source: Family Expenditure Survey, 1995-96.

**Vehicle excise duty**

Vehicle excise duty (VED) is currently set at a uniform rate of £150 a year for all cars (except vintage cars, which are exempt). One policy reform that has frequently been mentioned in the past, and which could possibly be introduced in this Budget, is to restructure VED to favour less-polluting cars. A more detailed discussion of this policy proposal can be found in *Options for 1997: The Green Budget* (IFS Commentary no. 56, 1996).

**Taxation of company cars, free fuel and parking spaces**

Company cars and free fuel for private motoring are two benefits in kind that companies often provide for their employees. Some method is needed to assess this benefit for the payment of income tax and other taxes such as employer's National Insurance contributions which would otherwise be due on wage income. Cause for concern will arise where this assessment process means that cars and fuel tend to be an undertaxed benefit in kind so that there is an incentive for employers to provide these perks instead of normal income payments, or where the price perceived by employees is less than if these purchases were privately made.

**Taxation of company cars**

Owners of company cars pay income tax on 35% of the manufacturer's retail list price of a car less than four years old with a one-third reduction for cars more than four years old. The liability is reduced on cars with high business mileages: a one-third discount applies on mileages between 2,500 and 17,999, and mileages of 18,000 and above attract a two-thirds discount. The argument for this arrangement is that some people simply have to do a large amount of business mileage because of the nature of their job, and for these people a car is a necessary piece of equipment for carrying out their work (like a computer or a telephone) and therefore a company car is less of a private benefit in kind for them than for those people who do not have to travel in the course of work. Table 7.1 shows the distribution of business mileages within these bands across company cars and indicates that the majority of company cars falls into the middle band.

**Table 7.1. Distribution of business mileages**

	Business miles		
	0-2,499	2,500-17,999	18,000 and above
<b>Number of cars (thousands)</b>	170	950	530

Source: *Inland Revenue Statistics 1997*, HMSO.

When employers give their employees company cars as a benefit in kind, this needs to be assessed for tax purposes. We want the same tax to be paid as if the firm had given the employee wage income to buy an equivalent vehicle. A problem for this procedure arises when the same car is used for both business and private purposes. If the car is used only for private travel, then it is clear that all the benefit accrues to the employee and it is fairly obvious what the income equivalent would have to have been. The present system may capture this income equivalent fairly well, using the list price and depreciating the vehicle over several years. If the car is used only for business purposes, then

the firm should pay for business travel as it does any other input, which it would do by owning the vehicle, or renting vehicles, or paying for any alternative mode of transport.

The problem when the same car is used for both business and private purposes is that it is then an input to the firm's production and a private good. Since it must still be assessed for tax as a benefit in kind, we need to ask whether the private benefit is altered by how much the vehicle is used for business. The present system implies that a high business mileage devalues the private benefit of the car and thus the tax liability of the individual should be lowered. So in what way can we say that someone who travels many business miles a year enjoys the private use of his or her car less than someone who travels few business miles? One way in which this is certainly so is that a car with high mileage is worth less than an equivalent car with low mileage since usage depreciates the vehicle.<sup>1</sup> If the individual bought the car himself or herself and sold it at the end of the period, it would sell for less the more business miles that were travelled, all other things equal.

So, whilst it might be fair to say that the value of a company car to an employee who has to drive many business miles will become less than the value of an equivalent car that is not used so much for business, the present system has some obvious flaws. The tax deduction remains fixed over a wide range of business mileages and then jumps at a threshold value. Not only is this a poor reflection of reduction in value, but there is also a large incentive at the margins of these thresholds for people to increase business mileage in order to reduce tax liability. This may also encourage travelling by car for business rather than, say, travelling by rail, which seems to go against the government's general policy of trying to encourage people out of their cars and onto public transport. It seems desirable that any reform to the assessment of company car business miles should remove the mileage band system and that, if tax liability is reduced with business miles, it should be done in a more continuous way. If the tax reduction from a marginal mile truly reflected the reduction in the private benefit of the vehicle, then there would be no incentive to travel extra miles simply to reduce tax payments.

Of course, in practice, these principles might be difficult to implement. It could be argued that employees have little control over how much business travel they do, and that the bands are there for administrative simplicity. There could be some truth in this, but it is still the case that there are perverse incentives near the margins of the bands, and that administrative simplicity has to be weighed against an accurate reflection of costs. In addition, in designing any system, it has to be recognised that it is difficult to enforce the distinction between business and private miles, just as it is difficult to stop employers letting employees borrow a fleet car for the weekend as a perk. However, the present system is not immune to this problem, as there is an incentive to overstate true business mileage in order to reduce tax liability, and this will always be a problem if business miles are used as a basis for assessing tax liability.

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<sup>1</sup>It could also be said that constant business use by one household member precludes use of the car by other household members.

*Free fuel*

Around half of employees with company cars (some 800,000 people) receive free fuel for private motoring as a benefit in kind. Its cash equivalent for personal taxation purposes is taken to be a fixed amount depending on engine size. The same banded amounts are used to charge employers VAT on the free fuel they give for private motoring (only VAT on fuel used for business purposes can be reclaimed by companies). This flat tax liability irrespective of amount means that free fuel is certainly undertaxed above a certain level of consumption. Recipients of unrestricted free fuel perceive a zero marginal price for the good, as opposed to private purchases where each unit is charged at the market price. They are thus also insulated from the effects of tax increases on road fuels which may, for example, have been introduced with the aim of getting people to reduce their fuel consumption. Although it would be desirable to move to a system where employees pay tax on the actual value of fuel received, such a system might be very difficult to enforce, because of the incentive to claim that fuel was used for business and not private purposes.

*Parking spaces*

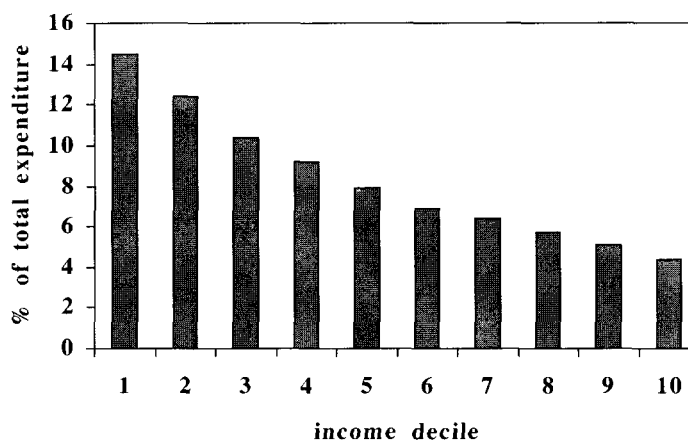
Many drivers who commute to work also receive free parking provided by their employer. Reforms to the provision of company parking spaces are often suggested as a means of helping to ease urban congestion. The provision of a company parking space is not at present assessed as a taxable benefit in kind and, as such, may represent a substantial tax-free perk. The fact that company parking is, at present, an untaxed perk obviously favours commuting by car over using alternative methods of transport. Companies are currently charged business rates on parking space, and it has also been suggested that the present system could be altered to apply a higher business rate to land used for this purpose.

## **7.2 Energy-saving materials**

In his Pre-Budget Briefing, the Chancellor announced that VAT on the installation of a range of energy-saving materials (such as wall, floor, loft and hot-water-tank insulation) under existing grant schemes for improving the energy efficiency of less-well-off households, would be cut from 17.5% to 5%. The decision was taken in the light of a review by Customs and Excise called *Helping the Less Well-Off Keep Warm*. The aim of this review was 'to identify the most effective and efficient ways of helping those on low incomes reduce the amount of fuel they need to keep warm'. The report stated that it had a dual focus of alleviating fuel poverty and reducing carbon dioxide emissions. There are at least three issues worth discussing here. First, if we think that a certain level of warmth is a basic need, then we are concerned if some people are too poor to afford this minimum level. Second, a warm home is produced using fuel and capital investments that alter the amount of fuel needed to produce warmth, and we want people to use the correct combination of these two inputs. Third, fuel use is associated with the emission of carbon dioxide, which creates a social cost in the form of potential climate change which may need to be addressed.

That there may be a case for assisting the poor in attaining adequate heating levels can be seen in Figure 7.3 showing spending on domestic fuel as a percentage of total expenditure by income decile. The figure shows that, on average, for the poorest income decile, spending on domestic fuel represents almost 15% of total expenditure, whereas for the richest decile, this figure is only 4.4%.

**Figure 7.3. Spending on domestic fuel as a percentage of total spending, by income decile**



Source: Family Expenditure Survey, 1995-96.

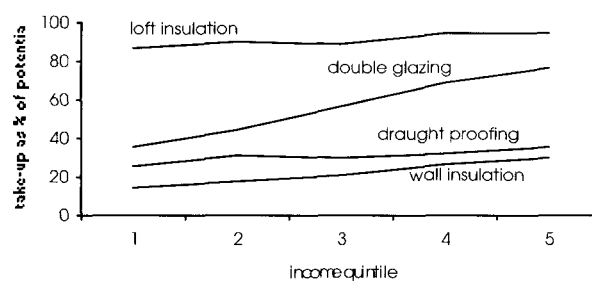
Energy-saving investments should be undertaken if their cost is less than the future expected fuel savings they generate. These incentives apply to everyone, and so, in theory, everyone should be producing the heat they can afford in the most cost-effective way possible. If this were the case, then, if the poor cannot afford a minimum standard of heating, it is likely they would need assistance with both fuel and insulation investments. Only helping them with insulation would lead to economically inefficient production of heat (i.e. too fuel-efficient). To argue that the poor require help in reducing the fuel they use to keep warm, we need to consider whether they face barriers in respect of undertaking energy-saving investments. There may be some reasons why this is the case. First, home insulation can involve large capital outlays requiring borrowing, and it is often thought that those with low incomes find it harder to obtain loans than the more wealthy. Second, many poorer households live in tenanted buildings and would not recoup the cost of their investment from the next tenants in the way that a home-owner selling on would. Landlords do not have the incentive to undertake insulation since it is not them but their tenants who receive the subsequent benefit of reduced fuel costs, and raising rents to reflect this may be problematic. Finally, the poor may be less well informed on the availability and effectiveness of energy-saving measures than the more wealthy.

The Customs and Excise review presents evidence showing there is some positive correlation between energy efficiency of dwellings and income.

However, care must be taken when interpreting such information as this could be partly to do with the fact that poor households do not use enough fuel to make energy-efficient investments worthwhile. Also, as the report points out, whilst this relationship is true on average, the poorest quintile contains more of the most-efficient as well as the least-efficient dwellings than any other quintile. This could be because a relatively high proportion of people in the lowest income decile live in local authority housing which can be well insulated and maintained.

Looking at whether the take-up of energy-saving measures varies with income may also give some indication of whether lower-income households seem more constrained in undertaking these investments than richer households. Figure 7.4 shows the ownership of four main types of insulation measures as a proportion of potential ownership by income decile. It shows that ownership of most energy efficiency measures only increases slightly with income, with the exception of double glazing where the increase is more marked. This might be because double glazing has more than one function and it may more commonly be installed for noise insulation than heat insulation purposes. The report calculates that installation of loft insulation, wall insulation and draught proofing in different types of dwelling would pay for themselves in terms of energy savings often within three or four years, with the time being rather longer for double glazing. Whilst Figure 7.4 indicates that there may be substantial numbers of households that do not own energy saving measures even though this would be cost-effective for them, these households only seem to be marginally more concentrated in the lower income quintiles than the higher ones. The fact that, on average, a strong relationship between income and ownership of many types of insulation does not seem to exist does not mean that we should not be concerned about some subsections of the lowest income groups. As mentioned previously, poorer private renters or owners may face problems that those living in local authority housing do not.

**Figure 7.4. Ownership of insulation measures by income quintile**



Source: English House Condition Survey, 1991.

VAT on energy-saving goods is currently charged at the full rate of 17.5%, but a lower rate of 5% applies to domestic fuel. Reducing the rate of VAT on installations under grant schemes is a way of making the money go further, but the fact that there are divergent rates of VAT on fuel and insulation materials raises issues for everyone, not just the poor. The different VAT rates tend to distort the price of insulation upwards compared with fuel, so relative prices are 'wrong' and people will tend to undertake too little energy-saving

investment. We would want everyone to face the correct relative prices, and then help the poor if they cannot afford enough heating. A reduction in the VAT rate on the purchase and installation of all energy-saving materials is not allowable under current European Union legislation. However, EU VAT legislation will allow a reduced rate to be applied for 'renovation and installation as part of a social policy', and so the Chancellor's proposals are allowable.

The final issue raised was that of carbon dioxide emissions. Respondents to the Customs and Excise report argued, if it was legally permitted, for a general reduction in the VAT rate applied to the purchase and installation of energy-saving materials on the basis that this would have a potentially positive impact in reducing carbon dioxide emissions. Whilst there is an argument for not having a greater VAT rate on energy-saving materials than on domestic fuel, the best way to tackle the cost of carbon dioxide emissions through the tax system is probably to put an environmental tax on fuel rather than to subsidise energy-saving materials. It is probably better for the price of fuel to reflect its full social costs including environmental damage than for both fuel and energy saving materials to be 'too cheap' compared with other goods. If burning fuel is associated with a social cost that people ignore, then this applies to all users for all purposes, not just domestic fuel use by the poor. Any steps to correct for this external cost should apply to all fuel users in all sectors. Taxation is one way of achieving this, since the problem is that the price of fuel does not reflect the environmental costs associated with its use. Price increases in fuel would also make energy-saving investment more attractive. The idea of a general carbon tax has been unpopular in the UK, though, both for its regressive nature and for its effect on the competitiveness of industry. Concentrating effort on increasing the fuel efficiency of very poor households' heating is a worthy aim, but is unlikely to cut aggregate carbon dioxide emissions significantly.

### **7.3 Water pollution**

A consultation paper entitled *Economic Instruments for Water Pollution*, published in November 1997 by the Department of Transport and the Environment, looked at the question of using fiscal instruments to control water pollution. The discussion is a good illustration of the potential benefits and problems associated with using taxes or other economic instruments to control pollution as opposed to the more conventional method of regulation.

Water pollution takes place in two distinct ways. Pollution from industry and sewage treatment works is known as *point source* pollution. This occurs from fixed individual sources such as outflow pipes, and is comparatively easy to identify and attribute to the relevant polluter. Pollution also arises from *diffuse sources* such as run-off from agricultural land from use of fertilisers and pesticides, and from waste disposal. These sources are less clearly defined than point sources and thus less easy to control — to control pollution directly, by whatever method, it is necessary to be able to both measure pollution levels and identify the polluter.

In principle, pollution abatement should take place if the benefit to society from reduced pollution exceeds (or, at the margin, is just equal to) the costs of abatement (investing in abatement equipment and so on). Abatement can be achieved either by regulatory measures or by using economic instruments. For example, a pollution tax gives the polluter the choice of paying the tax or undertaking abatement activities, whichever is the cheapest. Current arrangements for dealing with water pollution are regulatory. In the case of point source polluters, this mainly takes the form of the issue and enforcement of permits to effluent dischargers (determined on the basis of an assessment of environmental effects of the discharge), and the control of potentially polluting activities. In considering a move to a system of pollution charging, the relevant question is whether this will allow environmental objectives to be achieved more efficiently than the current arrangements.

The achievement of efficient pollution abatement is complicated when the environmental costs of a given pollutant can vary (in addition to the problem that these costs can be difficult to determine in the first place) and when the costs of abatement differ across polluters. Both these factors are an issue in the case of water pollution. Water pollution primarily imposes costs on water users. Waterways are used for recreational purposes, and water is abstracted for domestic, industrial and agricultural use. Pollution costs may therefore vary by location and season. Also, different pollutants have different environmental costs. The cost of pollution can depend on concentration as well as absolute amounts of the pollutant — discharges usually contain a great deal of water, and this affects river flow and hence the ability of the waterway to disperse pollution. Because of this, water abstracters may also influence pollution costs. Since dischargers are often also abstracters, this complicates the design of the appropriate tax. For example, if the tax were reduced for more dilute discharges, this would give a perverse incentive to increase abstraction in order to dilute discharge. This raises questions as to whether water abstraction (which is currently controlled by licensing) should face a separate tax. It is worth noting that all these issues are just as much of a problem for the design of an optimal regulatory policy as for an optimal tax.

It is on the abatement-cost side that economists often argue that economic instruments can have advantages over regulation. Regulators may not have access to information about polluters' abatement costs and so may have to set pollution rights with imperfect regard to costs. Discharge consents for water pollution are currently determined with no explicit consideration of abatement costs. This is inefficient when abatement costs differ across polluters, since some polluters may be undertaking abatement activities that could be performed more cheaply by others, and so the given level of pollution abatement will not be achieved in a cost-minimising way. An efficient pattern of abatement is automatically attained using taxation — polluters should undertake abatement activities only if the cost is less than the tax saving, so pollution should be reduced until the cost of further reduction is just equal to the tax on a further unit of pollution, and this is the case across all polluters. Thus the marginal cost of pollution abatement should be equalised across polluters, which in turn implies an efficient pattern of pollution reduction. In addition, since taxes are paid on each unit of discharge, they offer a continuing incentive to innovate cheaper methods of abatement and further reduce



pollution levels, whereas regulation only encourages minimum compliance. An objection to the use of pollution taxes is that the response to them can be rather uncertain and it is difficult to know what level of tax to set to achieve a certain outcome.

The report also considers using tradable permits (which would either be auctioned or be allocated in proportion to existing rights) as an alternative to taxes as a method of pollution control. Under taxation, a given level of abatement is ensured (if the response to the tax rate is estimated correctly), and polluters can undertake additional abatement if this is worth the tax saving to them. Under tradable permits, dischargers into a particular stretch of water would buy and sell rights within overall pollution limits. Tradable permits share the feature of taxes that efficient abatement is ensured (dischargers with low abatement costs sell to those with higher ones) with the difference that the authorities can set pollution levels with certainty. The disadvantage of tradable permits is that there need to be enough dischargers for an effective market for permits to emerge. When there are few dischargers, there is a danger that trade in permits will not be competitive, that they will be withheld from competitors to put them at a cost disadvantage, or that they will be used as a barrier to entry.

Since diffuse pollution is more difficult to monitor and attribute to a particular source than point pollution, it would not really be possible to use the same direct system of pollution taxes or permits for diffuse sources as proposed for dealing with point source pollution. If it is not clear whose land the polluted water has run off from, it is not possible to charge them directly. Diffuse pollution is currently controlled by regulation of the substances that fertilisers, pesticides and so on are allowed to contain. In a similar vein, it is suggested that, in the case of introducing fiscal pollution controls, product taxes could be levied on fertilisers, pesticides and so on, according to their contents. Whilst, from an efficiency point of view, it is better to charge for pollution directly, since it is not clear that the same product used under different circumstances will generate identical pollution costs, such 'second-best' instruments have to be considered when informational constraints prevent the use of ideal policies.

