THE IFS GREEN BUDGET: JANUARY 2002

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The IFS Green Budget

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Contents

List of figures

List of tables

1. Summary

An audit of the public finances

The January 2002 IFS forecast suggests that the current budget surplus in 2001–02 will be £14.0 billion compared with the £11.1 billion forecast by the Treasury. We forecast a surplus on public sector net borrowing (PSNB) in 2001–02 of £1.6 billion compared with the £1.4 billion deficit forecast in the November 2001 Pre-Budget Report. In the medium term, the January 2002 IFS forecast is that receipts will be at a similar level to the November 2001 Pre-Budget Report forecast though public spending will be higher.

The government could decide to reduce the level of caution contained in its fiscal projections. If it did this, then it could finance its new measures (such as the new tax credits) from increased borrowing, increase spending in 2004–05 and 2005–06 in line with national income and still meet its fiscal rules without the need to increase taxes in the Budget. Such a strategy would mean that an unexpected change in government revenues or spending could lead to the fiscal rules being breached in the future.

Alternatively, the government could decide to budget for a medium-term current budget surplus of around 0.7% of GDP. This is what the Chancellor did in the March 2000 Budget and the March 2001 Budget. To restore the degree of caution to this level and to finance the costs of the new measures would require the Chancellor to announce new spending cuts or tax increases of around £5 billion.

This assumes as a baseline that public spending in 2004–05 and 2005–06 grows in line with national income. In its last two Spending Reviews, the government decided to increase public spending as a share of national income. Increases in capital spending can be financed by increases in borrowing without breaching the fiscal rules. Increases in current spending as a share of national income require the Chancellor either to reduce the caution in his forecasts or to ensure that tax revenues rise. If the government were to increase current spending by 2¾% a year, then this would require around an additional £1 billion each year in borrowing or tax revenues. Therefore to increase current spending at 2¾% a year in real terms in 2004–05 and 2005–06, to finance the new measures and to restore the amount of caution in its plans to the March 2001 Budget level would necessitate new tax increases of around £7 billion in the Budget. This comprises the £5 billion for restoring caution, paying for the new measures and keeping spending constant as a share of national income and an extra £1 billion for each year of increasing current public spending at 2¾%.

Improving public services?

UK spending on health and schools is relatively low by international standards. But current increases in health and education spending are historically large, and are planned to continue at least until March 2004. If

continued substantial spending increases in the health and education budgets are deemed necessary beyond 2003–04, then one option would be to try to fund them from savings out of other departments. But this does not look easy – it seems unlikely that falling unemployment will continue to provide significant savings on social security, and the claims of many other spending departments – for example, transport and defence – might be seen as relatively strong at the moment. It seems likely, therefore, that continued large increases in health and education spending beyond 2003–04 would need finance from either increased borrowing or taxation.

Alongside increased public expenditure, the government sees reform of public services as an important means of improving their quality. In particular, it hopes that it can find new ways to involve the private sector and so increase efficiency. Our overview suggests that the arguments for greater private sector involvement are likely to be strongest in cases where the public sector is confident in its own ability to anticipate its needs over a long time horizon. Conversely, the arguments against tying the State into a long-term deal with the private sector seem most compelling when there is significant uncertainty about exactly what type of services we will want in the future.

Options for increasing tax

Restoring the level of caution in the public finance forecasts seen in the last two Budgets and paying for measures under consultation (such as the new tax credits) would require the Chancellor to raise taxes by around £5 billion. There may also be a need to fund any increases in public expenditure being planned for Spending Review 2002. Possible sources of significant extra revenue in the 2002 Budget are National Insurance and VAT. But the decision to rule out increases in income tax rates might seem disadvantageous should the government want to raise significant revenue. For the pledge limits the potential to increase the single biggest tax, and it does so more severely now than it did in Labour's first term, as many of the means used to increase income tax revenue without changing the rates are now exhausted. It might also seem disingenuous if income tax rate rises are simulated using National Insurance. Indeed, the National Insurance option might seem less distributionally appealing than income tax: National Insurance increases leave untouched the unearned income of the wealthy and would hit moderately high earners harder.

Personal tax reforms: the child tax credit and the working tax credit

The government has promised to announce the rates of two new tax credits – the child tax credit and the working tax credit – in Budget 2002. These credits will be introduced in 2003–04, and are likely to have a full-year cost of £2–3 billion a year. In addition, after a worrying lack of public discussion and openness, many of the operational details may be announced in the Budget. These details will determine whether the people who the credits are aimed at understand them and choose to claim them.

We explore some options for the initial rates and total exchequer cost. As the child tax credit is the most direct mechanism the government will have to meet its child poverty targets, we show by how much the new tax credits could reduce child poverty. We also discuss what operational details need to be announced in the Budget and whether the credits will succeed as a new form of means test.

Tax policy and companies

The government intends to introduce a further R&D tax credit open to larger firms in Budget 2002. Following the Pre-Budget Report, it issued a further consultation document on the final design of the credit. Although incremental credits can be more cost-effective than volume-based credits in terms of generating additional R&D, they can also introduce considerable complexity and uncertainty. The government looks likely to opt for a volume-based credit with relatively low compliance and administrative costs.

The 2001 Pre-Budget Report outlined proposals to pilot new initiatives to improve the acquisition of basic skills and level 2 qualifications among employees. This represents a further proposed reform to the provision of post-school education and training, following the introduction and subsequent withdrawal of Individual Learning Accounts. Few doubt that there is some role for government in the provision of training. But the government should clearly identify, and consider evidence on the magnitude of, the market failures that it is trying to tackle, and develop a policy that addresses these issues. It is not clear that the current proposals have followed this route. The piloting of the scheme, with plans for an evaluation of its effectiveness, is therefore welcome.

Developments in asset-based welfare policy

At the time of the Pre-Budget Report, the Treasury published a consultation document discussing two proposed asset-based welfare policies – the Saving Gateway and the Child Trust Fund. These are intended to 'extend the benefits of saving and asset-ownership more widely'. The latest round of consultation on asset-based welfare policies focuses on detailed design issues: on how pilot versions of the Saving Gateway can be used to test practical elements of the design of a nationwide policy and on how to organise the market for a nationwide Child Trust Fund. It seems very likely that the policies will be rolled out nationally, and it has been argued that they will form a good complement to existing welfare policies. Increased spending on traditional forms of welfare provision or State-provided services would also complement existing provision. It is not clear that spending on matched savings accounts (the Saving Gateway) represents a better way of supporting lower-income families than would increasing benefit expenditures or funding more financial education. Equally, it is not clear that children will be better supported by being provided with an asset that matures at age 18 (the Child Trust Fund) rather than by targeted increases in financial support to their families or by targeted education spending.

A graduate tax for the UK?

The recent interest in a graduate tax continues a long-running, but unresolved, debate about student finance in the UK. It is unclear whether there is to be a formal consultation on the issue or whether concrete proposals will appear. We examine the potential impact of a graduate tax scheme. Graduates tend to be better off than the average, and to come from families with above-average incomes. A graduate tax operating through increases in basic and higher rates of income tax would have progressive effects. But fundamental questions about whether it would be appropriate to use such a vehicle as a means of funding higher education remain unanswered, as do many issues about the design and implementation of such a tax.

2. An audit of the public finances

The January 2002 IFS forecast suggests that the current budget surplus in 2001–02 will be £14.0 billion. This is £2.9 billion larger than that forecast in the November 2001 Pre-Budget Report (PBR). This is due to a similar level of receipts combined with the fact that continued departmental underspends seem probable, although public sector net investment does look likely to hit the government's target. The January 2002 IFS forecast suggests that there will be a surplus on public sector net borrowing (PSNB) in 2001–02 of £1.6 billion compared with the £1.4 billion deficit forecast in the November 2001 PBR.

In the medium term, the January 2002 IFS forecast is that receipts will be at a similar level to the November 2001 PBR forecast though public spending will be higher. In part this is due to the additional cost of new measures to which the government has committed, not yet being included in the Treasury's projections. These include the new tax credits for families with and without children. In addition, our baseline assumption is that public spending as a share of national income will remain constant in 2004–05 and 2005–06 rather than decline as assumed in the PBR.

The Budget will need to confirm the cost of the new measures and decide how much spending to allocate to the July 2002 Spending Review. The Chancellor will also need to decide how much caution he would like in his public finance plans – i.e. the size of current budget surplus to plan for. These factors will determine whether the Budget will be able to increase public spending or cut taxes or, alternatively, whether it needs to reduce future borrowing by either cutting public spending or increasing taxes.

The government could decide to reduce the level of caution contained in its fiscal projections. If it did this, then our forecasts show that it could finance its new measures from increased borrowing, increase spending in 2004–05 and 2005–06 in line with national income and still meet its fiscal rules without the need to increase taxes in the Budget. Such a strategy would leave very little room to manoeuvre, and an unexpected change in government revenues or spending could lead to the fiscal rules being breached in the future.

Alternatively, the government could decide to budget for a medium-term current budget surplus of around 0.7% of GDP. This is what the Chancellor did in the March 2000 Budget and the March 2001 Budget when higher-than-expected revenues and lower-than-expected spending allowed him to announce both spending increases and tax cuts. To restore the degree of caution to this level and to finance the costs of the new measures would require the Chancellor to announce new spending cuts or tax increases of around £5 billion.

This assumes as a baseline that public spending in 2004–05 and 2005–06 grows in line with national income. Freezing public spending in real terms would allow caution to be restored alongside substantial tax cuts. This would not be consistent with the government's commitments to reduce child poverty and to improve public services. In its last two spending reviews, the government decided to increase public spending as a share of national income.