# 8. Indirect taxation

## 8.1 Alcohol taxes

Since 1987–88, real revenues from beer and spirits have declined, as is illustrated in Figure 8.1. For the most part, this has been due to long-term trends in the drinks market which has seen an increase in wine sales over the period at the expense of beer and spirits (between 1987–88 and 1996–97, the volume of beer released for consumption fell by 6% and the volume of spirits fell by 8% while wine volumes rose 47%). However, in the last two years, the rates of duty on alcoholic drinks have not kept pace with inflation. The rate on spirits has been reduced twice in the last two years whilst the rates on most other drinks remained frozen. This represented cuts in real terms of around 13 per cent for spirits and 5 per cent for beer and wine.

**Figure 8.1. Real alcohol revenues**



Note: The introduction of end product duty for beer in 1993–94 led to a reduction in receipts of approximately £200 million.

Source: *HM Customs and Excise Annual Report 1996–97*.

In the July Budget, the rates of excise duties on all alcoholic drinks were increased by 3 per cent, in line with inflation in order to maintain real revenues.<sup>1</sup> The rate of duty on spirits was raised from £18.99 to £19.56 per

<sup>1</sup>The revalorisation of excise duties is usually retrospective. In the past, November Budgets have used the annual inflation rate for the year to the previous September to uprate duties (for example, the November 1996 Budget used the annual inflation rate for the year September 1995 to September 1996). These changes were usually timetabled to take effect from the following January. March Budgets have used the previous December's annual figures and have usually taken effect immediately. The July 1997 Budget was a pseudo November Budget which used a forecast of the inflation rate for the year to September 1997 (of 3%) to uprate changes which took effect on 1 January 1998. Forecasts of future revenues made in the FSBR

litre of pure alcohol; the rate of duty on beer rose from £10.82 to £11.14 per litre of pure alcohol. The rate for still wine between 5.5% but not exceeding 15% alcohol by volume was increased from £187.24 to £192.86 per hectolitre. These changes were timetabled to take effect from 1 January 1998 and added approximately 19 pence on a 70cl bottle of spirits, 1 pence on a pint of beer and 4 pence on a 75cl bottle of table wine.

Table 8.1 shows the price effects of revalorisation using the quarterly inflation figure for October 1997 to December 1997 which was 0.31%. In the case of tobacco and road fuels, one-quarter of the pre-announced annual duty escalators (5% and 6% respectively) have also been added. The effect on the retail price index of these changes will be negligible.

**Table 8.1. The price effects of excise duty revalorisation**

	<i>Beer</i>	<i>Wine</i>	<i>Spirits</i>	<i>Cigarettes</i>	<i>Petrol 4-star</i>	<i>Unleaded Petrol</i>	<i>Derv fuel</i>
<b>Current</b>							
Duty	£0.25	£1.39	£5.48	£1.44	£0.45	£0.40	£0.40
VAT	£0.25	£0.46	£1.68	£0.50	£0.11	£0.10	£0.10
<i>Ad valorem</i>				£0.70			
Price	£1.65	£3.07	£11.25	£3.33	£0.73	£0.68	£0.69
<b>Revalorised</b>							
	@0.31%	@0.31%	@0.31%	@1.54%	@1.78%	@1.78%	@1.78%
Duty	£0.25	£1.39	£5.49	£1.46	£0.46	£0.41	£0.41
VAT	£0.25	£0.46	£1.68	£0.50	£0.11	£0.10	£0.10
<i>Ad valorem</i>				£0.71			
Price	£1.65	£3.08	£11.27	£3.37	£0.74	£0.69	£0.70

Notes: Typical prices are from *HM Customs and Excise Annual Report 1996-97*, January 1997, updated to September 1997 using RPI sub-indices. The prices are for a pint of bitter (3.9% abv) on licensed premises, a 75cl bottle of table wine in retail premises, a 70cl bottle of whisky (40% abv), a packet of 20 cigarettes, a litre of 4-star petrol, unleaded petrol and derv fuel (diesel). All numbers are rounded to the nearest penny.

The other likely source of lost revenues is cross-border shopping. HM Customs and Excise estimates that £770 million of revenue was being lost in

published at the time assumed that future Budgets would be announced on a similar basis as the July Budget (i.e. would use predicted year-to-September inflation rates to take effect in January the following year). This leaves the government with a number of options in March. It could continue with a calendar of duty changes consistent with November Budgets (in which case it would need to use a forecast of inflation in the year to September 1998 to update with effect from January 1999), or it could switch back to a March-to-March basis for revalorisation. If it is decided that duty changes should revert to a March timetable, then the main options would be either to use the quarterly inflation figure for the three months from October 1997 to December 1997, or to hold duties constant until March 1999 and then update by the October 1997 to December 1998 figure.

1996 through illegal importation of alcoholic drinks and tobacco products smuggled from other European Union members. Of this, £210 million was for alcoholic drinks. The drinks industry disputes these figures and suggests a figure of £420 million for revenue lost from alcohol.<sup>2</sup> The revenue lost from legitimate cross-border shopping<sup>3</sup> was estimated by HM Customs and Excise to be £235 million in 1996.

The amount evaded is substantial but nevertheless represents less than 5% of the annual total excise duty and VAT collected on alcohol and tobacco. The results from the HM Customs and Excise 1997 survey<sup>4</sup> on smuggling show that the evasion of tax (excise duty and VAT) through cross-Channel smuggling of alcohol and tobacco products has increased by about 5% since last year, broadly in line with the growth in nominal tax revenues.

In July last year, the government announced a review aimed at reducing alcohol and tobacco smuggling and fraud. The terms of reference of the review concentrated on the health and law and order issues raised by fraud, smuggling and cross-border shopping. It was also concerned with assessing the contribution to these issues of a wide range of factors such as the relaxation of border controls as a result of the Single Market, pricing structures, tax rates, transport costs, marketing, changing consumer tastes and competition law. In partnership with industry bodies, the government hoped to identify and cost possible measures to address these issues. The review was due to present options to Ministers by 31 December 1997. Whether the review was to consider the effects of cuts in UK domestic tax rates as a method of reducing smuggling by reducing the expected gains is not clear. It seems more likely that it will concentrate on policing issues as the domestic demands for alcohol and tobacco products are unlikely to be sufficiently price-responsive for cuts in domestic taxes to stimulate a large enough increase in domestic (duty-paid) demand to compensate for the reduced tax revenue per unit sold so as to result in an overall increase in revenues (even when revenues other than indirect taxes are allowed for).<sup>5</sup>

Other than the level of alcohol excise duties and the problem of maintaining revenues in the face of cross-border shopping, the other area of possible reform concerns the structure of duties. At present, partly for historical reasons, the structure of alcohol taxes is somewhat confused. Some alcoholic drinks (wines, cider and perry) are taxed by volume (for example, wine with between 5.5% and 15% alcohol by volume is taxed at £192.86 per hectolitre), while spirits are taxed on their alcoholic content (£19.56 per litre of pure alcohol). When looked at as a tax on alcohol content (surely the principal identifying feature of alcoholic drinks and also the reason why they are taxed in the first place), this begins to look like a very odd structure indeed. This is

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<sup>2</sup>Wine and Spirit Association, 25 September 1996.

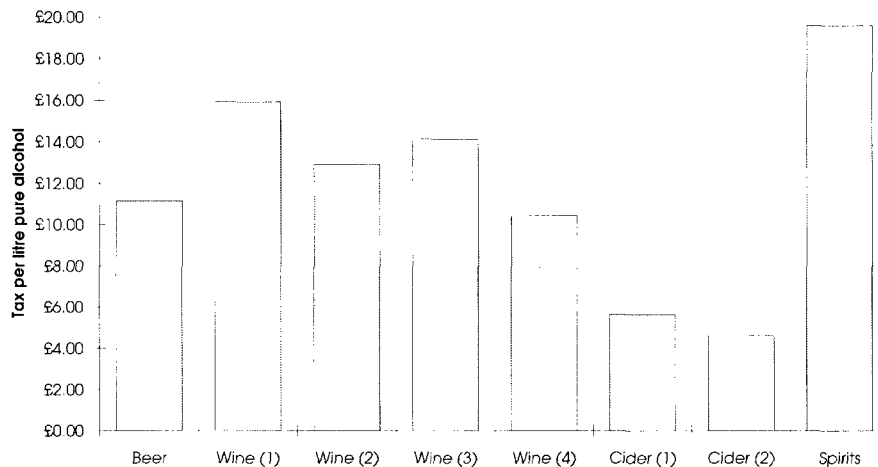
<sup>3</sup>These figures assume that 50% of alcoholic drink legally imported by individuals is for additional consumption.

<sup>4</sup>HM Customs and Excise, Press Release 26 September 1997.

<sup>5</sup>For further discussion, see I. Crawford and S. Tanner, *Alcohol Taxes and the Single Market*, IFS Commentary no. 47, 1995, and *Options for 1996: The Green Budget*, IFS Commentary no. 50, 1995.

illustrated in Figure 8.2. Beer is taxed at £11.14 per litre of pure alcohol, spirits are taxed at nearly twice this, while wine varies between £15.92 and £10.42. Cider and perry are taxed at very low rates in comparison. Nevertheless, the disparity in tax per unit of alcohol between spirits and other forms of alcohol has been reduced somewhat in recent Budgets by the nominal freezes in the excise duty on spirits.

**Figure 8.2. Rates of duty per litre of pure alcohol**



Notes: There are four tax bands for wine and two for cider and perry. For wines, these are above 1.2% to 4%, 4% to 5.5%, 5.5% to 15% and 15% to 22%; for cider and perry, the bands are 1.2% to 7.5% and 7.5% to 8.5%. The four wine and two cider and perry categories refer to alcoholic contents in the middle of these bands.

## 8.2 Tobacco duties and household smoking

Cigarettes are subject to the standard rate of VAT and additional excise duty. The excise duty has two components — a specific duty per cigarette and an *ad valorem* duty, with the rate being expressed as a percentage of the retail price (as opposed to the convention of expressing VAT as a percentage of pre-tax prices). The duty on other forms of tobacco, such as cigars and hand-rolling tobacco, is purely specific, and is levied per kilogram of the product.

Because it is levied as a percentage of price, the *ad valorem* component does not need updating to keep pace with inflation. Specific duty, however, is set at a given absolute amount and so its real value tends to get eroded over time, depending on the inflation rate. This means that specific duties need to be revalorised at each Budget to maintain their real value. In the November 1993 Budget, the then Chancellor, Kenneth Clarke, announced, in addition to revalorisation, a commitment to raise the *real* value of (*ad valorem* plus specific) duty on tobacco, on average, by at least 3% a year. The aim of this was to increase prices and thus encourage reductions in smoking levels and help meet the Health of the Nation targets. In his June 1997 Budget speech, Gordon Brown increased the commitment to real duty increases to 5% a year, and the first increases he announced took effect on 1 December 1997. Table 8.2 shows the history of tax increases on cigarettes over the last 10 years. The policy changes are clear — since Kenneth Clarke's announcement, tax as a

proportion of the total price of a packet of 20 cigarettes has risen steadily by around half a percentage point a year (with a double increase around Christmas 1994 as a result of the mini-Budget forced by the changes to VAT on household fuel).

**Table 8.2. Price of, and taxes on, a packet of 20 cigarettes**

Date of change	Typical price	<i>Ad valorem</i> Duty	Specific duty	Total tax	Real tax	Tax as % of final price
March 1987	152	21%	61.2	112.9	178.8	74.3
March 1988	155	21%	63.5	116.3	178.0	75.0
March 1989	161	21%	63.5	118.3	167.8	73.5
March 1990	175	21%	69.8	129.4	169.8	73.9
March 1991	202	21%	80.3	152.8	185.2	75.6
March 1992	221	21%	88.6	167.9	195.7	76.0
March 1993	237	20%	97.5	180.2	206.1	76.0
Nov. 1993	252	20%	104.7	192.6	216.7	76.4
Nov. 1994	264	20%	111.2	203.3	222.9	77.0
Jan. 1995	270	20%	115.3	209.5	228.6	77.6
Nov. 1995	289	20%	125.0	225.8	240.2	78.2
Nov. 1996	308	21%	131.9	242.5	251.0	78.7
Dec. 1997	333	21%	144.1	263.6	263.6	79.2

Source: Customs and Excise Annual Reports and Office for National Statistics.

Notes: Total tax is the sum of specific and *ad valorem* duties and VAT. VAT was 15% between 1983 and 1990, then was raised to 17.5% in the March 1991 Budget.

**Table 8.3. Tobacco tax revenues**

Year	Tobacco Tax revenue (excluding VAT) <i>£m (current prices)</i>	Tobacco Tax revenue (excluding VAT) <i>£m (March 97 prices)</i>	Total cigarettes released for domestic consumption <i>(Million)</i>
1987/88	4,800	7,400	96,748
1988/89	5,000	7,400	93,740
1989/90	5,000	7,000	100,004
1990/91	5,600	7,200	97,811
1991/92	6,300	7,400	93,496
1992/93	6,000	6,900	94,080
1993/94	6,500	7,200	74,514
1994/95	7,400	8,100	85,205
1995/96	7,300	7,700	80,833
1996/97	8,000	8,200	81,344
1997/98	8,300 <sup>a</sup>	8,300	<i>not available</i>

<sup>a</sup>Forecast in HM Treasury Pre-Budget Report, November 1997.

Source: HM Customs and Excise Annual Report 1996-97.

Taxes on tobacco have risen more quickly than inflation in the last decade. Total tax and VAT paid on a packet of 20 cigarettes is now 48% higher in real

terms than in 1987 and, as a consequence, revenue collected from tobacco taxes has also increased over the same period despite the number of smokers, and particularly the numbers of cigarettes smoked, falling. As Table 8.3 shows, the tax increase excluding VAT has also been large in absolute value. Over £3½ billion a year more revenue is now being collected from tobacco, which is an increase of 12% in real terms. As the table also shows, this increase has taken place over a period during which the aggregate number of cigarettes released for domestic consumption has been falling from around 100 billion to around 80 billion a year.

With the new government committing itself to even more substantial increases in duties in the future, the time seems right to consider the possible effects of tax-based policies in achieving the government's stated goals of reducing the number of smokers and the number of cigarettes smoked. The Health of the Nation targets, set in 1992, are for fewer than 20% of men and women to be smokers by the year 2000, and for a reduction in the number of cigarettes released for domestic consumption by 40% from their 1990 levels by the year 2000.

Some light can be shed on this issue by updating conventional econometric models of cigarette spending by households to include data up to 1996. This exercise yields strongly significant negative effects of cigarette prices on the number of cigarettes consumed by smokers but only weak evidence of a (negative) effect of price on the number of households containing at least one smoker.<sup>6</sup> But these estimates do not account for addiction. Over time, addicted smokers will die and be replaced in the population by younger households whose members might be less likely to have started smoking as a result of the higher prices. Hence the impact in the long run could be much greater than in the short run.

Without knowing the effects of addiction, it is difficult to evaluate the appropriateness of continued real increases in tobacco duties as a means of cutting smoking. We can be sure, however, that tax increases of the magnitude we have seen, and are likely to continue to see, in the UK cigarette market are potentially associated with very significant distributional effects. Whilst it is true that the distributional implications of the whole tax system must be evaluated together, with sustained large real increases in any one part of the system it is important to document the distributional implications of individual components as they change. If households (or, particularly, certain groups of households) are not cutting down their cigarette consumption quickly, and if compensating changes are not being introduced elsewhere in the tax and benefit system, then there will be overall distributional effects over time.

Figure 8.3 shows the proportion of households<sup>7</sup> reporting expenditures on tobacco in the 1987 and 1995 Family Expenditure Surveys, with the

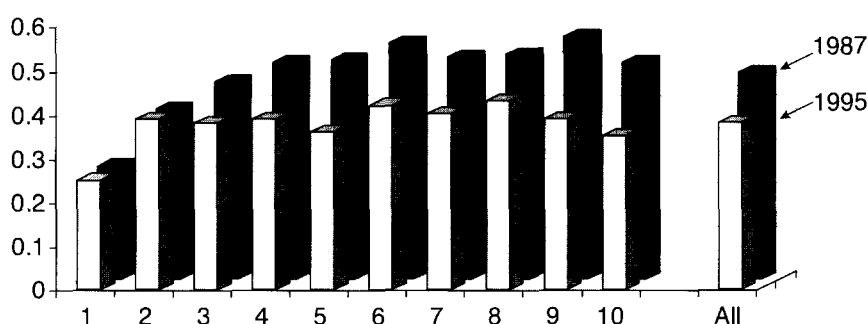
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<sup>6</sup>Over 150,000 observations from Family Expenditure Survey data over the period 1974-96 are used to update the estimates used in the IFS Simulation Program for Indirect Taxation (see P. Baker, S. McKay and E. Simmons, 'The simulation of indirect tax reforms: the IFS Simulation Program for Indirect Taxation', IFS Working Paper no. 90/11, 1990).

<sup>7</sup>The Health of the Nation targets relate to individuals but as long as the distribution of smokers across households has not been changing, the trends in household smoking habits should be indicative of the trends in individual smoking. Besides this, grouping individuals by

population divided into deciles of total expenditure excluding expenditure on housing. The most striking feature is the lack of any reduction in the number of households consuming tobacco in the bottom two deciles of the expenditure distribution. In contrast, all other expenditure groups have seen a substantial fall in the number of smoking households.<sup>8</sup> Looking at household budget shares on tobacco, the pattern across income deciles is remarkably similar between the two years, suggesting that, on average, smoking households have been cutting down the quantities of cigarettes smoked in the face of increasing prices at equal rates.

**Figure 8.3. Proportion of households with at least one smoker by decile of total household non-housing expenditure, 1987 and 1995**



*Source: Family Expenditure Survey data*

Figure 8.4 shows these expenditure shares on tobacco in 1995, by expenditure group. That is, for every decile of total expenditure, we compute average spending on tobacco as a proportion of total spending on all non-housing items, first for all households within the decile and then for just those containing a smoker. Since almost 80% of cigarette spending is tax (and this is broadly constant for all households), the regressive pattern of tobacco taxes follows clearly from this figure. Taking all households, the poorest groups spend, on average, around 5% of their spending on tobacco, whereas this number is less than 1% for the richest decile. The patterns for smokers within each expenditure decile are even more striking. Households in the bottom decile that spend anything on tobacco allocate, on average, 15.9% of their weekly non-housing spending to tobacco. This compares with 3.8% in the highest spending group.

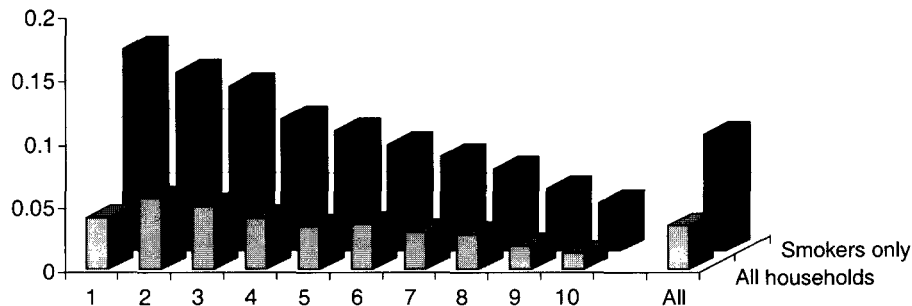
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income or spending levels has its own problems when households contain more than one member.

<sup>8</sup>Since the FES is not a panel, there may be some effects of changing composition in this result. However, the use of spending deciles rather than income should reduce the size of this problem, as would the use of the period 1987-95. This is confirmed by looking at the average age composition of each decile, which is very similar at either end of the period.



**Figure 8.4. Average tobacco spending as a proportion of total (non-housing) spending**  
by decile of total household non-housing expenditure, 1995



Source: 1995 FES

### 8.3 Duty-free

From June 1999, travellers within the EU will no longer be able to make duty-free purchases, although duty-free will be still available to those travelling to destinations outside the EU. Duty-free sales represent a significant amount of revenue for operators of ferry and air services (ECU 5.4 billion at the European level in 1995)<sup>9</sup>. Around half is accounted for by tobacco and alcohol products.

The change is likely to affect the UK (and Ireland) more than many other European countries. The International Duty-Free Confederation estimates that one-quarter of all intra-EU turnover is in the UK — about £1 billion a year. This is because duty-free has previously been available only on air and ferry services and unavailable to people travelling between EU countries by car and train (except on Le Shuttle services in the Channel Tunnel).

There is a clear economic rationale for abolishing duty-free purchases in a genuine single market. The opportunity for duty-free shopping generates a number of distortions:

- duty-free amounts to a subsidy to passenger travel by air and sea compared with travel by road and rail;
- the revenue from duty-free on air and ferry services may be used to cross-subsidise goods traffic by air and sea in relation to transport by road and rail;
- normal retail outlets are adversely affected compared with duty-free concessions.

<sup>9</sup>EU Commission DG XXI memo/97/82.

Some concern has been expressed over the possible effects that the end of duty-free might have on the revenue of air and ferry operators. It has been argued that this could result in a higher level of fares for air and ferry services, lower levels of employment or even the closure of certain air and ferry lines.

If fares do rise, they have only been at their previously lower level because of a subsidy from the general public (in the form of tax revenues from VAT and excise duty forgone) to air and ferry travellers. It has been estimated that the size of this subsidy was equal to ECU 2 billion in 1995.<sup>10</sup> If there is genuine concern that socially necessary air and sea services may be forced to close because of the end of duty-free, direct subsidies from the government would be more appropriate than the indirect subsidy provided by duty-free concessions.

It is not clear that the end of duty-free will have an adverse effect on employment, since it is likely that the money spent on duty-free will be spent in some other way. The final effect on employment will depend on the extent to which operators choose to convert duty-free facilities to tax-paid retail outlets, the extent to which normal retailers benefit from an increase in retail activity and how any additional tax revenue is spent by the government.

Air and ferry travellers will still be a captive market for tax-paid retail outlets and many airports in the US have large shopping facilities where goods are sold with sales taxes included. In the case of goods sold on board planes and ferries, there is still one issue yet to be resolved. Given that there are still large differentials in duties between EU countries, which rates will apply? There are two main options, neither of which is wholly satisfactory. One is to levy the duty rates of the country from which the journey starts, which would mean few people buying alcohol and tobacco on the way to France from the UK, for example. The other is to levy the duty rates of the country in which the retailer bought the product, although this would generate an inefficient waste of resources as UK producers exported their goods to French retail outlets to take advantage of lower rates of duty. Either way, the abolition of duty-free is likely to impose an administrative burden until there is genuine harmonisation of indirect tax rates within the EU.

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<sup>10</sup>EU Commission DG XXI memo/97/82.

## 9. Issues in public spending

Labour's election manifesto pledged that a Labour government would be 'wise spenders not big spenders' but would still increase the share of national resources devoted to education and increase spending on the NHS in real terms year on year. We examine whether these pledges are compatible with the government's commitment to stick to the spending plans inherited from the previous Conservative administration and whether these relatively modest pledges of extra cash are likely to be sufficient to satisfy public demands for improving front-line services or to stem the growth of alternative private spheres of provision. In the longer term, we assess whether it is possible to find additional resources for health and education by restraining or cutting other budgets, especially that of social security — in which the Labour manifesto pledged to 'break the spiral of escalating spending'. The success of the Comprehensive Spending Review, which aims 'to bring public spending programmes into line with [the government's] priorities and objectives',<sup>1</sup> may well have a major influence on whether the government can meet public expectations of improvements in health and education services without having to increase government spending as a proportion of GDP.

### 9.1 Spending control in the short run

Labour's election manifesto pledged that 'for the next two years, Labour will work within the departmental ceilings for spending already announced'. These spending plans were laid down in Kenneth Clarke's November 1996 Budget. Since the election, the Labour government has largely stuck to this pledge, although there has been a small reallocation of resources between the defence, publicly owned nuclear industry and health budgets and some additional spending outside of these departmental totals.

Overall, the stance of fiscal policy is set to tighten considerably during Labour's first two years in office, resulting from a combination of the tight control of spending planned by the Conservatives in the November 1996 Budget and some increase in taxation revenues.<sup>2</sup> Figure 9.1 shows how fiscal policy has been tightened since the public sector borrowing requirement (PSBR) peaked at over 7% of GDP in 1993-94. In the earlier years of the recovery, the main engine of fiscal tightening was the tax increases announced in the two 1993 Budgets. The ratio of general government receipts (GGR) to national income increased by 2 percentage points from 1993-94 to 1995-96. Over the last couple of years, the focus of fiscal tightening has largely shifted

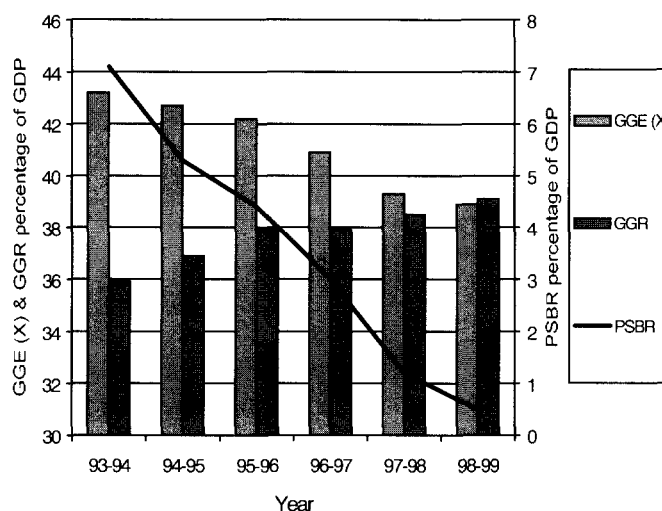
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<sup>1</sup>Chief Secretary to the Treasury, Alistair Darling MP, HM Treasury Press Release 89/97, 24 July 1997.

<sup>2</sup>In 1998-99, whilst the planned rise in control total spending is 0.12%, other spending items, such as debt interest, Welfare-to-Work spending and the absence of privatisation proceeds (which count as negative spending), mean the ratio of GGE to GDP only falls by 0.1 percentage points.

to public spending, with general government expenditure (GGE(X)) expected to fall to 38.9% of GDP by 1998-99.

**Figure 9.1: GGR and GGE(X) as a percentage of GDP, over time**



Note: The PSBR is not simply GGR - GGE(X) due to proceeds from privatisations, spending from the National Lottery and other accounting adjustments.

Source: HM Treasury Pre-Budget Report, November 1997, Tables B8 and B9.

We argued in Chapter 3 that gauging the stance of fiscal policy depended on an assessment of where the economy is at relative to trend. The Treasury estimates that a 1% increase in GDP relative to trend reduces GGE as a share of GDP by 0.5%.<sup>3</sup> This suggests that if there were an output gap (the difference between actual output and trend output) in the economy of 3% of GDP, spending would fall as a share of GDP by 1.5% as the economy returned to trend, without affecting the stance of fiscal policy. However, many commentators, including ourselves and the Treasury, now think that the output gap that opened up in the UK economy during the early 1990s probably closed in the latter half of 1996-97. This leaves little scope for further cuts in spending as a share of GDP without further tightening the stance of fiscal policy.

Since 1993, the government has used a measure of spending known as the control total as the basis for planning public expenditure. Table 9.1 shows that the control total covers around 85% of general government expenditure, and in the main excludes only the more cyclical elements of spending such as payments of interest on the national debt and cyclical social security.

<sup>3</sup>*Public Finances and the Cycle*, Treasury Occasional Paper no. 4, HM Treasury, September 1995.

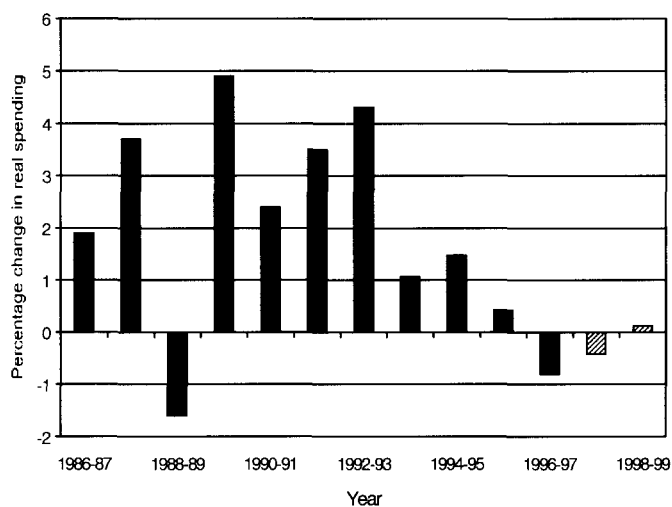
**Table 9.1. Composition of general government expenditure**

<i>Spending item</i>	<i>£ billion (1997-98)</i>	<i>£ billion (1998-99)</i>	<i>% GGE (1997-98)</i>
<b>Control total</b>	<b>£265.8</b>	<b>£273.5</b>	<b>83.4%</b>
Welfare-to-Work spending	£0.2	£1.2	0.1%
Local authority spending under Capital Receipts Initiative	£0.2	£0.7	0.1%
Cyclical social security	£12.7	£13.5	4.0%
Central government debt interest	£24.6	£25.0	7.7%
Accounting adjustments <sup>a</sup>	£11.1	£11.5	3.5%
<b>GGE(X)</b>	<b>£314.6</b>	<b>£325.4</b>	<b>98.7%</b>
Privatisation proceeds	-£2.0	£0.0	-0.6%
Other adjustments <sup>b</sup>	£6.1	£6.6	1.9%
<b>General government expenditure</b>	<b>£318.7</b>	<b>£332.1</b>	<b>100%</b>

<sup>a</sup>This includes the uplift on indexed linked gilts.

<sup>b</sup>This includes lottery financed spending and interest and dividend receipts.

Source: HM Treasury Pre-Budget Report, November 1997.

**Figure 9.2. Increases in the control total in real terms, over time**

Source: *Financial Statement and Budget Report, 1997-98*, Table 5A.1.

Annual real changes in the control total are shown in Figure 9.2. It is clear that the targeting of this measure of spending as the basis for the annual public expenditure round has been associated with much lower increases in control total spending than had been typical before. The plans for control total spending laid down in the November 1996 Budget were extremely tight, especially since they followed a real 0.75% cut in control total spending in 1996-97. Spending plans only allowed for a 0.2% real increase in spending for 1997-98 and 0.7% for 1998-99, far below the 1.5% average real increase in control total spending since 1985-86. In addition, these figures were based on a set of cash plans that assumed that the GDP deflator, the best measure of inflation for spending across the economy as a whole, would only be 2% in

each of the two years. In Gordon Brown's July 1997 Budget, the forecast for the GDP deflator was raised to 2.75%. This seems far more plausible, and is roughly in line with our own baseline macroeconomic forecasts. As a result, real control total spending is now set to fall by 0.4% this year, or be largely frozen in real terms if we take account of one-off items such as the proceeds of the sale of Ministry of Defence married quarters and the student loan book, both of which are counted as negative departmental expenditure. For 1998-99, Labour has committed to a limited 0.1% rise in spending in real terms.

The Labour government has also placed two additional items of spending outside of the control total — spending on the 'Welfare-to-Work' programme and additional housing investment paid for through the phased release of local authority capital receipts. There is no clear economic rationale for this approach, given neither item appears particularly cyclical. The rationale appears to be a political one, aimed at resolving the conflict between these two specific manifesto pledges on extra spending and the acceptance of the previous government's departmental spending plans. The amounts involved represent 0.2% of GGE in total this year, rising to 0.7% of GGE in 1998-99.

It is still too early to come to any firm conclusions as to whether the government will achieve its spending plans this year, but there is no convincing evidence to suggest otherwise. The spending plans allow spending to rise by 2% in cash terms, total net departmental outlays during the first eight months of 1997-98 are currently running 0.7% lower than in the corresponding months of 1996-97 in cash terms. It does not necessarily follow that this will translate into a significant underspend over the year as a whole, however, since the monthly pattern of departmental spending tends to be highly uneven from year to year. It also seems unlikely that the Treasury would be able to claw back cash that had already been allocated to departmental budgets.

### **Will the spending plans be achieved in 1998-99?**

Whilst the government seems unlikely to miss its spending plans this year, there are a number of potential obstacles to achieving another year of tight control of public spending in 1998-99. These include any increases in inflation or public sector pay demands, whether the contingency reserve is sufficient to meet unforeseen demands on the public purse and whether spending plans have politically unpalatable consequences for the delivery of front-line services.

#### ***Public sector pay***

Many public services are labour intensive, with wages and salaries accounting for a large proportion of annual running costs. Any sizeable increases in the public sector pay bill would therefore pose a major obstacle to keeping a tight control of spending in 1998-99. Despite the statement in the Labour Party's 1997 election manifesto that the government would 'resist unreasonable demands on the public purse, including any unreasonable public sector pay demands', public sector pay cannot be expected to fall behind private sector rates in the longer run.

In the October 1996 Green Budget, we concluded that the cash freeze on the public sector pay bill over the last few years had not generated pressure for a public sector wage explosion in 1997-98. Instead, the freeze in the overall wage bill had largely resulted from employment shedding rather than pay restraint. Public sector pay has fallen behind private sector rates and there is a danger that wage pressures could build up significantly next year.

The precise importance of labour costs on public spending is difficult to calculate. Official figures suggest that wages and salaries account for only 20% of GGE<sup>4</sup>. This is likely to be a significant underestimate since reforms such as the introduction of the NHS internal market mean that salaries for hospital staff are no longer counted as part of the wages bill.

Forecasts for earnings growth in 1998 currently range from 3.4% to 5.2%. Private sector earnings growth towards the top of this range, if matched within the public sector, could generate significant pressures on departmental budgets.<sup>5</sup> In his annual evidence to the pay review bodies, the Chief Secretary to the Treasury argued that pay recommendations should

*recognise the need for pay settlements to be affordable within Departments' existing spending plans, and to give this priority over other considerations. In addition, pay increases should be low next year so that departments can afford to maintain the delivery of services.*<sup>6</sup>

The consequences of large public sector pay awards would be particularly severe for those departments where labour costs make up a relatively high proportion of total spending such as health care and education. In 1996-97, wage costs made up around 45% of total education spending.<sup>7</sup> This implies that pay settlements 1% higher than predicted in November 1996 would add around £150 million to education spending next year. Due to classification changes in the further education sector in the early 1990s, previous estimates of labour costs representing closer to 60%<sup>8</sup> of the education budget may be a more reliable indicator of the budgetary pressures caused by higher-than-forecast public sector pay awards. On this basis, a 1% increase in pay would lead to an increase in education costs of over £200 million.

Public sector employment fell substantially during the 1980s and 1990s, as shown in Figure 9.3. Although much of the reduction in public sector employment occurred through privatisation and employment shedding, an additional portion has resulted from the contracting out of services such as refuse collection, security and cleaning. Any significant pressure on wages from this pool of 'contracted-out' workers will ultimately also have to be met from the public purse.

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<sup>4</sup>Source: *Public Expenditure Statistical Analysis 1997-98*, Table 3.6.

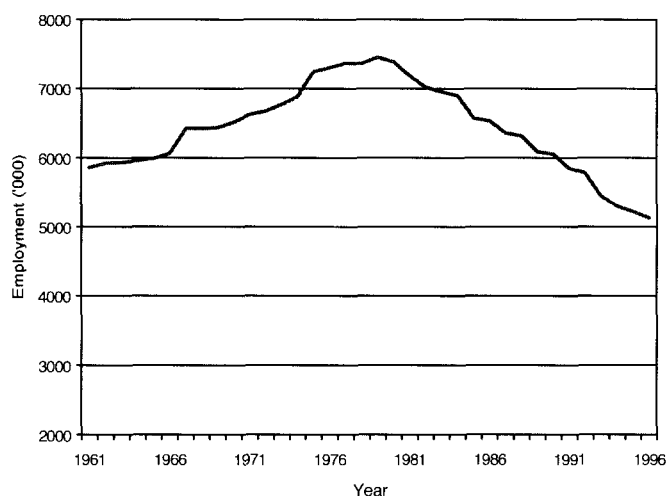
<sup>5</sup>Source: *Pay and Benefits Bulletin*, Industrial Relations Services, November 1997.

<sup>6</sup>Source: HM Treasury Press Release 107/97, 16 September 1997.

<sup>7</sup>Source: *United Kingdom National Accounts: The Blue Book*, 1997 edition. Table 9.4.

<sup>8</sup>Source: *United Kingdom National Accounts: The Blue Book*, 1997 edition. Table 9.4.

Figure 9.3. Public sector employment



Note: Excludes employment by universities (although polytechnics up until 1989 are included).

Source: *Economic Trends Annual Supplement 1997*, Table 3.8.

### *Inflationary pressures*

Any pick-up of inflationary pressures next year could pose an additional threat to achieving the government's targets in cash terms. Our central forecast is that slightly-higher-than-forecast inflation next year could lead to an overshoot of about £1 billion in cash terms if the government hits its target for control total spending in real terms. One particular concern is the impact of the higher-than-expected September 1997 RPI figure, which is used to index benefits such as the basic state pension and child benefit, on social security spending next year. This is estimated to increase spending by around £600 million<sup>9</sup> compared with the assumptions made in the November 1996 Budget.

It can be argued that indicators of inflation such as the retail price index or the GDP deflator exaggerate the pressure that exists on public sector budgets since these both exceed the general government final consumption deflator (GGFCD), which measures price rises within the public sector. This is currently running at around 1.5%,<sup>10</sup> more than 1 percentage point below the GDP deflator. However, this low rate of increase in inflation in the public sector is likely to largely reflect tight control of public sector pay. Indeed, the only other period in which this government inflation index has run below the rate of inflation in the economy as a whole for three consecutive years over the last few decades was from 1977 to 1979, just prior to a significant 'catch-up' in public sector pay sparked by the 1978-79 'winter of discontent'. In the

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<sup>9</sup>*Hansard*, 5 November 1997. Statement by Frank Field MP in response to question number 13426 asked by Malcolm Bruce MP.

<sup>10</sup>Source: Office for National Statistics, First Release, Quarterly National Accounts, 3<sup>rd</sup> quarter 1997, 22 December 1997.



longer run, it therefore seems unlikely that rates of inflation in the public sector can be held below those in the economy as a whole.