Increases in capital spending can be financed by increases in borrowing without breaching the fiscal rules. Increases in current spending as a share of national income require the Chancellor either to reduce the caution in his forecasts or to ensure that tax revenues rise. If the government were to increase current spending by 2¾% a year, this would require around an additional £1 billion each year in borrowing or tax revenues. Therefore to increase current spending at 2¾% a year in real terms in 2004–05 and 2005–06, to finance the new measures and to restore the level of caution in its plans to the March 2001 Budget level would necessitate new tax increases of around £7 billion in the Budget. This comprises the £5 billion for restoring caution, paying for the new measures and keeping spending constant as a share of national income and an extra £1 billion for each year of increasing current public spending at 2¾%.

The actual growth in current spending over the period April 1999 to March 2004 is forecast to be 3.0% a year. To continue increasing current spending at this rate, without reducing caution, would require an extra £2 billion a year in taxation rather than the £1 billion a year in the scenario above.

2.1 Borrowing and the Chancellor's fiscal rules

In July 2002, spending plans until 2005–06 will be unveiled in Labour's third Spending Review. In parallel, the government will need to present a plan for taxation, as its own fiscal rules constrain the degree to which the levels of taxation and spending may diverge. In order to assess the options for the next Spending Review, it is important to understand how they are affected by these fiscal rules.

In June 1998, the government published a Code for Fiscal Stability,[1] which set out the two fiscal rules it would adhere to in determining levels of borrowing:

- The *golden rule* states that the government will borrow money only for investment and not to fund current spending. The idea behind the golden rule is that imposing costs on future taxpayers through borrowing is only right if they stand to benefit from the spending that the borrowing allows.
- The *sustainable investment rule* requires that government debt as a percentage of national income should be kept at a 'stable and prudent level'[2] – which has been defined by the Chancellor as no more than 40% of GDP.

Both these rules are assessed over the economic cycle because different levels of receipts and spending and thus borrowing and debt may be desirable at different points of the economic cycle:

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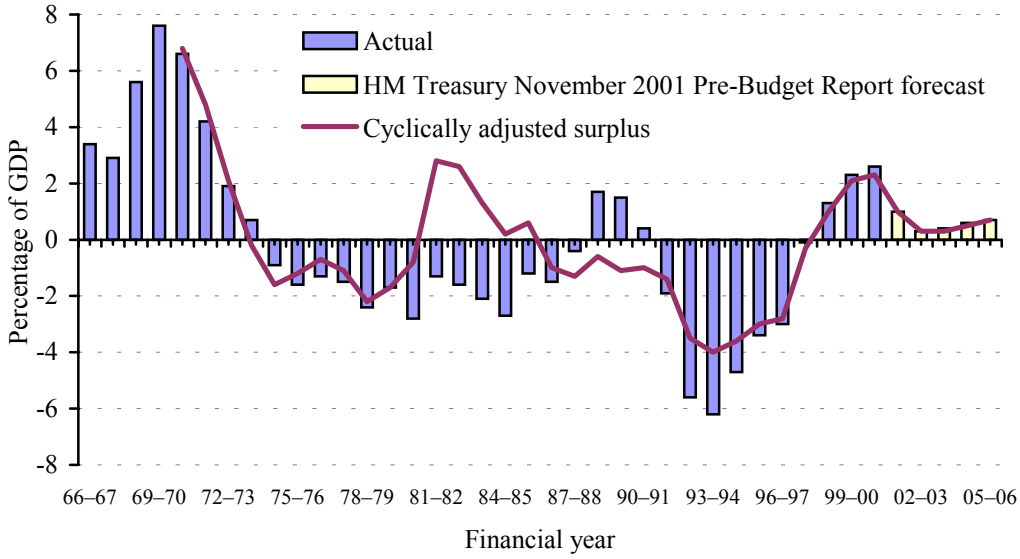
[1] Source: HM Treasury, *The Code for Fiscal Stability*, London, 1998.

[2] HM Treasury, *Pre-Budget Report*, Cm. 5318, The Stationery Office, London, 2001 (www.hm-treasury.gov.uk/pre_budget_report/prebud_index.cfm).

- For many taxes, receipts increase faster than national income during periods of strong economic growth. Higher rates of employment and earnings growth lead to higher receipts of income tax and National Insurance, while higher profits result in stronger corporation tax receipts. The converse is also typically true: when economic growth is weak, tax receipts fall as a proportion of GDP.
- Government spending also responds to the economic cycle. For example, lower economic growth leads to more unemployment and so claims for social security benefits such as the jobseeker's allowance increase.

If there were no economic cycle and national income simply grew at a constant rate, then the golden rule could be judged by looking at whether the government's current budget is in surplus – that is, whether total government receipts are greater than current spending – as, if it is, any borrowing will be less than capital spending and so the golden rule will be met. To assess the golden rule, given the presence of an economic cycle, the government publishes cyclically adjusted measures of the current budget which seek to strip out the effect of the cycle on the public finances.[3] If the process for calculating cyclical adjustment is correct, then, as long as the cyclically adjusted current budget is in surplus each year, the golden rule will be met across the economic cycle.

Figure 2.1. Current budget surplus as a percentage of national income



Note: Measures include the windfall tax and associated spending.
Source: HM Treasury, *Public Finances Databank, 4 December 2001*, London, 2001.

The surplus on current budget, as a percentage of national income, from 1966–67 to 2005–06 using current Treasury forecasts is shown in Figure 2.1. This also shows the cyclically adjusted surplus on current budget from 1970–71 to 2005–06. Between 1970–71 and 1996–97 – the year before Labour gained

[3] For more details of how the cyclical adjustments are calculated, see HM Treasury, *Fiscal Policy: Public Finances and the Cycle*, London, 1999.

office – the surplus on current budget averaged –1.1% of GDP, while the cyclically adjusted average was –0.4% of GDP. Both of these figures indicate a deficit on current budget over time and show that, if the government is to adhere strictly to the golden rule, this will imply some combination of higher taxes and/or lower public spending relative to GDP than was the case over the previous quarter of a century.[4]

Since Labour came to office in May 1997, there has been a surplus on current budget every year except 1997–98 when there was a deficit of just 0.1% of GDP. Plans going forward show the surplus on current budget remaining, although decreasing from the 2000–01 level of 2.6% of GDP to just 0.4% in 2003–04 before rising slightly to 0.7% in 2005–06. The cyclically adjusted current surplus is also forecast to fall, from 2.3% of GDP in 2000–01 to 0.3% of GDP in 2002–03 and 2003–04, before rising to 0.7% by 2005–06. Therefore, if adherence to the golden rule is measured according to whether there is a cyclically adjusted surplus on current budget every year, then, under the latest government plans, the golden rule is set to be met every year from 1998–99 to 2005–06.

An alternative interpretation of whether the golden rule has been met would be to judge it over a longer time period than one year by looking at the average surplus over each economic cycle. This might be considered reasonable, given that each economic cycle will be different and therefore the process of calculating a cyclical adjustment is far from being an exact science.

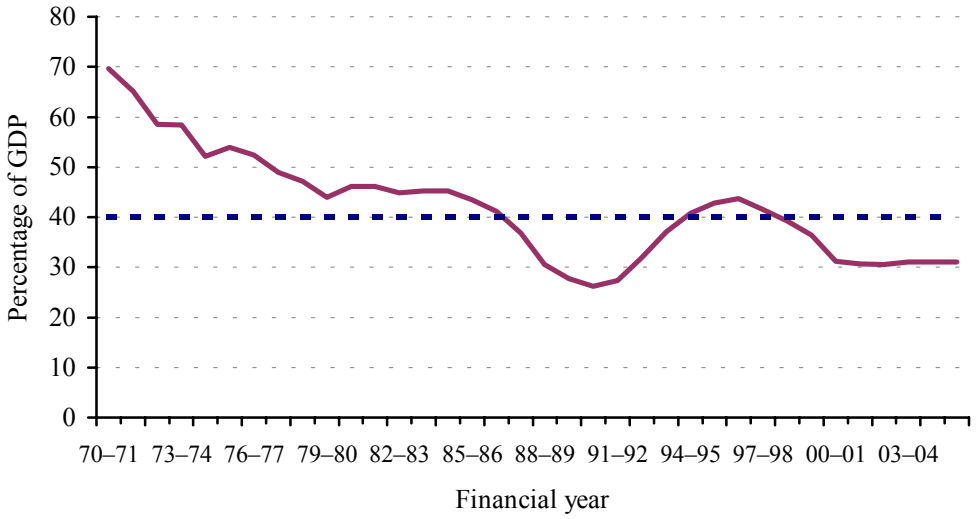
Averaging over the cycle is not straightforward either, as predicting when a cycle begins and ends is difficult. This interpretation of the golden rule does give the government more flexibility in meeting the rule compared with considering the annual cyclically adjusted measure. For example, it allows variation in tax revenues and spending beyond the effect of the automatic stabilisers. In particular, the historically large surpluses seen in 1999–2000 and 2000–01 would allow the government to run current budget deficits in coming years. Fiscal policy conducted in this way would be consistent with a short-run commitment to meet the golden rule under this interpretation. In the longer term, current budget deficits would have to be addressed and future tax increases or spending cuts would be required at some point to return to a position of current budget surplus.

Unlike the golden rule, which restricts the options open to the government, the sustainable investment rule is currently not a binding constraint. Figure 2.2 shows government debt as a percentage of GDP from 1970–71, going forward to 2005–06 under the latest HM Treasury forecasts. Debt higher than 40% of national income was the norm prior to the mid-1980s. Since Labour has been in government, we have seen debt fall from 41.5% of GDP in 1997–98 to 31.2% in 2000–01. It is forecast to remain at around 31% for the remainder of the forecast period. In order for the sustainable investment rule to be broken while the golden rule is maintained, the government would need to increase investment spending by just under 9% of GDP over and above its current

[4] For a more detailed discussion see C. Emmerson and C. Frayne, *The Government's Fiscal Rules*, Briefing Note no. 16, Institute for Fiscal Studies, London, 2001 (www.ifs.org.uk/public/bn16.pdf).

plans.[5] Given that public sector net investment over the five-year period since Labour came into power is set to average less than 1% of GDP (the lowest figure for any five-year period since the Second World War), this is not a constraint. In addition, government borrowing will not necessarily lead to increases in government debt as a share of national income. For example, the November 2001 Pre-Budget Report forecasts that borrowing will be between 1.1% and 1.3% of GDP over the period 2002–03 to 2005–06: as shown in Figure 2.2, this leads to public sector net debt stabilising at around 31% of national income.

Figure 2.2. Public sector net debt as a percentage of national income



Source: HM Treasury, *Public Finances Databank, 4 December 2001*, London, 2001.

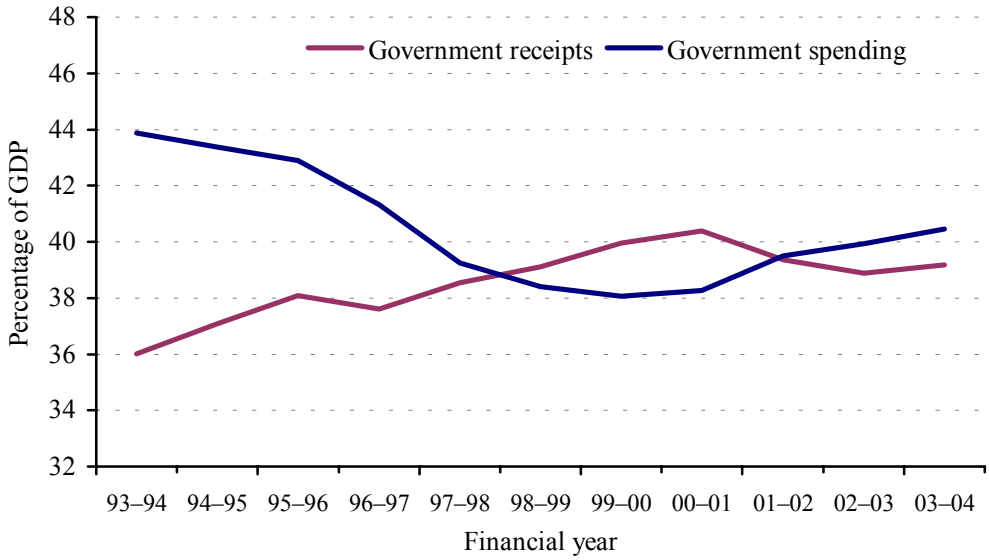
The decrease in debt since Labour came to power has been the result of changes in both receipts and spending. Figure 2.3 shows government receipts and spending as a percentage of GDP from 1993–94 to 2003–04. The difference between the two lines shows public sector net borrowing. In 1993–94, government borrowing was £51.0 billion (7.9% of GDP). This was reduced over the following three years by a combination of increased taxes and reduced spending. By 1996–97, just before Labour came to power, borrowing had already fallen to 3.7% of GDP. Borrowing was subsequently reduced further. This was due to factors such as strong economic growth, spending restraint, unexpected buoyancy in tax receipts and Budget measures that increased tax.[6] As a result, there was a surplus in public sector net borrowing in 1998–99 of 0.7% of GDP, rising to a surplus of 2.1% of GDP in 2000–01. The Treasury now forecasts a deficit in 2001–02 of 0.1% of GDP,

[5] The increase in debt interest payments arising from this increased borrowing would need to be met from current tax receipts if the golden rule were to continue to be met.

[6] For example, the July 1997 and March 1998 Budgets announced measures that had a net effect of increasing taxes. For more details, see Table 2.3 (page 14) of A. Dilnot and T. Clark, *Election Briefing 2001*, Commentary no. 84, Institute for Fiscal Studies, London, 2001 (www.ifs.org.uk/election/ebn2.pdf).

which is low enough to enable government debt to continue falling as a proportion of national income. This deficit is forecast to grow to 1.3% of GDP in 2003–04, because tax receipts are forecast to fall as a share of national income while public expenditure is forecast to rise. Despite these changes, borrowing is forecast to remain lower than when Labour came into power – this is because taxes are higher as a proportion of GDP and public spending is lower than in 1996–97.

Figure 2.3. Public sector receipts and spending as a percentage of GDP



Note: Numbers exclude windfall tax and associated spending.
Source: HM Treasury, *Public Finances Databank, 4 December 2001*, London, 2001.

Caution in forecasting government borrowing

It is, of course, likely that the eventual out-turn for public borrowing will differ from these forecasts. This is due to the inherent difficulties in forecasting public expenditure and receipts. The average absolute error in government borrowing forecasts one year ahead between 1985–86 and 1997–98 was 1.2% of GDP, with the error in forecasts four years hence rising to 4.1% of GDP.[7] Errors of that proportion of GDP represent £12 billion and £41 billion in 2001–02. The size of these average errors provides a strong rationale for using caution when making public finance forecasts, if the aim is to guarantee that the fiscal rules are met.

Any public finance forecasts will make assumptions about economic conditions in years to come, including the rate of growth of the economy. If economic growth turns out to be slower than anticipated, this will increase borrowing in the absence of any other changes. As long as any economic slowdown is cyclical, this should not affect whether the fiscal rules are met, since they are judged over the economic cycle and lower economic growth

[7] Table B13 of HM Treasury, *Pre-Budget Report*, Cm. 4076, London, 1998 (www.hm-treasury.gov.uk/pub/html/prebudgetNov98/index.html).

now should lead to higher economic growth in the future as the economy returns to trend output. If, however, lower economic growth is the result of a structural rather than a cyclical downturn, then this would permanently weaken the public finances and might lead to the golden rule not being met.

To reduce the likelihood of this occurring, government forecasts assume a trend rate of sustainable economic growth of 2¼% despite the Treasury's belief that the actual trend is for growth of 2½%. This means that the Treasury's predictions are more likely to underestimate revenues than to overestimate them. Since Labour entered government in May 1997, government forecasts have consistently underestimated revenues. Looking at estimates for 1998–99 to 2000–01 (Labour's three full financial years in government), the average absolute error for one year in advance is 3.0% of the prediction, while for five months in advance it falls to 1.3%.[8] This has meant that the government has had higher surpluses on current budget than forecast, enabling it to borrow less money than anticipated and so repay more debt.

In addition, the Treasury uses cautious rather than central estimates when forecasting a range of key factors. For example, a degree of caution is applied when forecasting the level of smuggling, unemployment and the ratio of VAT revenue to consumer spending. With unemployment, the amount of caution included in the forecasts at any one time will vary with the economic cycle. This is because the government uses the average of independent forecasts if this predicts rising unemployment, while it assumes that unemployment will remain constant if the average predicts a fall. This means that the unemployment assumption is only cautious in periods of falling unemployment. This is actually a rather curious situation – especially since it is arguably the case that more caution should be built into the plans during periods of weak rather than strong economic growth. Indeed, the current Treasury forecasts assume that unemployment will rise slightly, which is in line with the average across independent forecasters. While this is a reasonable central forecast, it is not one that could be described as particularly cautious.

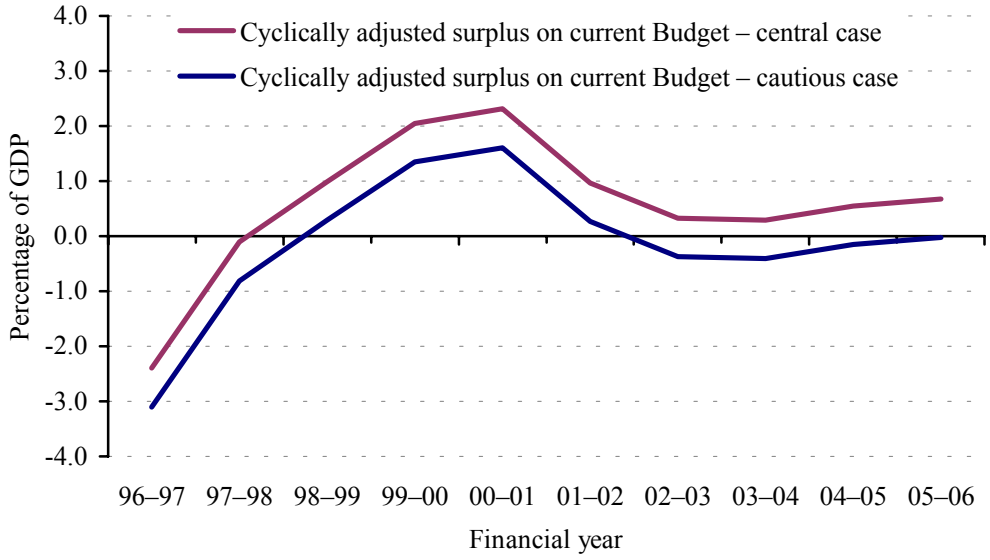
The Treasury also publishes forecasts for the cyclically adjusted current budget under a more cautious scenario in which the level of output that the economy can sustain is assumed to be 1% lower than is actually believed to be the case. These forecasts have appeared in each Pre-Budget Report and Budget since November 1998. In the March 2000 Budget, it was the case that 'Even on this more cautious case the golden rule would be met, with the cyclically-adjusted current budget projected to be in surplus or balance over the forecast horizon'.[9] The forecasts presented in the March 2001 Budget showed a cyclically adjusted current budget surplus throughout the planning period, even under the more cautious scenario. This is no longer the case, since, as shown in Figure 2.4, under more pessimistic assumptions there is now a deficit on the cyclically adjusted current budget surplus of around 0.4% of GDP in both 2002–03 and 2003–04. Even if this more cautious case turns out to be

[8] The 2000–01 out-turn figure is adjusted for the reduction in vehicle excise duty receipts announced in the November 2000 Pre-Budget Report.