***Pressure on the contingency reserve***

The contingency reserve — the money that the government builds into the control total but not into departmental budgets — is intended to meet unforeseen demands on the public purse such as the costs of the BSE crisis. At the start of 1997–98, a contingency reserve of £2.5 billion was available for 1997–98 (0.9% of GGE), £5 billion for 1998–99 and £7.5 billion for 1999–00. At present, £1.4 billion is still available for the remainder of 1997–98. The July 1997 Budget allocated £2.2 billion of next year's reserve to health and education. Together with other minor adjustments, this leaves £2 billion (0.6% of GGE) of the contingency reserve available in 1998–99. Thus significant additional demands on the public purse could lead to significant pressures on spending, especially once we consider that in 1993–94, £4.5 billion of the control total (1.5% of GGE) was set aside for contingencies in the following year.<sup>11</sup>

We cannot rule out the possibility that the government will miss its spending target in 1998–99, whether because of higher-than-expected inflation, significant public sector pay awards or unforeseen circumstances exhausting the remaining contingency reserves. However, unless these pressures are particularly severe, the government is likely to achieve these spending plans in order to meet its manifesto commitment.

Perhaps the key issue for public spending next year will not be the volume of spending but the impact that such tight control of spending is likely to have on the delivery of front-line services, especially health care and education. Indeed, during 1997–98, the government has effectively conceded that the spending plans that it has inherited from the previous government were not entirely compatible with its aims for health care by making some, albeit relatively, small reallocations between budgets. As well as finding 'efficiency savings' of £30 million within the health budget, the government has also reallocated £270 million from the budgets for defence and the publicly owned nuclear industry to the NHS this year.<sup>12</sup> In addition to this, £1.2 billion of next year's contingency reserve has already been allocated to health and £1 billion to education. Whilst Frank Dobson, the Secretary of State for Health, maintains that 'the extra money is not just an elastoplast for the winter',<sup>13</sup> it is clear that, in practice, this short-term reallocation of resources is intended to reduce the impact of the government's commitment to achieving tight spending plans on the services that it has chosen to prioritise. The key issue will be whether these sums are sufficient to avoid politically unpalatable increases in hospital waiting-lists, class sizes or pressure on accident and emergency services. If not, then the government is going to need to find

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<sup>11</sup>Source: *Hansard*, 30 July 1997. Answer by Alistair Darling, Chief Secretary to the Treasury, to question asked by Malcolm Bruce MP.

<sup>12</sup>Source: Treasury Press Release 159/97, 10 December 1997.

<sup>13</sup>Source: Department of Health Press Release 97/242, 22 September 1997.

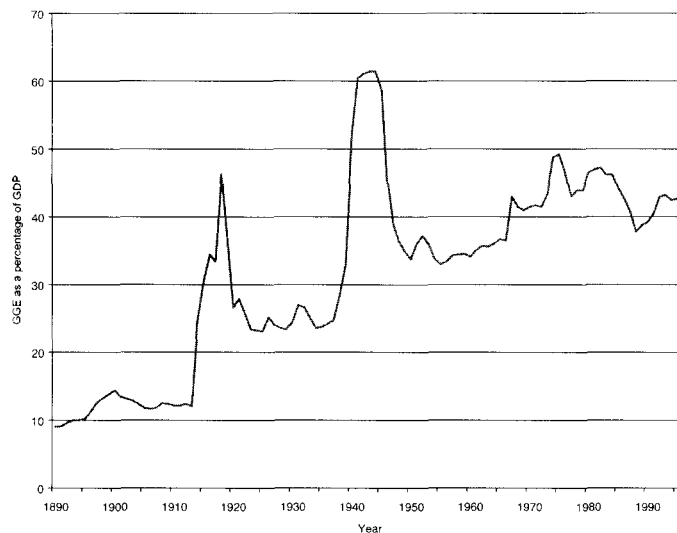
money from other budgets again next year in order to avoid the political cost of its very tight control of spending.

We now turn to examine the government's options for public spending over the full course of this parliament.

## 9.2 Longer-term issues in spending

Over the twentieth century, there has been a trend increase in the share of national income taken by public expenditure, as shown in Figure 9.4. Despite the obvious impact of cyclical influences and the two World Wars, this trend growth appears to have been remarkably resilient until the early 1980s. Since then, the growth of the public sector has been effectively halted, even if little progress has been made in 'rolling back the state'. By 1996-97, GGE was 41% of GDP, 3 percentage points lower than the Conservatives inherited in 1978-79. This, however, still represented growth in real terms averaging 1.9% over the 18 years.

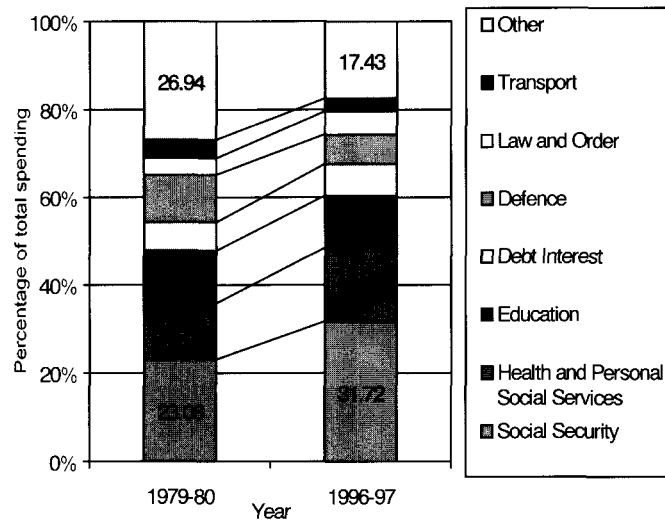
**Figure 9.4. General government expenditure as share of GDP, over time**



Source: *The Government's Expenditure Plans 1988-89 to 1990-91*, Table 5.5.

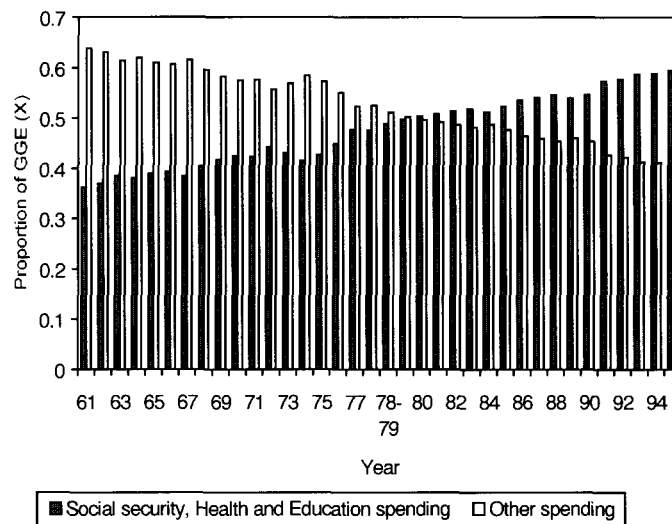
The composition of public expenditure has changed quite considerably over the last 18 years. Figure 9.5 shows the composition of general government expenditure in 1979-80 and 1996-97 by service. In 1996-97, the largest budgets were those for social security (£97.5 billion), health and social services (£51.2 billion) and education (£36.9 billion). Together these accounted for 60% of total expenditure. Expenditure on social security and health care increased substantially over the period, whilst the share of spending going on defence fell considerably from the middle of the period onwards.

**Figure 9.5. Composition of public spending**



Sources: *Public Expenditure Statistical Analysis 1994-95*, Table 1.2; *Public Expenditure Statistical Analysis 1997-98*, Table 3.2.

**Figure 9.6 : Share of Government spending on the ‘Big Three’**



Sources: *Public Expenditure Statistical Analysis*, various editions; *United Kingdom National Accounts: The Blue Book*, 1972 edition, Table 40; *United Kingdom National Accounts: The Blue Book*, 1979 edition, Table 9.4.

The growth in the importance of the ‘Big Three’ from 48% of total spending in 1979-80 to 60% in 1996-97 is in line with a much longer-term trend which is evident over several decades at least, as is shown in Figure 9.6. The increase in the proportion of government spending spent on the ‘Big Three’ since 1979 has been caused entirely by increases in the proportion spent on social security and health care, with the proportion spent on education actually falling slightly. However, between 1960 and 1975, all three spending areas had grown almost continuously as a proportion of total government spending.

Education, health care and provision for old age are classic examples of what economists call 'superior goods'. As incomes increase, people generally choose to spend a larger proportion of their budgets on these goods, whether consumed privately or provided for them by the state. Over time, rising incomes are likely to continue to fuel increased public expectations of what they can expect from public services. Since 1979, increases in the proportion of spending devoted to health and social security have been achieved by reducing the share allocated to other services, allowing the overall share of public spending in national income to decline slightly. It is unlikely that this trend will be able to continue indefinitely.

Over time, if growing demands for retirement pensions, health care and education services fail to be reflected in service improvements, individuals are likely to turn to the private sector. In many cases, individuals may simply supplement the provision of tax-financed services, either explicitly through user charges or implicitly through, for example, parents buying a larger share of school books. In other cases, greater numbers of individuals may choose to purchase pensions, health or education services directly from the private sector. Even substantial real increases in health care and education spending over the last 18 years have not prevented a significant expansion of private health and education provision, and we have seen large numbers of individuals choosing to 'opt out' of SERPS and into personal pension schemes since this option was first made available in 1988. Between 1979-80 and 1995-96, private health spending increased from 8.8% to 15% of total spending on health care.<sup>14</sup> Similarly, between 1978-79 and 1993-94, private spending on education increased from 8% to 15%.<sup>15</sup>

There is some evidence that deteriorations in the quality of public services are associated with greater use of private sector alternatives. Besley, Hall and Preston (1996)<sup>16</sup> found a link between increases in long-term waiting-lists and a greater take-up of private medical insurance. Whilst increased use of private sector medical or education services is likely to alleviate some of the pressure on public sector budgets in the short run, any large-scale expansion of private provision may ultimately serve to undermine public support for the Welfare State. Recent research has shown some link between the take-up of private medical insurance and a reduced willingness to pay higher taxes to fund increases in public spending on health.<sup>17</sup>

The government's election manifesto made specific pledges of devoting additional resources in real terms to health care and as a share of national income to education, alongside reductions in hospital waiting-lists and in primary class sizes. This seems to accord with public opinion. In the 1995

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<sup>14</sup>T. Burchardt, *Boundaries between Public and Private Welfare: A Typology and Map of Services*, Centre for Analysis of Social Exclusion, London School of Economics, 1997.

<sup>15</sup>See J. Hills, 'Funding the Welfare State', *Oxford Review of Economic Policy*, vol. 11, no. 3, p. 3, Table 1, 1995.

<sup>16</sup>T. Besley, J. Hall and I. Preston, *Private Health Insurance and the State of the NHS*, IFS Commentary no. 52, 1996.

<sup>17</sup>L. Brook, J. Hall and I. Preston, 'What drives support for higher public spending?', IFS Working Paper no. 97/16, 1997.

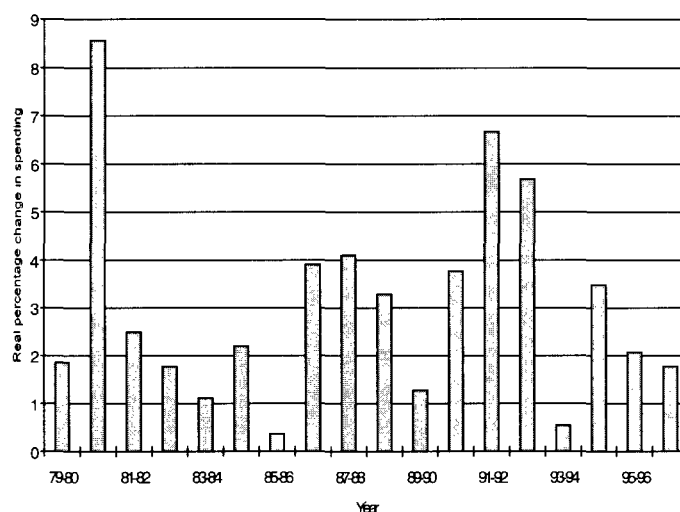
British Social Attitudes Survey, 49% of respondents chose health as their top priority for *extra* public spending, whilst 32% chose education.<sup>18</sup> In practice, it should be relatively easy for the government to deliver on its pledges of additional resources to health in particular, since a real increase in spending can be financed easily by GDP growth. However, such sums are unlikely to satisfy public demands for improvements to front-line public services. Indeed, substantial increases in real resources to the NHS are likely to be necessary to achieve the government's intended reduction in waiting-lists. In the longer term, the government will have to choose between tight control of health and education budgets and maintaining and improving service standards.

We now turn to examine the pressures facing the government over health and education spending, before considering whether more funds can be found for these two priority services from tight control of other departmental budgets.

### 9.3 Health

The government has pledged it will 'raise spending on the NHS in real terms every year', echoing a very similar pledge made by the Conservatives five years previously. In itself, this is far from ambitious. Figure 9.7 shows that the annualised trend increase in spending on health care in real terms was 3.1% during the last 18 years. Moreover, there was not a single year in which spending on health did not increase in real terms. The government's plans for health care face two sets of challenges: what the consequences are for the NHS of the tight spending plans this year and next, and whether the government's very modest pledge of extra resources for the NHS can be reconciled with either its pledge to reduce waiting-lists over the course of the parliament or increasing public demands on the NHS.

**Figure 9.7. Annual increases in spending on health, over time**



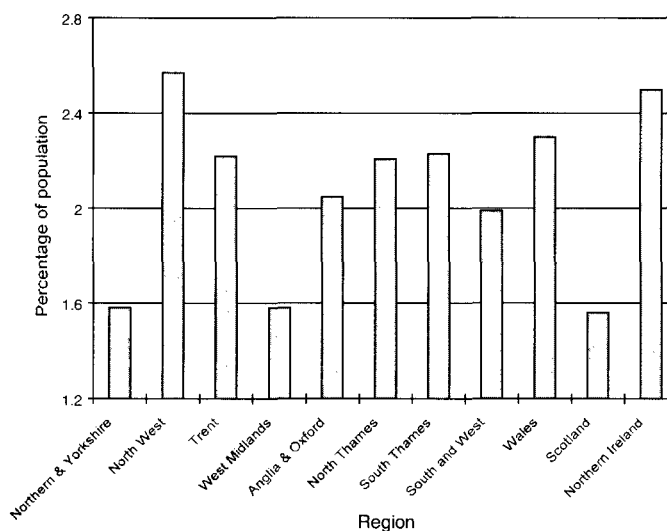
Sources: *Public Expenditure Statistical Analysis 1994-95*, Table 1.3; *Public Expenditure Statistical Analysis 1997-98*, Table 3.3.

<sup>18</sup>Source: R. Jowell et al., *British Social Attitudes: The 13<sup>th</sup> Report*, Gower, London: 1996.

In the short run, the outlook for health care is far from rosy. Fifty out of 100 local health authorities and 128 out of 429 hospital trusts are currently in deficit, and waiting-lists are increasing. At the end of September 1997, 1.2 million patients (2% of the population) were on the waiting-list for admission to an NHS hospital in England, up by 13.8% since the previous September. Of those, 4.8% have been on the waiting-list for one year or more, compared with 1.4% a year earlier.<sup>19</sup>

There is a considerable degree of variation between regions in both the proportion of the population who are on a waiting-list for treatment and the proportion of the population who have been on a waiting-list for more than a year. Figure 9.8 shows that whilst only 1.6% of the Scottish population were on a waiting-list, this increases to 2.6% in north-west England. Similarly, whilst 0.3% of those living in Northern Ireland have been on a waiting-list for more than 12 months, this is considerably larger than the 0.03% of the English population or the 0.02% of those living in Scotland. Waiting-lists are only one aspect of NHS performance, but they are often taken by the media and the public generally as a barometer of the performance of the NHS as a whole.

**Figure 9.8. Proportion of resident population on waiting-lists, by region**



Note: Figures are for September 1996 except Wales, where they refer to March 1997.  
Source: *Regional Trends 1997*, Tables 7.1 and 7.17.

Even after taking into account the £270 million in extra funds made available for health care this year by reducing the defence budget (£168 million) and the budget for the public sector nuclear industry (£102 million), real spending on health overall is only planned to grow by 1.2%, although an extra 2.1% will go to the NHS.<sup>20</sup> Since this additional £270 million is a one-off payment, it may lead to additional pressures on next year's budget. Adding in the allocation of £1.2 billion from the contingency reserve for next year leads to a planned real

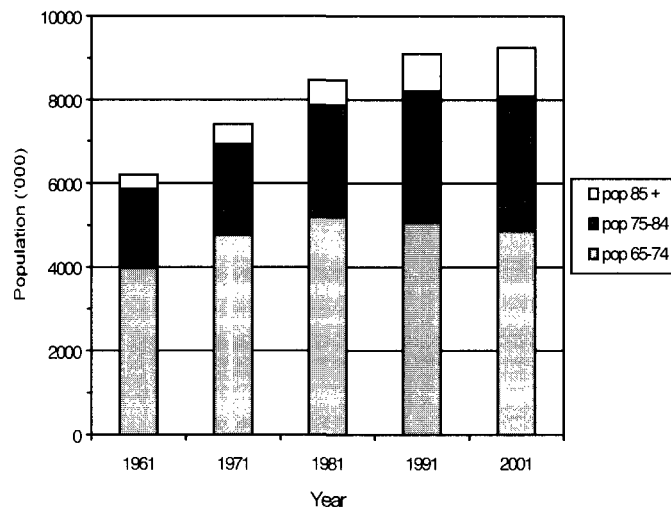
<sup>19</sup>Sources: Department of Health Press Release 97/349, 18 November 1997; Department of Health Press Release 96/358, 21 November 1996.

<sup>20</sup>Source: Department of Health Press Release 97/123, 14 October 1997.

increase in spending of 1.75%, with only an extra 1.5% going to the NHS.<sup>21</sup> These increases are considerably lower than the annual average 3.1% rise in health spending over the last 18 years, even given the extra £30 million of 'efficiency savings' announced by the Secretary of State for Health and the estimated long-run revenues of £100 million per year from charging insurance companies for the treatment of accident victims.<sup>22</sup> Thus, whilst hopefully averting a crisis in the short run, sticking to the former Conservative government's spending plans is unlikely to prove compatible with making progress on the manifesto commitment to reduce waiting times within the NHS.

In the longer run, demographic pressures caused by an ageing population, the costs of new technology and forms of treatment, and wage pressures resulting from the limited scope for productivity improvements will require significant increases in the health budget in real terms if further deterioration in the quality of provision relative to expectations, including waiting times, is to be avoided. Figure 9.9 shows how the elderly population, particularly those aged over 85, who place the most intensive demands on the NHS, has increased consistently over the last few decades. If we take increased use of private provision as a signal that the quality of health services provided by the NHS is failing to satisfy public demands, increases in spending larger than the 3.1% annual average since 1979 are likely to be required for the NHS to be truly 'safe in Labour's hands'.

**Figure 9.9. The growth of the elderly population, over time**



Source: *Annual Abstract of Statistics*, 1997 edition, Table 2.3.