[9] HM Treasury, *Financial Statement and Budget Report*, Hc346, The Stationery Office, London, 2000.

correct, it would still be true that one interpretation of the golden rule would have been met, as over the economic cycle the current balance would be in surplus on average. It is also true that the golden rule is now forecast to be met with far less room to manoeuvre than was the case in either the March 2000 or the March 2001 Budget. If the Chancellor wishes to return to having this degree of caution in the plans, then either reductions in public spending or increases in taxation will be required to reduce borrowing.

Figure 2.4. Forecasts for the current budget surplus under HM Treasury central and cautious scenarios



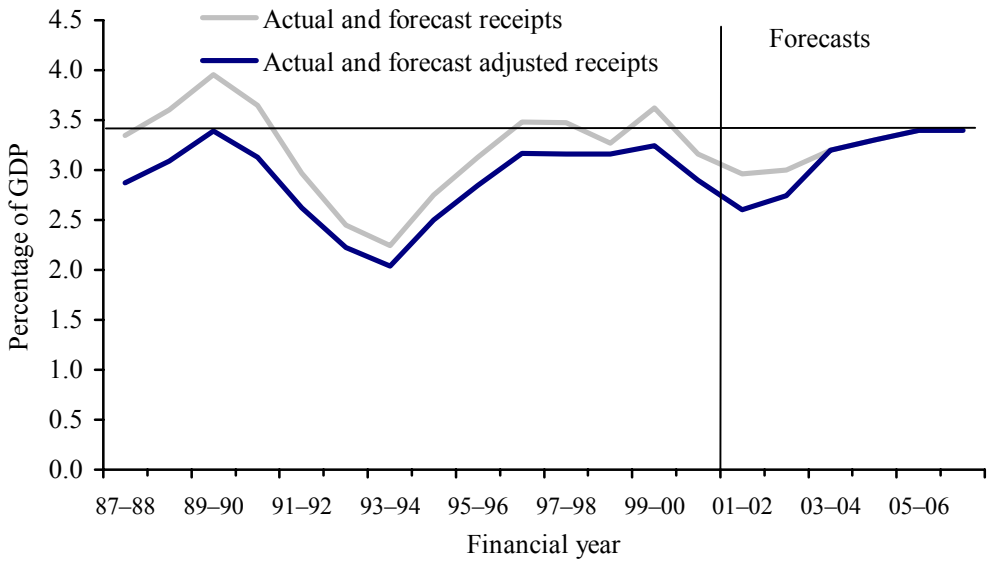
Source: Chart B2 (page 167) of HM Treasury, *Pre-Budget Report*, Cm. 5318, The Stationery Office, London, 2001 (www.hm-treasury.gov.uk/pre_budget_report/prebud_index.cfm).

Forecasting corporation tax

Corporation tax is the most cyclical tax and is the hardest tax to forecast. This suggests that particular care should be taken to ensure that corporation tax forecasts look appropriate. While only accounting for 8.5% of total revenues, it actually explains 60% of the fall in receipts between the March 2001 Budget forecast and the November 2001 PBR forecast for 2001–02.[10] Despite this, the PBR forecast that corporation tax receipts from financial company profits will be £2 billion higher in 2005–06 than was forecast in the March 2001 Budget. Figure 2.5 shows the government's forecasts for non-North-Sea corporation tax receipts as a percentage of national income. These are estimated to be around 3% of GDP in 2001–02 and 2002–03. Thereafter they are forecast to rise strongly, ending up by the middle of the decade at 3.4% of GDP.

[10] Corporation tax receipts in 2001–02 were forecast in the March 2001 Budget to be £37.8 billion out of revenues of £398.4 billion, while the November 2001 PBR forecast £33.3 billion and £391.1 billion – falls of £4.3 billion and £7.2 billion respectively (sources: HM Treasury, *Financial Statement and Budget Report*, Hc279, London, 2001; HM Treasury, *Pre-Budget Report*, Cm. 5318, The Stationery Office, London, 2001 (www.hm-treasury.gov.uk/pre_budget_report/prebud_index.cfm).

Figure 2.5. Non-North-Sea corporation tax revenues as a percentage of GDP



Note: Adjusted series takes account of the fact that the rate of corporation tax has fallen over the period and that the move towards the quarterly payments system brings increased revenues between 1999–2000 and 2002–03.
Sources: Inland Revenue, *Inland Revenue Statistics 2001*, London, 2001; HM Treasury, *Pre-Budget Report*, Cm. 5318, The Stationery Office, London, 2001 (www.hm-treasury.gov.uk/pre_budget_report/prebud_index.cfm); Inland Revenue Press Release, *A Modern System for Corporation Tax Payments*, IR9, 17 March 1998.

For comparison, Figure 2.5 also shows the out-turn figures going back to 1987–88. It can be seen that, both during the 'Lawson boom' and again in the mid-1990s, non-North-Sea corporation tax receipts were above 3.4% of GDP. But in both of these periods, the tax rate was higher than the current 30% rate. The examination of corporate tax receipts is also complicated by the transition to the new system of quarterly payments on account. This brings forward the timing of corporation tax payments and increases revenues in each of the four years from 1999–2000 to 2002–03. The graph also shows a simple estimate of what corporation tax receipts would have been had the corporate tax rate been 30% and without the increased receipts arising from the transition.[11] On this adjusted series, non-North-Sea corporation tax as a share of GDP has only once equalled 3.4%. This was in 1989–90.

So do the Pre-Budget Report forecasts for corporation tax look reasonable? Given the underlying forecasts for GDP growth and the pro-cyclical nature of

[11] The adjustment for changes in the tax rate is produced by simply dividing the revenue figure by the rate that applied in the preceding year and multiplying it by 30%. The adjustment for the effect of the transition is based on the government's published estimates of the effect of the transition and the unexpectedly large receipt of advance corporation tax (ACT) in 1999–2000. See Inland Revenue Press Release, *A Modern System for Corporation Tax Payments*, IR9, 17 March 1998 and paragraph C32 of HM Treasury, *Financial Statement and Budget Report*, Hc620, London, 1998. Note that these estimates for the effects of the transition period are somewhat out of date, as the government has not published any updates to its estimates since 1998.

corporation tax receipts, we would expect relatively strong growth in receipts. And it is worth noting that the real growth rates anticipated in 2003–04 are well within historic precedent. On the other hand, the long-run forecast for corporation tax receipts is higher than the majority of the retrospective data. Given that the forecasts for this year and next are in line with recent experience, it is not apparent that there is any immediate problem. But Budget 2002 should contain further discussion of what is driving the forecast increase in revenues in the medium term.

2.2 Issues in planning public spending

Government expenditure is divided into annually managed expenditure (AME) and departmental expenditure limits (DELs). AME includes the less predictable parts of total spending, such as social security items and debt interest payments. As its name suggests, annually managed expenditure is revised annually to reflect changes in the economy that may affect the level of spending.

Departmental expenditure limits, again as their name suggests, are the spending limits that are set for each government department. These are set in Spending Reviews with three-year planning horizons. Labour's first Comprehensive Spending Review, in July 1998, set out spending limits for 1999–2000, 2000–01 and 2001–02. The last Spending Review, in July 2000, modified the plans for 2001–02 and set plans for 2002–03 and 2003–04. The government has stressed that these Spending Reviews will lead to 'greater stability: firm three year plans have been set for departments to enable them to plan ahead'.[12] Despite this, the plans set down in July 1998 and July 2000 have been changed as a result of the March 2000 Budget, the March 2001 Budget and the November 2001 Pre-Budget Report.

Chapter 3 discusses the pressures for increased expenditure in areas such as health and education. We now turn to some key issues facing the government in planning public expenditure and to the implications for taxation or borrowing under different potential paths for public spending.

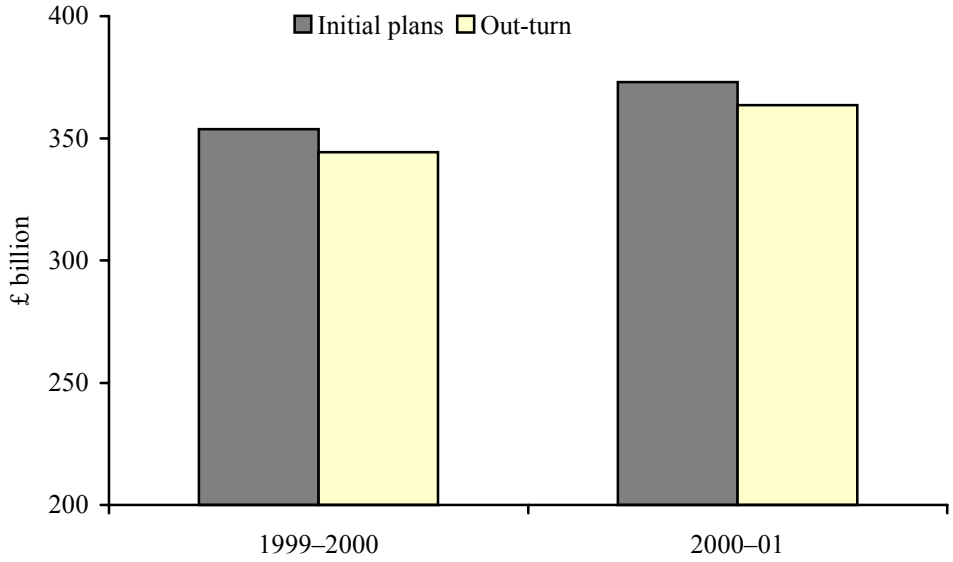
Underspending

Public spending is forecast by the Treasury to be £393.7 billion in 2001–02 (39.5% of GDP). Despite the increases in spending announced in the July 1998 Comprehensive Spending Review and the July 2000 Spending Review, this is still set to be lower than the 41.0% of GDP spent in 1996–97, the last year of the previous Conservative government. This is mostly due to lower unemployment, reduced debt interest payments and extremely tight plans for public spending in 1997–98 and 1998–99. But an additional factor is that some of the increases in spending announced since have failed to materialise.