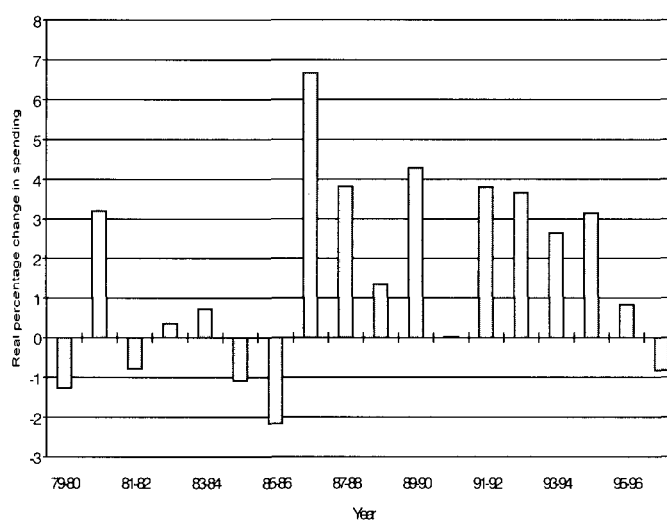
<sup>21</sup> Source: HM Treasury Press Release 159/97, 10 December 1997.

<sup>22</sup> Source: HM Treasury Press Release 123/97, 14 October 1997.

## 9.4 Education

It is likely to be more difficult for the government to achieve its manifesto pledges on education than those on health care for two reasons. First, Labour has pledged a considerably larger increase in resources to education over the course of this parliament than either it has pledged to health care or has been channelled into the education budget during the last 18 years. The 1997 Labour election manifesto stated that 'Education will be our number one priority, and we will increase the share of national income spent on education as we decrease it on the bills of social and economic failure'. Second, the responsibility for schools provision rests with local authorities and not central government. Local authorities receive an unhypothecated grant from central government which they are free to allocate to local services in accordance with their own priorities. Whilst central government clearly has considerable influence, it cannot directly guarantee that any additional resources are actually spent on education.

**Figure 9.10. Real increases in education spending, over time**



Sources: *Public Expenditure Statistical Analysis 1994-95*, Table 1.3; *Public Expenditure Statistical Analysis 1997-98*, Table 3.3.

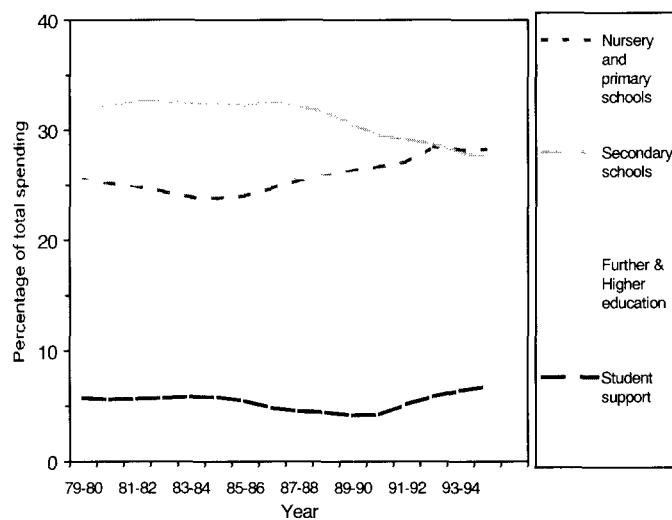
Over the last 18 years, increases in education spending have been lower, on average, than those for health care and also more volatile, with cuts in real spending occurring in five of the 18 years, as shown in Figure 9.10. Whilst the annualised average growth rate between 1979-80 and 1996-97 has been 1.6% per year — slightly lower than the growth in either GDP or GGE — annual growth was -0.1% until 1985-86, but has increased to 2.7% in the later period. As a result, the share of national income devoted to public spending on education fell from 5.4% in 1978-79 to 4.7% in 1985-86 and has since partially recovered to 4.9% in 1996-97. Restoring this share to that achieved under the final year of the last Labour government would require an additional



£3.8 billion of resources for education, representing a 10% increase in the education budget.<sup>23</sup>

Figure 9.11 shows the composition of education spending from 1979–80 to 1994–95. The proportion spent on each of the components has remained fairly constant over time, with only the share going to secondary schools changing significantly, from 32% in 1979–80 to 28% in 1994–95. Although not shown on the graph, the share spent on primary schools has also fallen, since nursery education now takes up a larger proportion of the total budget. Surprisingly, the share spent on higher education or student support has only risen by a small proportion over the period, despite the large increase in student numbers over the same period.

**Figure 9.11. Composition of education spending**



Note: In addition to spending on special schools, miscellaneous includes spending on items such as youth service and school transport. Spending on school welfare and school meals is not included as 'education' spending. Spending on student loans is included in student support from 1990–91 onwards.

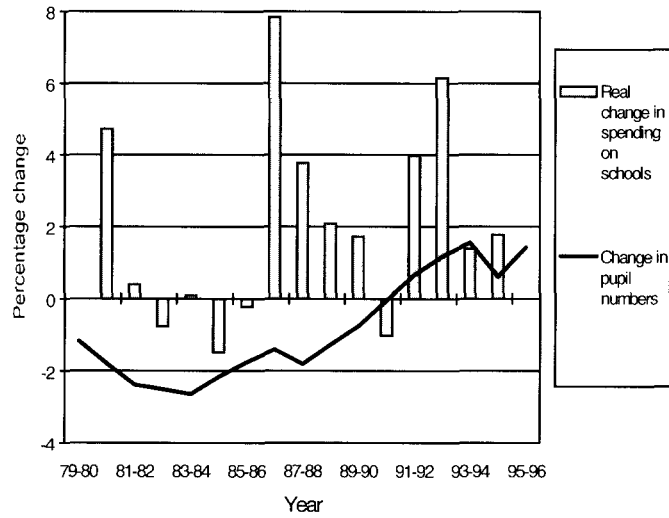
Sources: *Annual Abstract of Statistics*, 1992 and 1997, Table 3.2.

## Schools spending

Demographic pressures on school budgets are more variable than the pressures that an ageing population places on health budgets since the number of school-aged children both rises and falls over time. Figure 9.12 shows that changes in schools spending do not appear to be strongly related to changing pupil numbers at the primary and secondary level. Instead, the lower pupil numbers of the mid- to late 1980s appear to have had a larger impact on teacher-pupil ratios than on total spending, at both the primary and secondary level.

<sup>23</sup>If we take 1979–80 as the base, when education spending was 5.1% of GDP, the relevant figures are £1.5 billion and 4%.

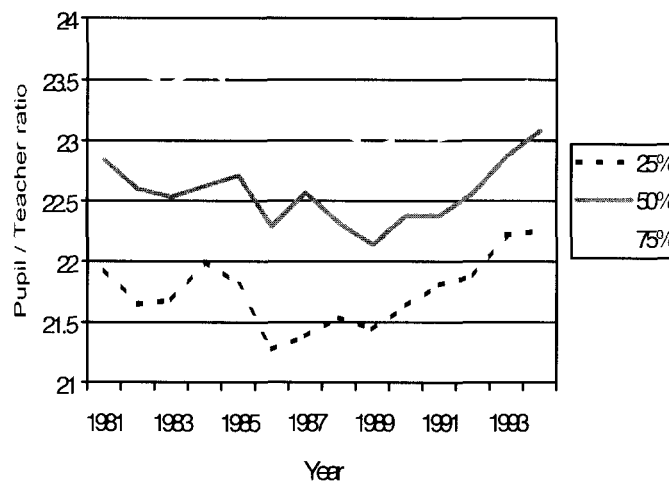
**Figure 9.12. Real increases in spending on schools, and pupil numbers, over time**



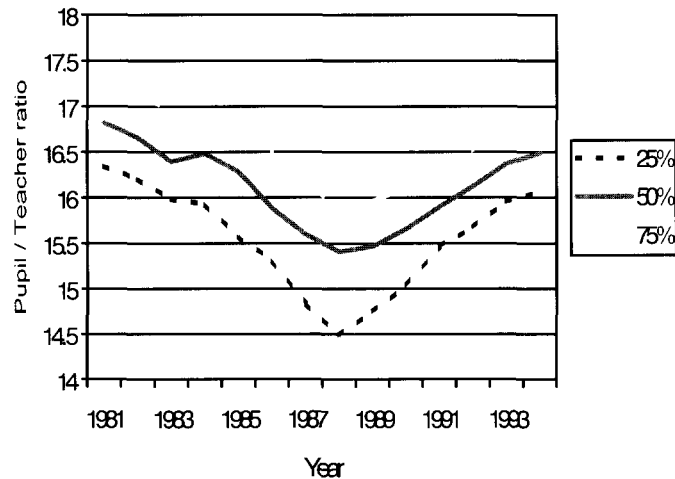
Sources: *Annual Abstract of Statistics*, 1990 and 1997, Tables 3.2 and 5.2.

Figures 9.13 and 9.14 show how the median, 25<sup>th</sup> and 75<sup>th</sup> percentiles for pupil-teacher ratios across local education authorities have changed over the period from 1981 to 1994 in primary and secondary schools respectively. Median pupil-teacher ratios across local education authorities are currently lower for secondary schools and higher for primary schools than they were at the start of the period, with reduced demographic pressures in the mid-1980s being reflected more in reductions in the ratio of pupils to teachers than in significant spending reductions.

**Figure 9.13. Median, 25<sup>th</sup> and 75<sup>th</sup> percentile of primary class sizes**



Source: IFS calculations.

Figure 9.14. Median, 25<sup>th</sup> and 75<sup>th</sup> percentile of secondary class sizes

Source: IFS calculations.

Labour's specific pledges on education include a reduction in class sizes at the primary level. This is planned to occur at a time when demographic trends are working against the government for most of the parliament, although numbers of primary pupils are likely to peak around the turn of the century.<sup>24</sup>

Pupil numbers at the secondary level, where costs per pupil average around £2,500, compared with around £1,800 at the primary stage,<sup>25</sup> are likely to rise much more rapidly over the next few years. Whilst not a specific manifesto pledge, there is likely to be a great deal of political pressure to stop secondary class sizes rising over the next few years. This will require extra resources for schools, over and above those required to reduce class sizes at the primary level.<sup>26</sup>

Capital spending on education is likely to receive a boost from two different sources over the next few years. First, extra capital spending of £100 million this year and £300 million next year will be financed from the windfall tax and therefore is outside of the control total. Over the course of this parliament, £1.3 billion of revenue from the windfall tax has been allocated to the 'new deal for schools'. In addition, last year saw the launch of a number of Pathfinder projects to extend the Private Finance Initiative (PFI) into the local schools sector, including the refurbishment of Pimlico School in London. PFI

<sup>24</sup>Source: Department for Education and Employment Departmental Report, March 1997, Figure 1.5.

<sup>25</sup>Source: Department for Education and Employment Departmental Report, March 1997, Annexe Bii and Annexe L.

<sup>26</sup>By 1995-96, there were 815,000 surplus places in primary and secondary schools, although there may be a considerable degree of geographic mismatch between current excess supply and future demand.

spending in the local authority sector is forecast to rise from £100 million in 1997-98 to £500 million in 1999-00.<sup>27</sup>

## **Funding for higher education**

Since 1979, there has been a massive expansion in the proportion of individuals who attend higher education from around one in eight people aged under 21 in 1979 to nearly one in three today. Even given demographic trends, this has led to a more than doubling of student numbers over the period.<sup>28</sup> The introduction of tuition fees from the start of the 1998-99 academic year may ease the burden on taxpayers in the future, but, since the maximum student loan will be expanded by the full £1,000 of the new tuition fee, public finances are unlikely to benefit until graduates under the new system start to repay their loans, and the scheme is unlikely to reach maturity for another five years after that.<sup>29</sup>

## **Education as a local service**

The government does not directly control most school spending since schools are the responsibility of 183 local education authorities. Local authorities are funded through an unhyphenated grant called revenue support grant so central government has no direct control over whether its policy objectives are met.<sup>30</sup>

In his July Budget, the Chancellor allocated £1 billion from next year's contingency reserve for education.<sup>31</sup> In England, these funds were added to the education standard spending assessment (SSA) — the total amount that central government believes local authorities need to spend to provide a 'standard' level of service. In all, the education SSA increased by a little over £1 billion (5.3%) between 1997-98 and 1998-99. Although the additional £835 million from the contingency reserve has been added to the block total of revenue support grant, it will only benefit those authorities responsible for providing education, although there is no compulsion on them to spend it on schools. Since local education authorities, in aggregate, spent over £600 million above SSA this year, local authorities could, in principle, only put around a half of the extra cash into their education budgets and still be spending at SSA.

Overall, total SSAs have increased by 3.8% for next year, but total external finance to local authorities (largely revenue support grant and the revenue

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<sup>27</sup>Source: *Financial Statement and Budget Report 1997-98*, HM Treasury, November 1996.

<sup>28</sup>Source: Department for Education and Employment Departmental Report. March 1997.

<sup>29</sup>Expenditure on student loans (net of repayments) scores against both GGE and the PSBR. As a result, the recent sale of some of the student loan book has increased net expenditure in future years, since there will be a lower level of repayments flowing to the exchequer.

<sup>30</sup>Central government clearly has a great deal of influence. On 2<sup>nd</sup> December 1997, the Secretary of State at the Department for Education and Employment wrote to council leaders making clear he would monitor whether they spent the additional resources on education. Departmental Press Release 405/97.

<sup>31</sup>Of which, £835 million was allocated to English local authorities. The remainder will form part of the unhyphenated block-grant given to the Scottish and Welsh Offices.

from the national non-domestic rate) only increased by 2.7%. As a result, council tax bills would rise by 7.1% if each local authority had spent and continued to spend at SSA. In practice, almost all local authorities spend above SSA, and a majority of authorities set their budgets at the centrally-determined cap (the maximum budget that central government would allow each authority to set). In the past, this has meant that some local authorities have been unable to respond to increased central provision for education, because they were already spending at cap. For 1997-98, for the first time, local authorities were allowed to 'passport' any increase in SSA for education to an increase in their capping limit, and for 1998-99, this provision has been extended to the financial arrangements for all local services.

## 9.5 Social security

Social security is the largest government spending programme, accounting for about £100 billion or 31% of public spending. It has grown quickly over the last 18 years, accounting for 85% more real resources and growing from 10.1% of GDP in 1979 to 12.5% in 1997-98. So it is no wonder that the government has targeted the 'bills of social and economic failure' — or, in other words, the social security budget — as the primary area to derive resources for increased health and education spending, although it must be stressed that the rate of growth in the social security budget has fallen considerably over the last few years. Social security spending has also fallen as a share of GDP: in 1993, social security spending as a share of GDP stood at 13.6%, so that fears that the welfare budget is spiralling out of control are unfounded.

The government has repeatedly stressed two key aims for the reform of social security:

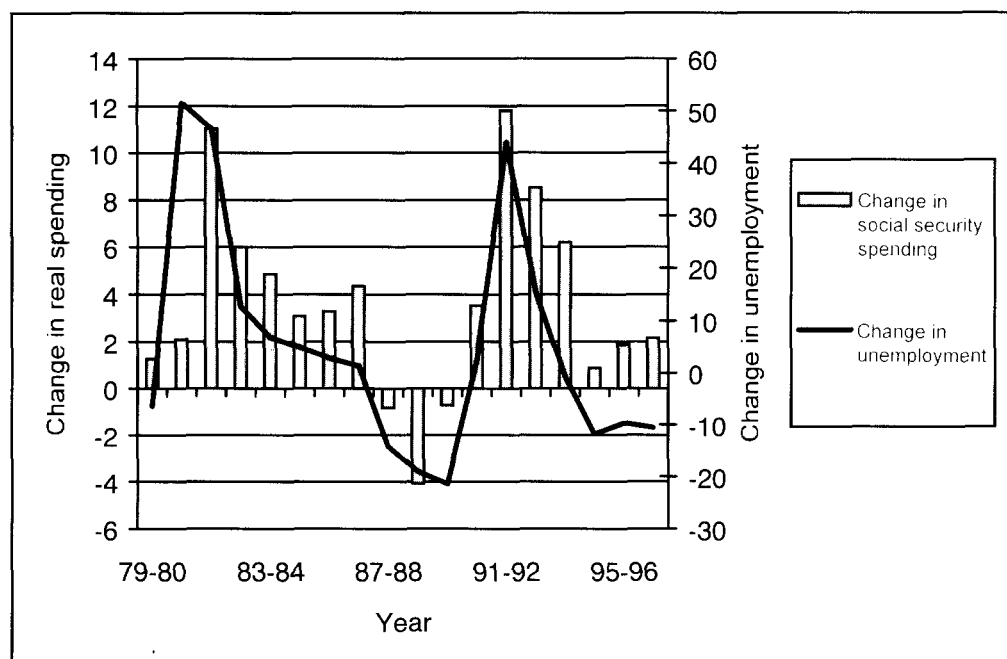
- *To reduce dependency and cut the costs of social failure.* The initiatives under the 'new deal' for the unemployed and lone parents have been designed to attempt to achieve this by encouraging greater labour-force participation. Reviews within government are currently looking at reducing social security expenditure in other areas.
- *To protect those in need.* The government has repeatedly stressed that it aims to provide a modern Welfare State that protects and potentially increases support for those in need.

It is not straightforward to reconcile cutting costs with protecting those in need. Unless the government can remove people from welfare and put them to work without involving substantial exchequer cost, or can easily identify and remove benefits from those who are not in need, it cannot reconcile these two aims. And, in office, it is not finding it easy.

In theory, the most obvious means of reducing social security expenditure without affecting those in need is to remove payment from those not entitled to help. Identifying and eliminating fraud is an important aspect of managing any social security system, but there is little evidence that the previous government was idle and allowed substantial fraud to build up that is easy to eliminate. Estimates of the extent of fraud vary considerably but in few instances are they

large enough to suggest that the government's wider aims can be achieved simply by reducing fraud. The rate of housing benefit fraud (arguably the benefit with the highest rate of fraud) is estimated to be 8% of expenditure.<sup>32</sup> Reducing this rate would not be costless. So substantial savings from reduced fraud in the system, whilst very welcome, are unlikely to provide the resources either to secure greater social protection for those most in need or for substantial increases in the budgets of other departments.

**Figure 9.15. Real increases in social security expenditure and trends in unemployment, over time**



Sources: *Public Expenditure Statistical Analysis 1994-95*, Table 1.3; *Public Expenditure Statistical Analysis 1997-98*, Table 3.3. Seasonally adjusted unemployment from *Economic Trends Annual Supplement 1997*, Table 3.2.