[12] Paragraph 1.7 (page 10) of HM Treasury, *Comprehensive Spending Review*, Cm. 4011, The Stationery Office, London, 1998.

The size of the underspending for the two years since the July 1998 Comprehensive Spending Review is shown in Figure 2.6. Compared with the initial plans, public sector expenditure was £9.4 billion lower in 1999–2000 and £9.5 billion lower in 2000–01. In 1999–2000, public spending was supposed to increase as a proportion of GDP for the first time since 1992–93. Instead, the £9.4 billion underspend meant that once again public spending fell as a proportion of national income.

Figure 2.6. Underspending on total managed expenditure



Note: These numbers compare the latest out-turn figures with the plans made in the November 1998 Pre-Budget Report. They are not adjusted for subsequent discretionary changes in expenditure plans, which would increase the degree to which spending was lower than originally forecast.
Sources: HM Treasury, *Financial Statement and Budget Report*, Hc620, London, 1998; HM Treasury, *Public Finances Databank, 4 December 2001*, London, 2001.

Some of this underspend is due to lower levels of spending on items such as unemployment benefits and debt interest payments. More concerning for the government, given its desire to improve public services, is that, despite the tight spending plans set down for the preceding two years, several departments failed to spend their allocations in 1999–2000 or 2000–01. The magnitude of this departmental underspending in 2000–01 is shown in Table 2.1. Of the £6.2 billion departmental underspend, £1.4 billion was from the Department for Education and Employment, £0.9 billion from the Department for the Environment, Transport and the Regions and £0.5 billion from the Department of Health. All of these departments saw significant underspends in 1999–2000.[13] Underspends in these areas of education, transport and health will make it more difficult for the government to succeed in delivering significant improvements in these services in the short term. Looking instead at the

[13] For a detailed breakdown of the 1999–2000 departmental underspends, see A. Dilnot, C. Emmerson and H. Simpson, *The IFS Green Budget: January 2001*, Commentary no. 83, Institute for Fiscal Studies, London, 2001 (www.ifs.org.uk/gbfiles/gb2001.shtml).

underspends as a percentage of the department's budget, the largest underspend was the welfare-to-work budget, which in part reflects lower-than-expected unemployment. The second largest offender was the Department of Trade and Industry, which somehow underspent by nearly one-fifth of its annual budget (or by £0.7 billion).

Table 2.1. Departmental spending in 2000–01: underspend relative to final departmental expenditure limits

	Underspend, £ billion	Underspend as a % of department's DEL	Underspend as a % of total underspend
Department for Education and Employment	1.4	7.6	23.0
DETR – main programmes	0.9	8.2	14.7
Department of Trade and Industry	0.7	19.3	12.0
Scotland	0.7	4.2	10.4
Department of Health	0.5	1.1	8.2
Welfare to work	0.4	22.8	6.2
Wales	0.3	3.2	4.0
Home Office	0.2	2.8	4.0
Ministry of Defence	0.1	0.3	1.2
DETR – local government	0.1	0.2	1.0
Other	1.0	3.8	15.4
Total	*6.2*	*3.2*	*100.0*

Notes: The total underspend given here is the £6.2 billion set out in the July 2001 *Public Expenditure Provisional Outturn*, which estimated the provisional out-turn for total DEL spending in 2000–01 to be £191.1 billion, compared with final DELs of £197.3 billion. The November 2001 PBR showed a provisional out-turn for DEL spending of £190.9 billion, producing an underspend £200 million higher than the provisional July underspend. The breakdown of this additional £200 million has not been accounted for here.
Source: HM Treasury, *Public Expenditure 2000–2001 Provisional Outturn July 2001*, Cm. 5243, London, 2001.

It is not completely clear why there has been so much underspending over the last four years. One of the advantages of three-year spending rounds that the Treasury has highlighted is that, when departments spend less than their allocation in a year, they retain an entitlement to this money in the following year. This is known as 'end-year flexibility'. It was introduced amid concern from the Treasury that under one-year spending plans, departments would find it preferable to spend any remaining money towards the end of the financial year in ways that were potentially less effective rather than lose it, leading to reduced value for money. It is true that the introduction of end-year flexibility will have reduced the incentive for departments to spend their entire allocation in each year.[14] Hence, it may be that underspends are a result of departments taking more time to decide the optimal way to spend their allocations. This explanation fits in with the fact that underspending increased greatly once end-year flexibility became part of the system. Such an explanation becomes less plausible, however, as the underspending persists.

[14] Given that spending plans have not been fixed for three years and that it might be easier for a department that has spent its allocation of funds to argue that it needs more resources in the following year, there may still exist an incentive not to underspend.

A disproportionate amount of the underspend is capital rather than current spending. One possible explanation is that it takes a long while to get investment projects under way. This problem could be increased if comparisons of alternative ways of delivering public services under the Private Finance Initiative (PFI) are particularly time-consuming. If this is so, then, as long as the public sector comparator process correctly evaluates the relative efficiency of the PFI, better public services will be delivered eventually. If this is the case, then improvement must be weighed up against the cost of delays in the delivery of services. For a discussion of the possible advantages and disadvantages of the PFI, see Chapter 3.

It has been also been suggested that the underspends are arising due to institutional reasons – namely, that the civil service is simply not well set up to deliver these increases in spending. Colin Talbot, Professor of Public Policy at Glamorgan University, believes that, following years of falling investment, the capacity of civil servants and local government 'to specify, contract and manage large investment projects has been seriously eroded'.[15] Further, it may be that the civil service has not been able to recruit enough people to be able to manage new projects.

Whether this underspending is a serious problem or not will depend crucially on the underlying cause. If the government is to improve the services that both it and voters consider to be a priority, then it is important to look at the outcome in terms of provision of public services. Departmental underspending is likely to hinder the government's efforts to improve results. If the underspends are due to delays in finding the best projects to proceed with, then better public services should eventually be delivered. If this is not the case and there are institutional factors at play or the government is unable to recruit sufficient numbers of qualified staff, then it would be more worrying. A final consideration is that underspending implies that some departments are building large entitlements to money in the future. Their choice of when to spend this money could have consequences for the economy. A large backlog of entitlements could pose inflationary risks at a time of rapid economic expansion in the future. Alternatively, entitlements to spend may become misaligned with the government's priority areas for public spending.[16]

Contingency reserve

The government's spending plans include some funds that are not allocated to any specific spending area. Previously, these funds were known as a 'contingency reserve', whereas, under the new plans for public expenditure, they are kept in a 'DEL reserve' and an 'AME margin' (these will hereafter be referred to jointly as the reserve). The reserve is in place to enable the government to fund unforeseen spending. For example, the reserve was used to cover the cost of the foot-and-mouth clear-up operations, while some of it is

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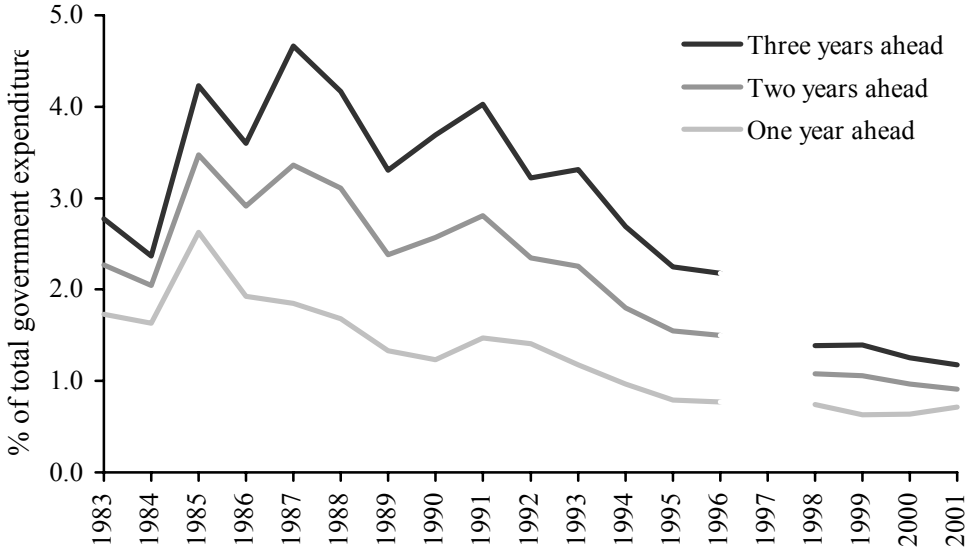
[15] See N. Timmins, 'Labour "underspending and it's getting worse"', *Financial Times*, 3 December 2001.

[16] For a more detailed discussion of these issues, see Section 3.3 of A. Dilnot, C. Emmerson and H. Simpson, *The IFS Green Budget: January 2001*, Commentary no. 83, Institute for Fiscal Studies, London, 2001 (www.ifs.org.uk/gbfiles/gb2001.shtml).

likely to contribute to the cost of the war in Afghanistan. Having the funds set aside in this way is important if such contingencies are to be met without risking a breach of the fiscal rules.[17] Moreover, a reserve enables the government to carry out such spending without having to return to the financial markets to raise the funds.