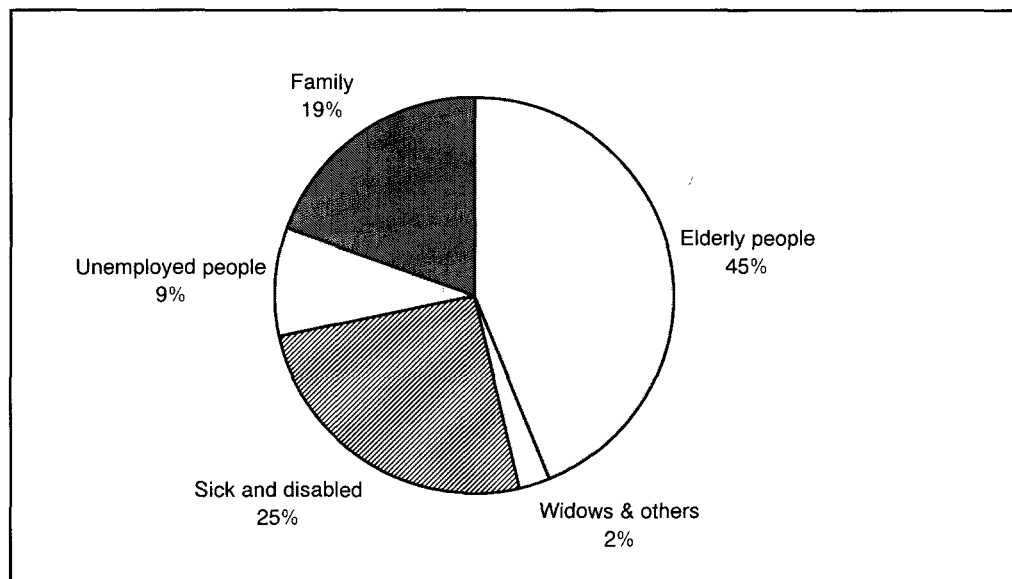
A second way to reduce social security costs whilst protecting those in need is to get those dependent on benefit into work. Welfare-to-Work measures will be introduced nation-wide in 1998-99 under the umbrella of the 'new deal'. Most of the Welfare-to-Work spending under the new deal was earmarked in the July Budget for the new deal for young people (85%) with the remainder allocated to older long-term unemployed and lone parents. Figure 9.15 clearly shows that the growth of social security expenditure has been strongly related to the change in unemployment, and therefore successful macroeconomic policy is vital to ensuring low social security bills. By this same token, permanently higher overall employment resulting from the new deal could also reduce social security expenditure, but it remains to be seen how effective the new deal will be in increasing employment. But if it is effective, there is no guarantee that the reduced costs of social security expenditure will outweigh the costs of the new deal. And even if the new deal is also cost effective, the

<sup>32</sup>Department of Social Security, *Housing Benefit Review: Main Stage Report*, January 1996.

share of expenditure on benefits to the unemployed is only 9% of total social security expenditure, so the net savings resulting from the new deal are unlikely to be large.

A third means of reducing expenditure on social security whilst protecting those in need is to identify and reduce benefit payments to people deemed not to need them. The reductions in lone-parent benefits for new claimants after April 1998 is an example of this, despite its being presented as a Welfare-to-Work measure.<sup>33</sup> As benefits for the elderly, which, as Figure 9.16 shows, account for 45% of expenditure, and child benefit have effectively been protected from cuts in the short run by manifesto commitments, the most significant area in which reductions in entitlement are possible is in benefits to the sick and disabled. These benefits account for 25% of total social security expenditure and have risen from 14% in 1980-81. We now look at these benefits in more detail.

**Figure 9.16. Composition of social security budget**



Source: Department of Social Security Annual Report.

### Disability benefits

There are a wide range of benefits available to the sick and disabled in the UK. Table 9.2 provides a list of the main benefits, showing how much each costs the government and the number of people receiving them. The table shows that the most important benefits (in terms of total cost and the number of claimants) are incapacity benefit, disability living allowance and attendance allowance. Most benefits to the disabled are non-contributory and non-taxable, the exception being incapacity benefit. Disability benefits spending in 1996-97 amounted to over £18 billion. This does not include all benefits to the

<sup>33</sup>This results from the fact that lone parents in work will ultimately lose more than those out of work.

disabled, however. Including payment of means-tested benefits — such as income support, housing benefit and council tax benefit — to the disabled increases the total to £23.5 billion.

**Table 9.2. Disability benefits: total cost and number of recipients, Great Britain, 1996–97**

	Total cost	Number of recipients (*000s)
Incapacity benefit	£7.8 bn	2,373 <sup>a</sup>
Severe disablement allowance	£0.9 bn	25 <sup>b</sup>
Disability working allowance	£0.03 bn	11 <sup>c</sup>
Attendance allowance	£2.4 bn	1,166 <sup>d</sup>
Disability living allowance	£4.4 bn	1,853 <sup>d</sup>
Invalid care allowance	£0.8 bn	357 <sup>c</sup>
War pensions	£1.4 bn	327 <sup>f</sup>
Industrial injuries disablement benefit	£0.7 bn	245 <sup>g</sup>

<sup>a</sup> End-1997 figure.

<sup>b</sup> March 1995 figure.

<sup>c</sup> January 1997 figure.

<sup>d</sup> February 1997 figure.

<sup>e</sup> End-1996 figure.

<sup>f</sup> December 1996 figure.

<sup>g</sup> March 1996 figure.

Source: *Social Security Statistics 1997*.

### *Earnings replacement benefits*

*Incapacity benefit (ICB)* is paid to people who are assessed as being incapable of work and who meet certain contribution conditions. ICB replaced sickness benefit and invalidity benefit (IVB) from 13 April 1995. It is payable at three basic levels:

- *Lower short-term rate* (paid for the first 28 weeks of sickness)  
This is paid at the same rate as the old sickness benefit, and only paid to those not eligible to receive statutory sick pay.<sup>34</sup>
- *Higher short-term rate* (paid for weeks 29–52 of incapacity)  
This is set at a lower level than the old IVB.
- *Long-term incapacity benefit*  
People under state pension age who have been sick for more than a year are eligible to receive the long-term rate of ICB,<sup>35</sup> which is set at the same basic rate as old IVB.

Individuals over state pension age can receive short-term ICB (downrated to the rate at which retirement pension would have been paid) for up to a year if incapacity began before pension age. This is less generous than the old IVB, which continued for five years after reaching pension age. Increases to the basic ICB are paid for adult dependants and children, and age additions are

<sup>34</sup> Statutory sick pay is available to all employees incapable of work, and is administered and paid by employers, not the Benefits Agency.

<sup>35</sup> The higher rate is applicable from week 29 for those with a terminal illness or those receiving the higher-rate care component of disability living allowance.



paid with the long-term rate according to the age at which incapacity began. These additions are less generous than under the old system of IVB. And whilst IVB was not taxable, after 28 weeks of receipt ICB becomes subject to taxation.

Assessment for ICB is more stringent than it was for the old IVB. For the first 28 weeks of incapacity, an 'own-occupation' test applies to all those previously in work. After 28 weeks, these claimants are then assessed on the new 'all-work' test, which assesses ability to do *any* job, regardless of whether or not it is reasonable to expect them to do it. Those not previously in employment are subject to this all-work test from the start of their claim.

Those people who do not satisfy the contribution conditions for ICB can claim *severe disablement allowance* (SDA). SDA was introduced in November 1984 as a replacement for non-contributory invalidity pension. Recipients must be aged between 16 and 65 and have been incapable of work for at least 28 weeks. The age conditions only apply at the point of making the claim; once the award has been made, there is no upper age limit for receipt of SDA. Assessment of incapacity is on the same basis as the tests for ICB, except that those people who became incapable of work after their twentieth birthday must also prove they have been '80% disabled' for at least 28 weeks.<sup>36</sup>

### ***Benefits for severely disabled people***

In April 1992, the system of benefits available to severely disabled people was reorganised. *Attendance allowance* (AA) remained only for people over the age of 65, when their care needs start. For those people under the age of 65, attendance allowance and mobility allowance were abolished and replaced with a new benefit called *disability living allowance* (DLA), which has both a mobility and a care component. Only people resident in private households (i.e. *not* hospitals or residential or nursing homes) are entitled to receive these benefits. Neither AA nor DLA is taxable.

AA is a benefit available to people aged over 65 who are incapable of looking after themselves and who have been in this condition for six months before their claim. It is payable at two rates: the higher rate is paid to people who need help both during the day and at night, and also to people with a terminal illness (regardless of whether or not they have any supervision or care needs).<sup>37</sup>

Severely disabled people who become disabled before they reach 65 can claim DLA.<sup>38</sup> DLA is only payable to those claimants whose disability has been present for at least the past three months and is likely to be present for the next six months. There are two components to DLA:

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<sup>36</sup>For a description of prescribed degrees of disablement, see, for example, Child Poverty Action Group, *Rights Guide to Non-Means-Tested Benefits 1995/96*.

<sup>37</sup>The terminally ill are also exempt from the six-month rule for claiming AA.

<sup>38</sup>Individuals who were not eligible for AA or mobility allowance under the pre-April 1992 system *can* apply for the lower rates of DLA.

- *The care component*

This is payable to people who need help with personal care. There are three rates of DLA care depending on the degree of disability. The terminally ill automatically receive the highest rate.

- *The mobility component*

DLA mobility is available to people who need help getting around. There are two DLA mobility rates, again paid according to how disabling the claimant's conditions are.<sup>39</sup>

In addition, people caring full-time for individuals receiving the highest or middle rate of DLA or AA might also be able to claim *invalid care allowance*.

### ***Other benefits for disabled people***

Other benefits exist for specific circumstances. *Industrial injuries disablement benefit* (IIDB) is payable to people who are disabled because of an industrial accident or a prescribed industrial disease. The level of benefit depends on the claimant's medically assessed level of disability. Additions to the basic IIDB might be payable if the claimant is prevented from working or cannot go back to their normal job because of their disability, or if they need constant care and attention as a result of the accident or disease.

Disabled people over the age of 16 who are currently working can claim *disability working allowance* (DWA) if they work an average of 16 hours or more a week. DWA is similar to family credit, payable for 26 weeks at a time even if the claimant's circumstances change,<sup>40</sup> and is aimed at helping long-term disabled people back to work by topping up their earnings. DWA is not taxable, nor does it depend on claimants' National Insurance contribution record, but it is related to an individual's income level (and to the amount of capital they have and their family circumstances).

Finally, there are a wide range of benefits, allowances and other payments available to war pensioners whose disablement is a result of wartime service. The most important of these is the *war disablement pension*, which is paid at varying rates according to assessed level of disability.

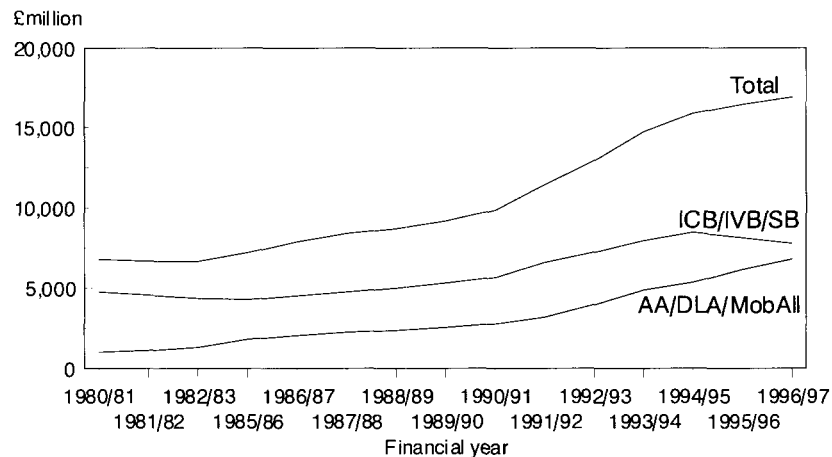
### ***The rising cost of disability***

The exchequer cost of disability benefits has risen considerably since 1979, in real terms and as a share of GDP. Figure 9.17 shows the real increases in expenditure on disability benefits and the real expenditure on the two most significant groups of benefits and their predecessors. It is clear that much of the rise in total expenditure has resulted from a rapid real rise in invalidity benefit in the early 1990s, and more recently a real rise in the cost of attendance allowance and disability living allowance.

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<sup>39</sup>The terminally ill do not automatically receive the higher rate of DLA mobility, but they are exempt from the time conditions.

<sup>40</sup>This is the same as the procedure for family credit.

**Figure 9.17. Real spending on main disability benefits**

Figures in 1996/97 prices

Notes: ICB/IVB/SB relates to incapacity benefit and its predecessors, invalidity benefit and sickness benefit.

AA/DLA/MobAll relates to attendance allowance, disability living allowance and mobility allowance.

Source: IFS calculations from DSS figures.

High unemployment, particularly amongst men nearing the age of retirement, the ageing of the population and changes in the real level of disability benefits have been shown to be factors in the growth of the number of recipients on earnings replacement benefits. More recently, the growth has been more concentrated in DLA and AA, where it is more difficult to make an argument that the benefits are substituting for unemployment benefits. Few people are able to provide a clear rationale for why expenditure on these benefits has risen so rapidly, and the government is surely right to review the entitlements of recipients to ensure the benefits are really going to those intended and in genuine need. If it finds that a proportion of DLA/AA is not well targeted, it will want to review the eligibility criteria and the administration of the benefits. But this will not guarantee a large saving in expenditure. The previous government hoped that just such a review and changed rules for invalidity benefit in 1995 would result in substantial savings, only ultimately to be disappointed by the scale of the savings.

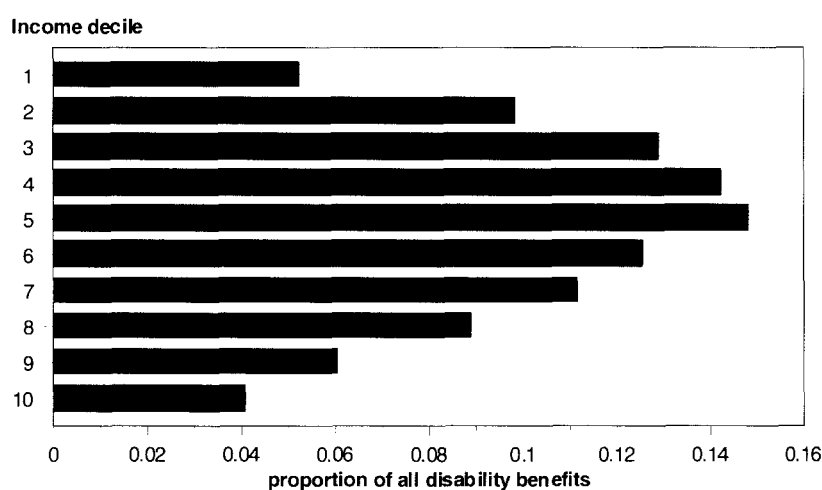
### *Who receives sickness and disability benefits?*

It is clear that spending on disability benefits has grown substantially in the past two decades, but who has benefited from this increase in spending? Figure 9.18 shows how total spending on disability benefits is distributed across the population. Net household incomes increase from £4,500 a year at the mid-point of the lowest decile, to £11,100 in decile 5 and up to £36,500 amongst the richest tenth of the population.

If disability benefits were evenly distributed across the population, each income decile would receive one-tenth of total disability benefit spending. It is evident from Figure 9.18 that disability benefits are concentrated around the middle of the income distribution. This is to be expected because the disability benefits increase the household's net income above the income levels of the

bottom deciles. If the sickness and disability benefits are addressing increased costs that eligible claimants face, households receiving these benefits might have living standards well below those of non-disabled households in the same part of the income distribution. That said, given much of the expenditure on disability benefits goes to the middle of the income distribution, means-testing the benefits would certainly recover a reasonable proportion of the expenditure. The problem the government would face is that these benefits were given to reflect the additional costs of having a disability. To remove that money from some recipients because they had other sources of income or lived with someone with other sources of income would remove the contingent principle and rationale for the benefits. Taxing the untaxed benefits such as disability living allowance suffers from the same problem but to a much lesser degree. It would also reduce expenditure by much less.

**Figure 9.18. Distribution of disability benefit spending**



Source: Family Resources Survey 1995-96.

## 9.6 Other spending budgets

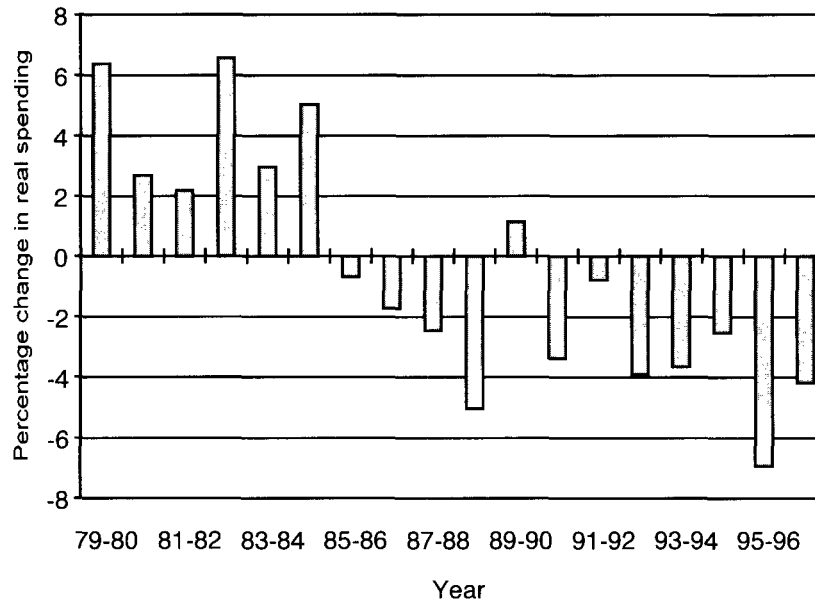
If the government is unable to fund sufficient extra resources from restraining the social security budget to finance its plans for health and education, it may have to consider other departmental budgets. We consider a number of options including defence, law and order, housing and the public sector capital programme.

### Defence

The fortunes of the defence budget have changed markedly over the last 18 years, as shown in Figure 9.19. The early Thatcher years saw substantial real increases in the defence budget, implementing a commitment made to NATO by the previous Labour administration to increase real defence spending by 3% per year until 1985. This was followed by significant real cuts made over the last parliament averaging 4.2% per year. It seems unlikely that such cuts can continue indefinitely without a reassessment of the role that the UK armed

forces are intended to play. The Labour Party manifesto pledged to 'build a strong defence' and also to retain Trident. The Secretary of State for Defence, George Robertson, has already stated to the Strategic Defence Review Committee that 'we must have well-equipped, modern, capable, armed forces' although 'we cannot expect any increased funding in real terms'.<sup>41</sup>

**Figure 9.19. Real changes in defence spending**



Sources: *Public Expenditure Statistical Analysis 1994-95*, Table 1.3; *Public Expenditure Statistical Analysis 1997-98*, Table 3.3.

### Law and order

Since spending on law and order has grown in real terms by an annualised average of 3.75% over the period 1979-80 to 1996-97, this may appear to be an area where the government may wish to make savings. However, this real increase was caused predominately by large real increases in spending during the Thatcher governments, with much lower real increases in spending occurring since 1993. Given the much tighter control of the law and order budget in recent years, it seems unlikely that significant budgetary cuts will be compatible with the government's manifesto pledge to be 'tough on crime, and tough on the causes of crime'.