The size of the contingency reserve planned one, two and three years in advance from 1983 to 1999 as a proportion of total government spending is shown in Figure 2.7. At all points in time, the contingency reserve is larger further into the future, reflecting greater uncertainty. The contingency reserve is now very small compared with its size in the 1980s and early 1990s. Between the 1983 Autumn Statement and the 1996 November Budget, the reserve averaged 1.5% of government expenditure one year ahead, 2.5% two years ahead and 3.3% three years ahead, compared with 0.7%, 1.0% and 1.3%

Figure 2.7. Planned contingency reserve as a percentage of total managed expenditure



Notes: Years 1983 to 1992 refer to Autumn Statements; years 1993 to 1996 refer to November Budgets; 1998 and 2000 refer to the relevant July Spending Review; and 1999 and 2001 refer to March Budgets. Figures for 1997 have been omitted due to the July Budget not containing any detailed spending plans.
Sources: Figure 3.7 (page 19) of A. Dilnot and P. Johnson (eds), *Election Briefing 1997*, Commentary no. 60, Institute for Fiscal Studies, London, 1997; HM Treasury, *Comprehensive Spending Review*, Cm. 4011, 1998; HM Treasury, *Spending Review 2000*, Cm. 4807, 2000; HM Treasury, *Financial Statement and Budget Report*, various years; figures for total managed expenditure from HM Treasury, *Public Finances Databank, 4 December 2001*, London, 2001.

[17] In the presence of a large unforeseen contingency, the government would ideally focus solely on whether the benefits of the expenditure outweighed the costs, rather than slavishly adhering to the fiscal rules.

since 1997.[18] The latest plans, as laid out in the March 2001 Budget, allow for a reserve of £2.8 billion in 2001–02, £3.8 billion in 2002–03 and £5.2 billion in 2003–04. Despite the fact that the size of the reserve was falling over time under the Conservatives, the reserve from the last Budget is smaller than in the Conservatives' last Budget in 1996. If the government were to match the November 1996 proportions, the reserve would increase to £3.0 billion in 2001–02, £5.9 billion in 2002–03 and £8.7 billion in 2003–04.

Since Labour has been in government, the contingency reserve has never been completely depleted to deal with unforeseen emergencies. Yet that does not mean that there is not a case for increasing the size of the reserve, since, otherwise, future unforeseen contingencies could lead to the fiscal rules being missed.

Spending Review 2002

For any level of public spending, the fiscal rules require sufficient revenues to ensure that no borrowing is needed to fund current spending. Under the last Conservative government, both spending and taxation plans were set in November. The Labour government separated these two exercises, by setting taxes in advance of unveiling spending plans. This does seem counter-intuitive since it is the desired provision of services for each department that should determine required government revenues. It is expected that the government will set taxes in the March 2002 Budget in anticipation of the choices it will make later in the year on the spending side. For any path of public spending, the government will need to show how much of that expenditure will be financed by borrowing and how much will be paid for through taxation.

Any increase in public expenditure as a share of national income will require either borrowing or taxation to rise as a percentage of GDP. Over the next two years, public spending is forecast to rise while taxes are not. Hence borrowing is set to increase. Under the current plans for 2003–04, receipts are set to equal £430 billion while current spending is planned at £426 billion, or 39.1% and 38.8% of GDP respectively. This gives a surplus on current budget of just £4 billion.

To restore the amount of caution to the level at the time of the March 2000 and March 2001 Budgets, and to finance the costs of the new tax credits, would require the Chancellor to announce new spending cuts or tax increases of around £5 billion. This assumes that the government decides to keep public spending constant as a share of national income in both 2004–05 and 2005–06. The Chancellor might choose to continue increasing spending as a share of national income. For any given level of caution, the extent to which this would require tax increases in the Budget will depend on two factors: first, how much of the additional spending was investment, since this could, under the golden rule, be financed through increased borrowing; second, for how long a period the Chancellor chose to increase spending as a share of national income. We

[18] The figures used are from the 1998 Spending Review, 1999 Budget, 2000 Spending Review and 2001 Budget. Spending Review numbers were used for 1998 and 2000 as those years' Budgets only contained plans one year ahead.

now turn to different options for growth in public spending and the implication for either borrowing or tax revenues.

Various options for growth in public spending are outlined in Table 2.2. If the Chancellor decides to allow public expenditure to remain constant as a share of national income, then both tax receipts and borrowing could also remain constant as a share of national income. Alternatively, if the Chancellor chooses to freeze public spending in real terms, then tax cuts or reductions in borrowing of £10 billion a year would be possible. If the Chancellor decides to continue increasing public spending as a share of national income, then either borrowing or tax revenues will need to increase.

Table 2.2. Increases in taxation or borrowing needed to fund spending patterns

Planned growth in public expenditure	Real increase in spending	Annual increase in taxation or borrowing required
1. No real increase	0.0%	–£10bn
2. Same as expected trend GDP growth	2.5%	No change
3. As 2 except NHS continues to receive 6.4% a year	3.1%	£2½bn
4. As 3 except education continues to receive 5.4% a year	3.5%	£4bn
5. As 4 except transport continues to receive 8.4% a year	3.6%	£4½bn
6. All spending to rise at rate expected over April 1999 to March 2004	3.5%	£4bn
7. All spending to rise at rate expected over April 2001 to March 2004	4.3%	£7bn

Sources: HM Treasury, *Public Finances Databank, 4 December 2001*, London, 2001; authors' calculations.

A discussion of recent trends in health and education spending is provided in Chapter 3. One of the overriding themes of the November 2001 PBR was the improvement of the NHS. It made plain that NHS funding will continue to be increased as a share of national income in the future. One scenario is for NHS spending to be increased at the same rate as over the period from April 1999 to March 2004 – namely, at 6.4% in real terms on average per year. If this happened while all other spending stayed constant as a share of GDP (i.e. grew at 2.5%), we would see total government spending growing at 3.1% in real terms. If borrowing were not to rise, then the government would need to raise an extra £2½ billion in receipts per year to pay for this.

An alternative scenario might be that, in addition to increasing NHS spending at 6.4%, the government chooses to increase education at the rate forecast between April 1999 and March 2004 (5.4% a year in real terms). If all other spending is kept stable as a proportion of national income, this would represent an annual increase in overall spending of 3.5%, requiring an increase in borrowing or taxes of around £4 billion per annum.

Real increases in benefits for low-income families with children will be needed if the government is to progress towards its objective of abolishing child poverty. Other areas of government spending such as defence and transport may also require increases in their allocations, which would lead to

further increases in borrowing or taxes. For example, the overall increases in total spending from 2000–01 until 2003–04 are set to be more significant, with spending increasing at a rate of 4.3% over these three years. If this rate of growth were to continue, we would expect to see either tax receipts or borrowing rise by £7 billion a year to pay for the spending.

As long as any increase in spending as a share of national income was achieved by holding current spending constant as a share of national income while increasing public sector net investment more quickly, then the golden rule would allow this to be financed through increased borrowing. In the July 1998 Comprehensive Spending Review, the Chancellor planned to increase current spending by 2¼% a year, while in the July 2000 Spending Review, he planned to increase current spending by 2½% a year. Both of these were equal to the Treasury's central estimate of trend growth at the time.

Over the period from April 1999 to March 2004, current spending is actually forecast to grow by an average of 3.0% a year in real terms (i.e. more quickly than national income). If the Chancellor chooses to continue increasing current spending at this rate in future, then, unless the margin with which the golden rule is to be met is reduced, this would require an additional £2 billion a year in additional tax increases.

2.3 Borrowing in 2001–02

Continuing the pattern seen in recent years, higher-than-expected receipts and lower-than-expected government spending led to a surplus on public sector net borrowing (PSNB) in 2000–01 of £20.1 billion compared with the November 2001 Pre-Budget Report forecast of £10.1 billion and the January 2001 Green Budget forecast of £15.9 billion.[19]

The pattern of receipts being higher than expected has not continued into the current financial year. The November 2001 PBR forecast that receipts in 2001–02 will be £391.1 billion, which is £7.3 billion lower than the March 2001 Budget, as shown in Table 2.3. The November 2001 PBR forecast the same level of spending in 2001–02 as the March 2001 Budget. This is due to departmental expenditure limits being left largely unchanged while any difference in forecasts within annually managed expenditure, such as increased spending on social security benefits, is offset by changes in the AME margin. The result was that the PBR forecast a surplus on current budget[20] of £11.1 billion and PSNB of £1.4 billion. These figures compare with the March 2001 Budget forecast surplus on current budget of £17.0 billion and a surplus on PSNB of £6.0 billion.

The January 2002 IFS forecast is for receipts in 2001–02 to be £391.4 billion, which is £7.0 billion lower than forecast in the March 2001 Budget, but

[19] For a breakdown of the November 2000 Pre-Budget Report and the January 2001 IFS / Goldman Sachs Green Budget forecast for 2000–01 with the eventual out-turn, see Appendix A.

[20] Unless otherwise stated, surplus on current budget and public sector net borrowing refer to measures excluding expenditure financed by the windfall tax.

£0.3 billion higher than the PBR forecast. Due to the continued evidence of departments failing to spend their entitlements, the January 2002 IFS forecast for total managed expenditure is £391.1 billion – £2½ billion below that forecast by either the March 2001 Budget or the November 2001 PBR. We assume that departments only manage to spend half of this underspend amount in 2002–03.

Our forecasts of government revenues and expenditures suggest a surplus on current budget of £14.0 billion and a surplus on PSNB of £1.6 billion, both of which leave the public finances stronger by around £3 billion than forecast in the November 2001 PBR.

Table 2.3. Comparison of Green Budget and HM Treasury forecasts for government borrowing, 2001–02 (£ billion)

	Budget, Mar. 01	Pre-Budget Report, Nov. 01	Green Budget, Jan. 02	Differences in Green Budget forecast relative to:	
				Budget	PBR
Current receipts	398.4	391.1	391.4	–7.0	0.3
Total managed expenditure	393.7	393.7	391.1	–2.5	–2.5
Of which:					
Departmental expenditure limits	212.3	212.5	210.0	–2.3	–2.5
Annually managed expenditure	181.4	181.1	181.1	–0.3	0.0
Public sector net borrowing[a]	–6.0	1.4	–1.6	4.4	–3.0
Net investment	11.2	12.9	12.9	1.7	0.0
Surplus on current budget[a]	17.0	11.1	14.0	–3.0	2.9

[a] Excludes windfall tax and associated spending.

Sources: Treasury forecasts – HM Treasury, *Pre-Budget Report*, Cm. 5318, London, 2001; HM Treasury, *Financial Statement and Budget Report*, Hc279, London, 2001.

A more detailed breakdown of the January 2002 IFS and November 2001 PBR forecasts for 2001–02 is shown in Table 2.4. The slightly higher IFS forecast for receipts in 2001–02 arises from a slightly higher forecast for income tax receipts, although this is partially offset by slightly lower forecast receipts from social security contributions and vehicle excise duty.

On the spending side, the January 2002 IFS forecast is for £2½ billion less spending in 2001–02, which arises entirely from lower current spending than forecast in the November 2001 PBR. While the PBR forecast growth in central government current spending of 6.9% in 2001–02, information on the first nine months of this financial year show that it has only grown at 5.1%.[21] If it continues to grow at this rate, the eventual underspend could be even greater than the £2½ billion contained in the IFS forecast (depending on spending by local authorities and public corporations). In contrast, recent figures on public sector net investment suggest that, unlike in recent years, the government is currently on course to meet its investment target in 2001–02.

[21] Latest figures on government receipts and spending are from Office for National Statistics / HM Treasury Press Release, *Public Sector Finances: December 2001*, 21 January 2002.

Table 2.4. Comparison of Green Budget and HM Treasury forecasts for government borrowing, 2001–02 and 2002–03 (£ billion)

	2001–02		2002–03	
	PBR Nov. 2001	*Gr. Budget Jan. 2002*	*PBR Nov. 2001*	*Gr. Budget Jan. 2002*
Inland Revenue				
Income tax[a]	109.7	111.1	116.1	116.6
Corporation tax[b]	33.3	33.3	35.0	34.8
Tax credits	–7.6	–7.6	–9.0	–9.0
Petroleum revenue tax	1.4	1.4	1.4	1.4
Capital gains tax	2.9	2.9	1.8	1.8
Inheritance tax	2.4	2.4	2.5	2.5
Stamp duties	7.4	7.4	7.7	7.8
Social security contributions	64.3	63.5	65.7	65.8
Total Inland Revenue (net of tax credits)	**213.8**	**214.4**	**221.1**	**221.5**
Customs and Excise				
Value added tax (VAT)	61.3	61.3	63.7	64.2
Fuel duties	22.2	22.1	23.0	22.6
Tobacco duties	7.8	7.8	7.7	7.7
Spirit duties	1.9	1.9	2.0	2.0
Wine duties	2.0	2.0	2.0	2.0
Beer and cider duties	3.0	3.0	3.1	3.1
Betting and gaming duties	1.4	1.4	1.3	1.3
Air passenger duty	0.8	0.8	0.8	0.8
Insurance premium tax	1.8	1.8	1.8	1.8
Landfill tax	0.5	0.5	0.5	0.5
Climate change levy	0.6	0.6	1.0	1.0
Aggregates levy	0.0	0.0	0.2	0.2
Customs duties and levies	2.1	2.1	2.3	2.3
Total Customs and Excise	**105.4**	**105.3**	**109.6**	**109.7**
Vehicle excise duties	4.5	4.1	4.7	4.2
Oil royalties	0.5	0.5	0.5	0.5
Business rates[c]	18.1	18.1	18.4	19.0
Council tax	14.8	14.8	15.8	15.8
Other taxes and royalties[d]	9.6	9.6	10.3	9.8
Total taxes and social security contribns[e]	**366.7**	**366.9**	**380.4**	**380.6**
Accruals adjustments on taxes	0.3	0.3	0.2	0.2
less Own resources contribution to EU	–5.8	–5.8	–5.4	–5.4
less PC corporation tax payments	–0.1	–0.1	–0.2	–0.2
Tax credits[f]	6.1	6.1	6.5	6.5
Interest and dividends	4.3	4.3	4.0	4.0
Other receipts	19.7	19.7	20.7	20.7
Current receipts	**391.1**	**391.4**	**406.2**	**406.4**
Current spending[g]	**380.8**	**378.2**	**403.4**	**404.3**
Windfall tax and associated current sp.[h]	n/a	0.9	n/a	0.9
Current balance[i]	**11.1**	**14.0**	**4**	**2.9**
Net investment	12.9	12.9	14.8	14.8
Windfall tax and associated capital sp.[h]	n/a	–1.3	n/a	–0.9
Public sector net borrowing[i]	**1.4**	**–1.6**	**11**	**11.9**

[a] Gross of working families' tax credit and children's tax credit. [b] Includes advance corporation tax (net of repayments); also includes North Sea corporation tax after ACT set-off, and corporation tax on gains. Gross of R&D tax credit. [c] Includes district council rates in Northern Ireland. [d] Includes money paid into the National Lottery Distribution Fund. [e] Includes VAT and 'traditional own resources' contributions to EU budget. Net of tax credits, cash basis. [f] Excludes children's tax credit, which scores as a tax repayment in the National Accounts. [g] In line with the National Accounts, depreciation has been included as current expenditure. [h] Removes spending financed by the windfall tax. [i] Excludes spending financed by the windfall tax.

Note: For more details of the IFS forecast in 2001–02, see Table A.3 in Appendix A.

Sources: Treasury forecasts from HM Treasury, *Pre-Budget Report*, Cm. 5318, The Stationery Office, London, 2001; this table is similar to Table B11 (p. 180). Authors' calculations.

2.4 Borrowing in 2002–03

Table 2.4 also presents the forecasts for 2002–03. Underpinning these forecasts are, where possible, the published macroeconomic assumptions from the November 2001 Pre-Budget Report. Where these are not available, we either use information from independent forecasters or use assumptions that are consistent with the overall growth forecasts contained in the November 2001 PBR. Therefore, like the Treasury's, these forecasts are based on the more cautious assumption that the trend rate of growth is 2¼% rather than the Treasury's central estimate of 2½%.

The government is committed to introducing a number of new policies that it has not included in its public finance projections. The effect of these new policies on the public finances is likely to begin in 2002–03 and increase in later years. The Code for Fiscal Stability states that fiscal projections should include the cost of 'all Government decisions and all other circumstances that may have a material impact on the fiscal impact' as long as they 'can be quantified with reasonable accuracy'.[22]

The January 2002 IFS forecast includes the effect of some of these new measures, as shown in Table 2.5. For the new tax credits for families with and without children that the government has pledged to introduce in 2003–04, we take the less-generous options that are outlined in Chapter 5. We assume that they will be introduced halfway through the tax year so that they cost £1.15 billion in 2003–04 and £2.3 billion in 2004–05. No costings are available for the implications of the corporation tax reforms that the government has stated that it intends to introduce. Press speculation at the time of the Pre-Budget Report suggests that the R&D tax credit for large firms might cost £300 million and that the introduction of an exemption for capital gains for disposals of corporate substantial shareholdings might cost £200 million.

The government has also stated that it will introduce other reforms that will reduce corporation tax receipts. In the case of the reform of the tax treatment of intangible assets, the costs are likely to be low in the long run, but they could be significant over the transition period. Since no reasonable costings for this policy are in the public domain, we have not included any estimate in our public finance projections. We have also not included estimates for the cost of extending the 10% corporate tax band or for the community investment tax credit.

The January 2002 IFS forecast is for receipts in 2002–03 of £406.4 billion compared with £406.2 billion forecast in the November 2001 PBR. This is despite the £200 million reduction in expected corporation tax receipts arising from the introduction of an exemption for capital gains for disposals of corporate substantial shareholdings that we have allowed for in our forecasts. The additional receipts are from income tax, VAT and business rates and more than offset our lower forecast for vehicle excise duty and fuel duties.

[22] Paragraph 23 (p. 12) of HM Treasury, *The Code for Fiscal Stability*, 1998.

Table 2.5. Cost of new measures included in the January 2002 IFS public finance projections but excluded from the November 2001 Pre-Budget Report projections (£ billion)

	2002-03	2003-04	2004-05
Social security spending			
Increased spending on new tax credits for families with children	0.00	1.00	2.00
Increased spending on new tax credits for families without children	0.00	0.15	0.30
Total effect on public spending	0.00	1.15	2.30
Corporation tax			
New R&D tax credit for large firms	0.00	–0.30	–0.30
Capital gains exemption for disposals of corporate substantial shareholdings	–0.20	–0.20	–0.20
Total effect on tax revenues	–0.20	–0.50	–0.50
Total effect on government borrowing	**0.20**	**1.65**	**2.80**

Note: See Chapters 5 and 6 for more details of these policies. No adjustment for inflation has been made to these figures due to the approximate nature of the costings.
Sources: Costings for the increase in social security expenditure from TAXBEN, the IFS tax and benefit model. Costings for the reforms to corporation tax from the *Financial Times*, 'Big companies to benefit from tax credit by volume of research and development' and 'Welcome for plan to reform intangible assets tax', 28 November 2001.

Looking at public spending, the January 2002 IFS forecast is for current spending in 2002–03 of £404.3 billion. This is £0.9 billion higher than the PBR forecast. This is due to us assuming that half of our forecast underspend in 2001–02 is carried forward and spent by government departments in 2002–03. This is offset slightly by £0.2 billion lower debt interest payments arising from our forecast of lower borrowing in 2001–02 and £0.2 billion reduction in the AME margin which would be consistent with recent Budget decisions. We forecast the same level of public sector net investment in 2002–03 as the November 2001 PBR.

The resulting January 2002 IFS forecast is for a current budget surplus in 2002–03 of £2.9 billion compared with the £4 billion surplus forecast by the November 2001 PBR. We forecast PSNB of £11.9 billion compared with the PBR forecast of £11 billion.