### Housing

Another area where savings are unlikely to materialise is spending on housing, since large real cuts have already been implemented since 1979, and especially over recent years. Over the lifetime of the last parliament, housing spending was cut on average by 8.9% a year in real terms. It is likely that housing

<sup>41</sup>From opening remarks made by Secretary of State for Defence, George Robertson MP, to the Strategic Review Seminar on 5 November 1997.

spending will actually rise over the next few years. In the July 1997 Budget, the Chancellor announced the start of a phased release of the local authority capital receipts that have arisen from the sale of the local authority housing stock under the 'right-to-buy' initiative. The extra £0.2 billion of housing investment this year and £0.9 billion next year have been distributed between local authorities largely according to assessments of their housing need rather than their stock of accumulated reserves. In practice, the effect of such additional spending on both public spending totals and the PSBR is identical to simply allowing local authorities to borrow more funds to finance their housing investment programmes.

## **Capital spending**

Governments of all political persuasions have often found it easier to cut capital spending than current spending in times of fiscal restraint — it can be seen as politically less costly simply to delay the construction of a bridge or a road for another year than to cut back on current spending. Moreover, the introduction of the Private Finance Initiative (PFI), where investment in social infrastructure occurs without any *immediate* impact on public spending totals, has provided a further incentive to scale back public spending. The PFI involves the private sector in the delivery of core public services. Under traditional public procurement, private sector firms constructed assets such as roads or bridges to a detailed specification. Under PFI, private firms provide services such as the availability of roads or underground trains over long contracts of 15 or 20 years. Over the last few years, the budget for capital spending has been largely frozen in cash terms, representing a 10.4% fall in real terms since 1992–93.<sup>42</sup>

The November 1995 Budget made it clear that private finance was being used as a substitute for, rather than an addition to, traditional public procurement. Roughly 80% of planned PFI spending simply compensated for cuts in previously planned levels of public capital expenditure over the three-year planning horizon. By the November 1996 Budget, delays in signing PFI projects, combined with cuts in public sector spending in anticipation of PFI deals going ahead, meant that the overall publicly sponsored investment programme was now smaller than originally planned.

The Labour Party election manifesto pledged that a Labour government would 'overcome the problems that have plagued the Private Finance Initiative'. Once in office, a review under Malcolm Bates led to a number of relatively minor reforms, including an end to the practice of testing all capital projects over a threshold value for their potential as PFI projects and more emphasis on drawing up priorities amongst competing proposals for PFI projects. These should speed up the process of signing PFI contracts. Within the NHS, the number of projects being considered for the first wave of PFI schemes has

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<sup>42</sup>Source: *Public Expenditure Statistical Analysis 1997–98*, Table 3.7. Comparisons with earlier years tend to be misleading because of the changing size and composition of the state sector, especially as a result of the privatisation of formerly state-owned industries during the 1980s.

been reduced from over 70 to 12, although these have a much greater likelihood of going ahead.

Whilst the PFI may allow governments to cut the public sector capital spending programme whilst still increasing the stock of social infrastructure, it does not form a sustainable basis for financing improvements to key public services.

- Whilst many transport projects have already gone ahead on the basis of their 'suitability for private finance', traditional public procurement is likely to be the only feasible route for many other types of social investment. As a result, there are limits to how far the public sector capital programme can be cut.
- Even when PFI deals go ahead, the government ultimately pays for public services — PFI simply alters the time-path of these payments. It was argued in the October 1996 Green Budget<sup>43</sup> that PFI contracts effectively tie the government's hands for long contract periods of 20 or more years.

### ***Resource accounting***

A second initiative that could have a significant impact on capital expenditure within the public sector is the introduction of resource accounting methods across the public sector. These accounting methods, based on the resources consumed in a year rather than on the cash spent, will be introduced in most departments by 1 April 1998 and be presented to parliament for the 1999–00 financial year. They will give more detailed information on the public sector's asset stocks, leading to the creation of the National Asset Register or 'Domesday Book'.

In the October 1996 Green Budget,<sup>44</sup> we argued that the introduction of resource accounting has the potential to improve the delivery of public services at the micro-level. Attaching a price to the use of capital assets should encourage more efficient use of factor inputs, incentives to dispose of surplus assets and a more rational basis for the planning of capital investment than the present cash-based system where the full cost of long-lived assets scores against public spending in the year the asset is created.

To accompany the launch of the National Asset Register, the government announced new regulations that allowed departments to use any cash released from the disposal of surplus assets to fund new capital spending, as long as the value of an individual disposal does not exceed £100 million and the total funds realised through asset disposals does not exceed 3% of the department's budget.<sup>45</sup> These provisions will be in place from April 1998 to April 2000, when resource accounting should be fully established. Whilst this may encourage better use of assets within departments, it is not likely to lead to an optimal allocation of new capital assets across the public sector as a whole,

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<sup>43</sup>*Options for 1997: The Green Budget*, IFS Commentary no. 56, October 1996.

<sup>44</sup>*Options for 1997: The Green Budget*, IFS Commentary no. 56, October 1996.

<sup>45</sup>Source: *Hansard*, 24 November 1997. Parliamentary answer by Chief Secretary to the Treasury to question 17817 from Mr Timms MP.

since departments that currently have large asset bases, such as defence, may not necessarily be those in which it would be most appropriate to concentrate further capital investment.

Whilst the introduction of resource accounting should create the potential for more efficient decisions to be taken concerning public expenditure at the micro-level, it is unlikely to have a major impact on public spending overall. Public sector capital investment programmes are likely to remain vulnerable in times of fiscal restraint, due to the focus that the media and other commentators place on the PSBR as a measure of the government's competence in managing the nation's fiscal affairs. Moreover, even if resource accounting should lead to a series of asset disposals, this is no more suitable as a method of sustaining higher levels of current expenditure than was the privatisation programme during the 1980s.

## **9.7 Conclusion**

Labour has pledged to increase real spending on health every year and, by reducing the cost of 'social failure', use savings from the social security budget to direct a larger share of the nation's resources into the provision of education. The results of the Comprehensive Spending Review, which will report later this year, may be critical to determining whether more funds can be found for health and education without increasing public spending overall. Whilst the cash pledges in Labour's manifesto are not particularly ambitious, they are unlikely to be sufficient to deal with the effects of growing demands on and expectations of public services. If extra resources do not materialise, we are likely to witness continued growth of the private sphere of provision, possibly at the expense of wider public support for the main pillars of the Welfare State.



# Appendix A: Forecasting the PSBR

This appendix outlines the methods we have used to forecast the public finances during 1997–98 and over the medium term. We begin by assessing how the forecasts for the PSBR in 1996–97 we presented in the October 1996 Green Budget differed from the out-turn for the year. We then outline our two principal methods for forecasting tax revenues. We consider the likely path of the PSBR in the medium term under a number of different assumptions about macroeconomic developments in the economy, and assess how far spending could rise over the course of this parliament before the PSBR would be in danger of breaching the government’s ‘golden rule’ target.

## A.1 Last year’s forecast for the public finances

Before presenting our forecasts for the PSBR, we consider how accurate our forecasts for the 1996–97 PSBR that we published in the October 1996 Green Budget turned out to be. Table A.1 shows that our PSBR forecast was £3.6 billion too pessimistic, a slightly better record than the Treasury which published the FSBR later in the financial year. Our error was wholly on the receipts side, where our forecast, which was exactly equal to that of the Treasury, was £4.5 billion too pessimistic. Of this error, £2.1 billion came from Inland Revenue taxes, with a £2.4 billion error on corporation tax receipts being the major contributory cause.

**Table A.1. Comparison of forecast and out-turn public finances, 1996–97**

	<i>IFS Green Budget October 1996 (£ billion)</i>	<i>FSBR November 1996 (£ billion)</i>	<i>Out-turn Pre-Budget Report (£ billion)</i>
General government receipts	£280.9	£280.9	£285.4
General government expenditure	£308.1	£308.5	£308.1
PSBR <sup>a</sup>	£26.2	£26.4	£22.6

<sup>a</sup>The PSBR does not equal the difference between receipts and spending because of the market and overseas borrowing by public corporations.

## A.2 Methods for forecasting tax receipts

In this section, we describe our main method for forecasting tax revenues — a modelled receipts method, which multiplies forecast changes in various tax bases between two consecutive years by the estimated elasticities of tax revenues to changes in the tax base. We supplement this, for within-year revenue forecasts, by a current receipts method, which uses information on the rate of growth of tax receipts available by early January 1998 to make revenue

predictions for the whole of 1997-98. These two methods are discussed in some detail below.

### Modelled receipts method

Our modelled receipts approach models changes in tax revenues as the product of multiplying forecast changes in the tax base by estimates of the elasticity of tax revenues to changes in the tax base.

Our basic approach is given by the following formula, taking the example of revenue forecasts for the current financial year:

$$1997 - 98 \text{ revenues} = 1996 - 97 \text{ revenues} \times \frac{1997 - 98 \text{ tax base}}{1996 - 97 \text{ tax base}} \times \text{elasticity} + \text{tax changes.}$$

Our default assumption is that all tax rates remain the same and allowances and specific duties are fully indexed. We use Treasury figures for the likely impact of discretionary changes to the tax base that have already been officially announced, such as changes to tax rates and revised treatment of allowances such as profit-related pay. After 1999-00, where comprehensive Treasury figures have not been published, we simply use Treasury figures for the impact of the proposed changes to corporation tax announced in the November 1997 Pre-Budget Report, and we make our own adjustment for the effect of the 'escalators' of 6% on fuel duties and 5% on tobacco duties announced in the July 1997 Budget.

**Table A.2. Tax bases and elasticities for model forecasts<sup>a</sup>**

<i>Tax</i>	<i>Tax base</i>	<i>Elasticity</i>
Income tax	Nominal wage growth	1.56
	Lagged employment growth	1.18
	Proportion of part-time employees	-0.26
	Lagged error correction model	-0.22
Corporation tax	Nominal gross profits	1.2
VAT	Nominal consumers' expenditure	1.1
National Insurance	Nominal wage bill	1.05
Petrol	Real consumers' expenditure	1
Tobacco	Real consumers' expenditure	0.25
Beer	Real consumers' expenditure	0.85
Wines	Real consumers' expenditure	1.5
Spirits	Real consumers' expenditure	0.95

<sup>a</sup>The derivation of these tax base elasticities is discussed in more detail in the October 1996 Green Budget.

Our estimated tax elasticities, shown in Table A.2, have been estimated using long time series of tax receipts and proxies for the tax base, adjusted for discretionary changes in taxes that have occurred over the period. Our methods have been discussed in more detail in previous Green Budgets and we have not changed our elasticity estimates since the October 1996 Green Budget. The precise elasticities vary between taxes, with receipts from income tax and

corporation tax responding more than proportionally to movements in proxies for our tax base, whilst revenues from certain excise duties, such as those on beer and tobacco products, respond less than proportionately to growth in consumers' expenditure.

### Current receipts forecasts

The current receipts method, which is useful for within-year forecasts, uses the following formula to estimate revenues for the fiscal year 1997-98 based on the data available for tax receipts so far:

$$1997 - 98 \text{ forecast} = \frac{\text{receipts collected April to November 1997}}{\text{receipts collected April to November 1996}} \times 1996 - 97 \text{ outturn.}$$

The current receipts methods is a useful method of predicting tax revenues when the pattern of tax receipts is relatively stable over the year and a large proportion of tax receipts are collected in the first few months of the financial year. However, although expected seasonal patterns are accounted for, the estimates are sensitive to one-off fluctuations in GDP growth.

**Table A.3. Percentage of annual receipts for which information available by early January**

	1993-94	1994-95	1995-96	1996-97
<i>Major revenue sources</i>				
Income tax	62%	62%	63%	61%
Corporation tax	61%	61%	63%	64%
VAT	64%	66%	67%	69%
National Insurance contributions	64%	65%	65%	67%
<i>Selected minor revenue sources</i>				
Capital gains tax	18%	6%	13%	10%
Inheritance tax	56%	59%	57%	61%
Stamp duties	56%	60%	57%	56%
Fuel duties	57%	58%	58%	58%
Tobacco duties	58%	54%	52%	50%
Vehicle excise duty	58%	58%	59%	59%

The current receipts approach is particularly sensitive to changes in the timing of tax payments. This is of most concern for those taxes that are collected in lumps at certain times of the year and for which only a small proportion of total annual receipts are likely to have been collected at the time of our forecast. Table A.3 shows the percentage of annual tax receipts for which information has been made publicly available by early January for each of the last four years.

For income tax, corporation tax, VAT and National Insurance contributions, we use data on receipts collected by the end of November 1997. Over 60% of these taxes are usually collected by this time of year. For other tax receipts, we use data on receipts collected by the end of October 1997, meaning that the

proportion of annual taxes collected is smaller (typically just over 50%). A major exception to this is capital gains tax, where receipts are concentrated in the months from November to January, so we have access to only around 10% of annual receipts. These factors must be taken into account when considering the accuracy of the tax receipts forecasts shown in Table A.4.

Table A.3 also illustrates how the proportion of annual tax receipts that has been collected by the end of the calendar year has varied considerably from year to year for individual taxes. Of the major taxes, this variation has been greatest in the case of VAT, where the proportion has varied from 64% to 69% over four years. A 5 percentage point variation in the timing of receipts between years would lead to a £2.5 billion forecast error for VAT receipts in the current year.

The volatility in the pattern of tax receipts from year to year is even more marked for some of the minor taxes, a selection of which are shown in Table A.3. The proportion of annual capital gains tax receipts collected by this stage of the financial year has varied from 6% to 18% over the last four years. Whilst far more volatile than VAT receipts, the much smaller yield of the tax means that a 12 percentage point annual variation in timing would lead to a forecast error of only £0.1 billion, far lower than for VAT.

### **A.3 Revenue forecasts for fiscal 1997–98**

Table A.4 shows our judgemental forecast for tax receipts in 1997–98, using information provided by various sources, including our current receipts approach, our modelled receipts approach and the Treasury's own figures, which were most recently published in the November 1997 Pre-Budget Report.

In this year's Green Budget, our judgemental forecast differs very little from that contained in the Treasury's Pre-Budget Report, largely reflecting the short time lag between the two reports, during which only one month's additional information on tax receipts has become available. This contrasts with the much larger differences between ourselves and the Treasury in some recent years as a result of additional information that became available between the publication of the Treasury's Summer Economic Forecast in June and our October Green Budget.

Our forecast for **income tax** receipts next year is £74.4 billion, £1.1 billion less than the Treasury's. This represents 7.7% annual growth, resulting from a combination of average earnings growth increasing to 4.5% and some discretionary rises in the tax base, most notably the impact of the abolition of the repayment of dividend tax credits for pension schemes and certain UK companies in the July 1997 Budget. This tax reform, on its own, will add an estimated £2.3 billion to income tax revenues in 1997–98. Whilst our current receipts approach suggests much lower growth than this, we anticipate that the bulk of the revenue from the abolition of payable credits is still to be collected.

Table A.4. Public finances forecasts, 1997–98

	<i>Pre-Budget Report</i>	<i>Current receipts</i>	<i>IFS modelled receipts</i>	<i>IFS judgement</i>
Income tax	75.5	72.4	75.8	74.4
Corporation tax	30.3	31.0	31.6	31.0
Windfall tax	2.6	2.6	2.6	2.6
Petroleum revenue tax	1.2	1.5	1.9	1.2
Capital gains tax	1.3	0.8	1.2	1.3
Inheritance tax	1.6	1.8	1.5	1.6
Stamp duties	3.4	3.2	2.4	3.4
<b>Total Inland Revenue</b>	<b>115.9</b>	<b>113.3</b>	<b>116.9</b>	<b>115.5</b>
VAT	50.1	48.9	49.8	49.8
Fuel duties	18.7	18.7	18.7	18.7
Tobacco duties	8.3	8.9	8.3	8.3
Alcohol duties	5.9	5.7	6.0	5.9
Betting and gaming duties	1.6	1.5	1.5	1.6
Air passenger duty	0.5	0.4	0.5	0.5
Insurance premium tax	1.1	0.9	1.2	1.1
Landfill tax	0.4	**	0.4	0.4
Customs duties and levies	1.9	2.3	2.3	1.9
<b>Total Customs and Excise</b>	<b>88.6</b>	<b>87.7</b>	<b>88.7</b>	<b>88.2</b>
Vehicle excise duty	4.5	4.7	4.5	4.5
Oil royalties	0.5	0.6	0.7	0.5
Business rates	14.6	**	16.0	14.6
National Insurance contributions	49.5	50.3	49.7	50.0
Council tax	10.5	**	10.8	10.5
Other taxes and royalties	8.0	**	**	8.0
<b>Total taxes and NI contributions</b>	<b>292.2</b>	<b>289.7</b>	<b>295.4</b>	<b>291.8</b>
Interest and dividends	4.9	**	**	4.9
Gross trading surplus and rent	4.9	**	**	4.9
Other receipts	6.4	**	**	6.4
<b>General government receipts</b>	<b>308.4</b>	<b>305.9</b>	<b>311.6</b>	<b>308.0</b>
Control total	265.8	**	**	265.8
Welfare-to-Work spending	0.2	**	**	0.2
LA spending under Capital Receipts Initiative	0.2	**	**	0.2
Cyclical social security	12.7	**	**	12.7
Central government debt interest	24.6	**	**	24.6
Accounting adjustments	11.1	**	**	11.1
<b>GGE(X)</b>	<b>314.6</b>	<b>**</b>	<b>**</b>	<b>314.6</b>
Privatisation proceeds	-2.0	**	**	-2.0
Other adjustments	6.1	**	**	6.1
<b>GGE</b>	<b>318.7</b>	<b>318.7</b>	<b>318.7</b>	<b>318.7</b>
General government borrowing requirement	10.3	12.8	7.1	10.7
Public corporations' market and overseas borrowing	-0.8	**	**	-0.8
<b>PSBR</b>	<b>9.5</b>	<b>12.0</b>	<b>6.3</b>	<b>9.9</b>

We forecast **corporation tax** receipts in 1997–98 to be £31 billion, £0.7 billion higher than the Treasury and representing 11.5% growth over the year. This rapid growth reflects very rapid growth in profits last year and we choose to base our forecast on our current receipts approach. Overall, we predict the yield of **Inland Revenue taxes** in 1997–98 to be £115.5 billion, a very similar level to the £115.9 billion forecast by the Treasury.

We forecast **VAT** receipts in 1997–98 to be £49.8 billion, taking the IFS modelled receipts approach, which lies somewhere between the Treasury forecast and the results of our current receipts approach. By this stage last year, a rather larger proportion of VAT receipts had been collected than is typical for this time of year, as shown in Table A.3. If this was a ‘blip’ as opposed to a trend, we would expect our current receipts method to underestimate revenues this year. For other Customs and Excise taxes, we simply take Treasury figures from the Pre-Budget Report, since the evidence from current receipts information suggests the out-turns will be very similar. Overall, we forecast receipts from **Customs and Excise taxes** to be £88.2 billion in 1997–98, very similar to the £88.6 billion forecast by the Treasury.

We forecast the out-turn for **National Insurance contributions** in 1997–98 to be £50 billion, £0.5 billion more than the Treasury, but less than our current receipts approach since there has been some volatility in the monthly pattern of receipts over recent years. Overall, we forecast **general government receipts** for 1997–98 to be £308 billion, £0.4 billion less than the Treasury.

Our forecast for **general government expenditure** for 1997–98 is identical to that in the Treasury’s Pre-Budget Report. We assume that the government will achieve its cash plans for the control total and no new information has become available since the publication of the Pre-Budget Report to suggest that forecasts for any of the other spending items should be modified. This leaves us with a **PSBR** forecast for 1997–98 of £9.9 billion, or £12.3 billion if we take out the impact of the windfall tax and associated expenditure on the ‘Welfare-to-Work’ initiative. This represents 1.2% of GDP, slightly larger than would be needed to hit the government’s golden rule target for fiscal policy but easily meeting the targets for the fiscal stance set by either the Maastricht convergence criteria or the debt sustainability criteria.

## **A.4 The public finances in the medium term**

Over the medium term, the PSBR will principally be affected by two sets of factors: developments in the macroeconomy and discretionary government policy decisions. In this section, we present our baseline forecast for the public finances over the medium term, using the macroeconomic assumptions outlined in Table A.5. Our central forecast is for the rapid growth in the economy this year to subside next year, with a period of below-trend growth at the turn of the decade. The government then achieves its 2.5% target for inflation over the last two years of this parliament.

**Table A.5. Main macroeconomic assumptions**

(% growth)	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03
GDP	3.7%	2%	1.7%	1.8%	2.3%	2.3%
Consumers' expenditure	4.5%	3.6%	2%	2.3%	2.5%	2.5%
Corporate profits (lagged)	12.9%	6.9%	2.2%	5%	5%	5%
Employment (lagged)	1.5%	1.4%	0.4%	-0.2%	0%	0.3%
Wage growth	4.5%	5%	4.9%	4.5%	4.5%	4.5%
GDP deflator	2.8%	2.8%	2.8%	2.5%	2.5%	2.5%

#### Central public finances forecast

- Central macroeconomic forecast
- Real spending plans achieved
- No discretionary tax changes

In our baseline forecast, we assume that there are no discretionary changes to the stance of fiscal policy. We therefore assume tax rates stay the same and tax allowances and specific taxes are indexed to the rate of inflation. Given these assumptions, we use the tax elasticities shown in Table A.2 and the central macroeconomic forecast shown in Table A.5 to forecast tax revenues in to the medium term. Income tax receipts, which are highly sensitive to economic growth, are forecast to rise by 54% in cash terms between 1996-97 and 2001-02, the last year of the current parliament, whilst VAT revenues are forecast to rise by 37% over the same period.

We assume that the control total in real terms follows the path implied by the cash spending plans set out for 1997-98 and 1998-99 in the November 1996 Budget and since reaffirmed.<sup>1</sup> For the years after 1998-99, we assume a central spending scenario of 2.25% growth in the control total, the highest of the three 'scenarios' presented in the July 1997 Budget and November 1997 Pre-Budget Report. Coming after the very tight control of spending in the first two years of this parliament, spending growth over the five-year parliament as a whole would be close to the average rise under the Conservative governments between 1979-80 and 1996-97.

Over the period, income tax receipts increase very quickly, resulting from a combination of very large discretionary changes in tax and substantial earnings growth in the economy as a whole. In 1998-99, for example, the Treasury estimates that revenues will be boosted by £0.9 billion from the restriction of mortgage interest tax relief to 10%, an extra £1.65 billion from the abolition of the repayment of dividend tax credits for pension schemes and certain UK companies, and £0.8 billion from the full implementation of self-assessment.

<sup>1</sup>Definitional changes in the November 1997 Pre-Budget Report have changed control total forecasts by £0.7 billion for 1997-98.

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In addition, we expect earnings growth to rise from 4.5% this year to 5% next year, with further growth in employment.

**Table A.6. Public finances in the medium term: central macroeconomic forecast, no tax changes, real spending plans achieved**

(£ billion)	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03
Income tax	75	85	94	100	107	115
Corporation tax	31	32	35	36	38	38
Windfall tax	3	3	0	0	0	0
VAT	50	53	55	58	61	64
Excise duties	33	35	38	41	44	48
Other taxes and royalties	51	53	55	57	59	59
National Insurance contributions	50	53	56	58	61	64
Other receipts	16	17	16	16	14	16
<b>General government receipts</b>	<b>308</b>	<b>329</b>	<b>347</b>	<b>365</b>	<b>384</b>	<b>405</b>
Control total	266	274	288	302	316	331
Welfare-to-Work	0	1	1	1	1	0
LA Capital Receipts Initiative	0	1	1	1	1	0
Cyclical social security	13	13	14	15	16	16
Central government debt interest	25	25	25	25	25	25
Accounting adjustments	11	12	12	12	12	12
GGE (X)	315	325	341	355	371	383
Privatisation proceeds	-2	0	0	0	0	0
Other adjustments	6	7	7	7	7	7
<b>General govt expenditure</b>	<b>319</b>	<b>332</b>	<b>348</b>	<b>362</b>	<b>378</b>	<b>390</b>
General government borrowing	11	3	1	-2	-6	-14
Public corporation borrowing	-1	-0	0	0	0	0
<b>PSBR</b>	<b>10</b>	<b>3</b>	<b>1</b>	<b>-2</b>	<b>-6</b>	<b>-14</b>
PSBR (excluding windfall tax and associated spending) <sup>a</sup>	12	4	-1	-4	-8	-14
GGE(X) / GDP (%)	40 %	39 %	39 %	39 %	39 %	38 %
PSBR / GDP (%)	1 %	0 %	0 %	-0 %	-1 %	-1 %

<sup>a</sup>Apparent differences in the total revenues from the windfall tax and spending on the 'Welfare-to-Work' programme over the course of the parliament are due to rounding.

Over the medium term, we also anticipate substantial growth in revenues from excise duties, resulting from the application of the 'escalator' of 6% real increases in fuel duties and 5% real increases in tobacco duties year on year. For the later years of the period, where Treasury figures for the impact on revenues are not available, we make a small and largely *ad hoc* adjustment to allow for the impact of higher taxes on the growth of the tax base.

By the final year of the parliament, when our central macroeconomic forecast has the economy back at trend, we observe a debt repayment of some 1% of GDP, easily meeting the Chancellor's two fiscal targets of debt sustainability and the golden rule.



## A.5 Medium-term projections for the public finances under alternative scenarios

Our baseline forecast for the public finances depends on both our central macroeconomic forecasts, as shown in Table A.5, and the absence of any discretionary changes in the stance of fiscal policy. Below, we present three alternative scenarios for the public finances:

- **A new paradigm?** Inflation is quickly brought under control and the trend rate of growth of the UK economy increases to 2.5%.
- **Mild overheating.** A mild overheating in the economy results in inflation being brought back under control later and at the expense of slower growth.
- **Higher spending.** We consider how much spending could rise without posing a significant danger of failing to meet the Chancellor's golden rule target of the PSBR falling to a little below 1% of GDP by the final year of this parliament.

These alternative scenarios are, of course, merely illustrations and should not be taken as representing 'best'- or 'worst'-case confidence limits for the range we think the path of the public finances could take over the next few years.

### Medium-term scenario: a new economic paradigm?

Our first scenario is of what the public finances might look like if the new government's management of the economy results in an era of higher non-inflationary growth. In this 'new paradigm' scenario, we assume that headline RPI peaks this year at 3.5% rather than next year at 4.2%, as in our central forecast. The macroeconomic assumptions are shown in Table A.7. The trend rate of growth of the economy increases to 2.5%, which is achieved from 1998-99 onwards.

#### New paradigm scenario

- More optimistic macroeconomic forecast — increase in trend rate of growth
- Real spending plans achieved
- No discretionary tax changes

This scenario leads to slightly higher growth in general government receipts, being £2.8 billion higher by 2001-02, the last year of this parliament. This small difference results from the extra receipts generated by higher economic growth being largely cancelled out by the impact of lower inflation. General government expenditure is £4 billion lower than our baseline forecast as a result of lower inflation over the period. As a result, the PSBR in 2001-02 is -£12.9 billion, a £6.7 billion larger debt repayment than in our central forecast.

**Table A.7. Macroeconomic assumptions underlying the ‘new paradigm’ scenario**

(% growth)	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03
GDP	3.7%	2.5%	2.5%	2.5%	2.5%	2.5%
Consumers’ expenditure	4.5%	3.6%	2.5%	2.5%	2.5%	2.5%
Corporate profits (lagged)	12.9%	6.9%	7%	7%	7%	7%
Employment (lagged)	1.5%	1.4%	0.4%	0.4%	0.4%	0.4%
Wage growth	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%
GDP deflator	2.8%	2.5%	2.5%	2.5%	2.5%	2.5%

**Table A.8. Public finances in the medium term: a new paradigm**

(£ billion)	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03
GGR	308	328	347	366	387	408
GGE	319	331	346	359	374	386
PSBR	10	2.8	-1	-7	-13	-23
GGE(X) / GDP (%)	39%	39%	38%	38%	38%	37%
PSBR / GDP (%)	1%	0%	-0%	-1%	-1%	-2%

### Medium-term scenario: mild overheating

Our second scenario for the public finances over the medium term involves a mild overheating in the economy in which headline inflation peaks at 4.8% and the government fails to bring inflation under control for an additional year, resulting in a larger correction to growth in the following years. The macroeconomic assumptions underlying this scenario are shown in Table A.9.

#### Mild over-heating scenario

- Temporary loss of control of inflation results in lower growth later on
- Real spending plans achieved
- No discretionary tax changes

**Table A.9. Macroeconomic assumptions underlying the ‘mild overheating’ scenario**

(% growth)	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03
GDP	3.7%	2%	1%	1%	2.3%	2.3%
Consumers’ expenditure	4.5%	3.6%	2%	1%	1.8%	2.5%
Corporate profits (lagged)	12.9%	6.9%	7%	0%	0%	7%
Employment (lagged)	1.5%	1.4%	0.4%	-0.5%	-0.5%	0.0%
Wage growth	4.5%	5.2%	5.5%	5%	4.5%	4.5%
GDP deflator	2.8%	3.0%	4%	3.5%	2.7%	2.5%

**Table A.10. Public finances in the medium term: ‘mild overheating’ scenario**

(£ billion)	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03
GGR	308	330	351	368	384	405
GGE	319	332	352	370	387	400
PSBR	10	2	1	2	3	-5
GGE(X) / GDP (%)	39%	39%	39%	39%	39%	39%
PSBR / GDP (%)	1%	0%	0%	0%	0%	-1%

Table A.10 shows the outlook for the public finances under this ‘mild overheating’ scenario. By the final year of the parliament, general government receipts would differ little from our central forecast with the higher inflation largely counteracting the negative impact of lower GDP growth on revenues. However, general government expenditure would be £9 billion higher by 2001-02, the final year of the parliament, as a result of the greater sensitivity of spending to higher inflation than to lower growth in our model. Nevertheless, the resultant PSBR of £3 billion by 2001-02 would still meet the Chancellor’s targets for fiscal policy.

### Medium-term scenario: higher spending

In the past, governments have occasionally indulged in brief expansions of spending which have had undesirable consequences for the sustainability of fiscal policy. In our final scenario, we consider how much scope the government would have for increasing public spending without falling foul of its target of meeting the golden rule, which we assume will continue to require a PSBR of no greater than roughly 1% of GDP when the economy is at trend.

#### Higher spending scenario

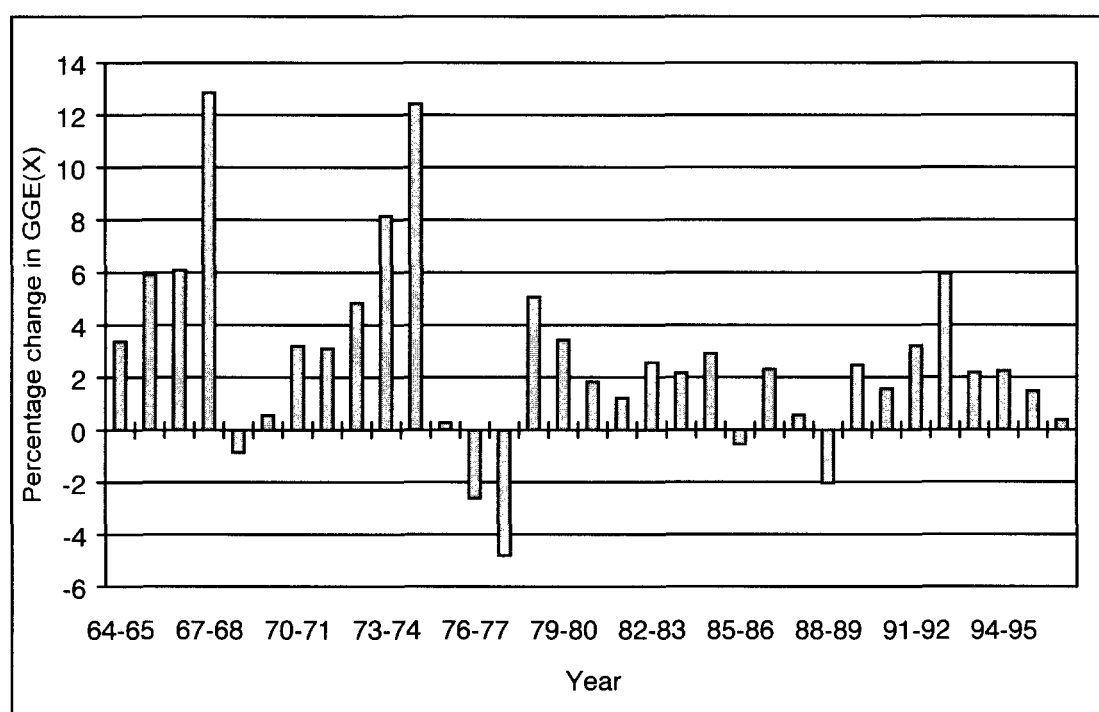
- Central macroeconomic forecast
- Significant real-terms increases in spending
- No discretionary tax changes

We take our central macroeconomic forecast, which envisages the economy back at trend in the final year of the current parliament, 2001-02. These macroeconomic assumptions are shown in Table A.5. Our central forecast is that the PSBR will be in surplus by around 1% of GDP in that year, easily meeting the golden rule. Table A.11 shows one possible path of public spending that would lead to the public finances only just satisfying the golden rule in 2001-02. In this scenario, spending follows the general pattern behind our baseline forecast but has rather higher real increases in spending in each year from 1998-99 onwards.

**Table A.11. Alternative scenarios for GGE(X)**

% real growth in GGE(X)	1997-98	1998-99	1999-00	2000-01	2001-02	Average
Baseline forecast	-0.6%	0.6%	2%	1.7%	1.8%	1.1%
Higher spending scenario	-0.6%	2.2%	2.8%	2.5%	2.6%	1.9%

How likely is it that the government could allow spending rises greater than this? The average increase in GGE(X) between 1963-64 and 1996-97 was 2.8%, as shown in Figure A.1. There have been a number of occasions when spending growth has been far more rapid. GGE(X) grew in real terms, with growth faster than 12% on two occasions and higher than 5% on seven occasions. However, since 1979-80, growth in GGE(X) has averaged only 1.9% in real terms per year, exactly equal to the average rate of growth of GGE(X) under this scenario.

**Figure A.1. Annual changes in real GGE(X) over time**

Source: *Public Expenditure Statistical Analysis 1997-98*.

**Table A.12. Public finances in the medium term: 'higher spending' scenario**

(£ billion)	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03
GGR	308	330	347	365	384	405
GGE	319	337	356	373	391	408
PSBR	10	7	8	8	8	3
GGE(X) / GDP (%)	39	39	40	40	40	40
PSBR / GDP (%)	1	1	1	1	1	0

The impact on the public finances is shown in Table A.12. Whilst the public finances still meet the golden rule in the final year of this parliament, any higher growth in spending would, under our central macroeconomic forecast, lead to the government missing its own target for the stance of fiscal policy. Such an outcome is certainly not implausible, since missing the target for the stance of fiscal policy by the last year of this parliament could be associated with any increase in real spending above the average rate of increase during the four Conservative governments between 1979 and 1997.

# Appendix B. Tax Revenues Ready Reckoner

**Table B.1. Direct effects of illustrative changes in taxation to take effect April 1998**

(£ million)	Cost/yield (non-indexed base)	
	1998-99	1999-00
<b>Income tax</b>		
<b>Rates</b>		
Change standard rate by 1p	1,400	1,950
Change lower rate by 1p	900	1,100
Change higher rate by 1p	310	680
<b>Allowances</b>		
Change personal allowance by £100	420	610
Change married couple's allowance by £100	110	160
<b>Lower-rate band</b>		
Increase lower-rate band width by 10%	180	240
<b>Basic-rate limit</b>		
Change basic-rate limit by 1%	65	120
Change basic-rate limit by 10%:		
increase (cost)	600	1,100
decrease (yield)	780	1,400
<b>Allowances, bands and limits</b>		
Change all main allowances, lower-rate band and basic-rate limit:		
increase/decrease by 1%	300	470
increase by 10% (cost)	2,900	4,450
decrease by 10% (yield)	3,250	5,000
<b>National Insurance contributions</b>		
<b>Rates</b>		
Change main employee rate by 1p	1997-98 2,000	1998-99 2,350
Change highest employer rate by 1p	2,525	3,025
Change Class 2 rate by £1	85	120
Change Class 4 rate by 1p	0	220
		(continues)

Note: The revenue effect is computed for changes to the 1998-99 tax system and relates to the first-year (1998-99) and the full-year (1999-00) effects.

**Table B.1. Direct effects of illustrative changes in taxation to take effect April 1988**  
(continued)

(£ million)	Cost/yield (non-indexed base)	
	1998-99	1999-00
<b>Corporation tax</b>		
Change full rate by 1%	710	980
Change smaller companies' rate by 1%	90	130
<b>Capital gains tax</b>		
Increase annual exempt amount by £500 for individuals and £250 for trusts	—	8
<b>Inheritance tax</b>		
Change inheritance tax rate by 1%	20	40
Increase inheritance tax threshold by £5,000	15	30
<b>VAT</b>		
Change VAT rate by 1%	3,055	3,255
<b>Excise duties</b>		
Beer up 1p a pint	120	125
Wine up 5p a bottle	40	45
Spirits up 25p a bottle	25	25
Cigarettes up 5p a packet	180	190
Petrol up 1p a litre	265	290
Derv up 1p a litre	145	160
Change insurance premium tax by 1%	220	305
<b>VAT</b>	1997-98	
Extend VAT to:	<i>effect</i>	
Food	7,600	
Passenger transport	2,750	
Construction of new homes	2,200	
Books, newspapers, etc.	1,200	
Water and sewerage services	1,000	
Children's clothing	900	
Prescriptions	800	

Note: The revenue effect is computed for changes to the 1998-99 tax system and relates to the first-year (1998-99) and the full-year (1999-00) effects.

Sources: *Inland Revenue Statistics 1997*.

HM Customs and Excise Annual Report 1996-97.

*Tax Ready Reckoner and Tax Reliefs*, HM Treasury, July 1996.