2.5 Medium-term prospects

The January 2002 IFS forecasts for the public finances to 2005–06 are outlined in Table 2.6. Again, they are based on a similar macroeconomic forecast to that published in the November 2001 Pre-Budget Report, and hence assume that the underlying trend rate of growth is 2¼%.

Our forecast level of government receipts is very similar to that of the Treasury. This shows that the IFS forecasting model produces a similar level of government receipts for a given macroeconomic scenario. Due to the difficulties in forecasting corporation tax in the current environment, we take the November 2001 PBR forecasts, although, as discussed in Section 2.1, it would be helpful if the Treasury published further discussion of what is driving the forecast increase in revenues in the medium term.

Table 2.6. Medium-term public finances forecasts, based on cautious macroeconomic assumptions (£ billion)

	2001-02	2002-03	2003-04	2004-05	2005-06
IFS forecasts					
Current budget					
Current receipts	391.4	406.4	429	451	473
Current expenditure[a]	378.2	404.3	427	449	472
Windfall tax & ass. curr. sp.[b]	0.9	0.9	0.2	n/a	n/a
Surplus on current budget[c]	**14.0**	**2.9**	**2**	**2**	**2**
Capital budget					
Net investment	12.9	14.8	19	20	22
Windfall tax & ass. cap. sp.[b]	–1.3	–0.9	–0.2	n/a	n/a
Public sector net borrowing[c]	**–1.6**	**11.9**	**17**	**18**	**19**
HM Treasury forecasts					
Current budget					
Current receipts	391.1	406.2	430	452	474
Current expenditure[a]	380.8	403.4	426	445	466
Windfall tax & ass. curr. sp.[b]	n/a	n/a	n/a	n/a	n/a
Surplus on current budget[c]	**10.3**	**4**	**4**	**7**	**8**
Capital budget					
Net investment	12.9	14.8	19	20	22
Windfall tax & ass. cap. sp.[b]	n/a	n/a	n/a	n/a	n/a
Public sector net borrowing[c]	**1.4**	**11**	**14**	**13**	**13**

[a] In line with the National Accounts, depreciation has been included as current expenditure.
[b] Removes spending financed by the windfall tax.
[c] Excludes spending financed by the windfall tax.
Sources: Treasury forecasts from HM Treasury, *Pre-Budget Report*, Cm. 5318, The Stationery Office, London, 2001; this table is similar to Table B5 (p. 171). Authors' calculations.

On the public spending side, our forecasts differ from those contained in the November 2001 PBR. In part this is due to the fact that we have included our projections of the increase in spending arising from the introduction of the child tax credit and the working tax credit. We also assume that, as a base scenario, current and capital spending will grow by 2½% a year in real terms and hence remain constant as a share of national income in 2004–05 and 2005–06. In contrast, the November 2001 PBR assumes that, while departmental expenditure limits will grow by 2½% a year in real terms, annually managed expenditure will only grow by 1¾% a year. The result is that, under the November 2001 PBR forecast, total public spending in 2004–05 and 2005–06 only grows by 2.0% a year in real terms and falls as a share of national income. As a result, the January 2002 IFS forecast is for current spending in 2005–06 of £472 billion, which is £6 billion higher than the £466 billion forecast in the November 2001 PBR. Public sector net investment is forecast to be the same, at £22 billion.

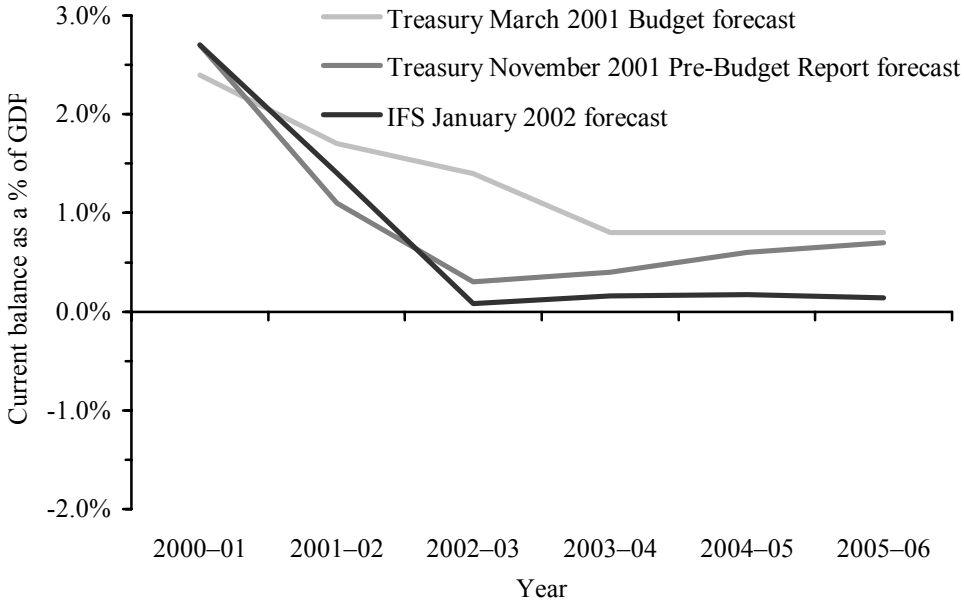
Due to the similar level of receipts but higher levels of public spending, the January 2002 IFS forecast is for less strong public finances than those forecast by the November 2001 PBR. Despite this, we still forecast a current budget surplus of £2 billion in 2005–06, suggesting that the golden rule will still be met, albeit with considerably less room to spare than the £8 billion surplus forecast in the November 2001 PBR. The January 2002 IFS forecast is for PSNB in 2005–06 of £19 billion compared with the £13 billion forecast in the

November 2001 PBR. The sustainable investment rule would be comfortably met under either forecast.

2.6 The Budget judgement

The current budget surpluses forecast in the March 2001 Budget, the November 2001 Pre-Budget Report and the January 2002 IFS Green Budget are shown in Figure 2.8. The November 2001 PBR forecast that the golden rule would continue to be met, but with less room to spare than was the case in the March 2001 Budget. The January 2002 IFS forecast also suggests that the golden rule will be met, although the current budget surpluses going forward would imply far less caution than was in either the March 2001 Budget or the November 2001 PBR forecasts. While the large current budget surpluses in 1999–2000, 2000–01 and 2001–02 would result in the government meeting its fiscal rules with ease over the current economic cycle, any adverse shock to the public finances could easily lead to them being breached in future.

Figure 2.8. Current budget surplus forecasts as a percentage of GDP



Sources: Treasury forecast from HM Treasury, *Pre-Budget Report*, Cm. 5318, London, 2001; authors' calculations.

In order to determine whether or not the Budget needs to increase taxes or cut public spending, the government will need to decide the amount of caution – i.e. the size of the current budget surplus at the end of the planning period – that it would like to have. In the past two Budgets, the Chancellor had a more favourable set of fiscal projections than expected previously and has chosen to announce tax cuts and spending increases that restored the surplus on current budget to around 0.7% of GDP at the end of the planning period.

The government may decide that it no longer wishes to maintain the same level of caution that it had in the March 2001 Budget projections. Our

forecasts suggest that the new measures, such as the child tax credit, could be financed through additional borrowing and the golden rule would still be met. Under this scenario, forecasts of public borrowing would still remain low by historical standards but the Chancellor would be being less prudent than he was in the March 2000 and March 2001 Budgets.

Given the large degree of uncertainty in any public finances projections, the government may decide that it would like to restore the level of caution in the public finance forecasts to that of the last Budget. This would imply aiming for a current budget surplus at the end of the planning period of around 0.7% of GDP. To do this, and to meet the cost of its new credits, the government would need to announce either spending cuts or tax increases of around £5 billion in the Budget. It should be noted that the overall fiscal tightening confirmed in the Budget would be less than this since it would, in part, be offset by the new measures that the government has already committed to.

This assumes that public spending in 2004–05 and 2005–06 grows in line with national income. Freezing public spending in real terms would allow both caution to be restored and substantial tax cuts. This would not be consistent with the government's commitments to reduce child poverty and to improve public services. The government may decide, as it did in its last two Spending Reviews, that spending should increase as a share of national income. If current spending is held constant as a share of national income, but capital spending is increased more quickly, then this can be financed through increases in borrowing. This is because the golden rule allows the government to borrow to invest and the sustainable investment rule is a long way from being a real fiscal constraint.

If, alternatively, the government wants to increase current public spending as a share of national income, then tax increases might be required. For example, if the government were to increase current spending by 2¾% a year, then this would require an additional £1 billion each year in borrowing or tax revenues. Therefore to increase current spending at 2¾% a year in real terms in 2004–05 and 2005–06, to finance the new measures and to restore the level of caution in its plans to the March 2001 Budget level would necessitate new tax increases of around £7 billion in the Budget. This comprises the £5 billion for restoring caution, paying for the new measures and keeping spending constant as a share of national income and an extra £1 billion for each year of increasing current public spending at 2¾%.

The actual growth in current spending over the period April 1999 to March 2004 is forecast to be 3.0% a year. To continue increasing current spending at this rate, without reducing caution, would require an extra £2 billion a year in taxation rather than the £1 billion a year in the scenario above.

Carl Emmerson and Christine Frayne

3. Improving public services?

The government spending plans that were set out in the July 2000 Spending Review run until 2003–04. This summer, the government will publish the findings of its 2002 Spending Review. This will reconsider the spending levels for 2003–04 and set plans for what will probably be the final two years of the current parliament (2004–05 and 2005–06). Section 3.1 looks in detail at the issues facing the government in the run-up to this Spending Review.

In addition to increased resources, the government has also stressed the need for reform in order to deliver substantial improvements in public services. An increasingly important part of its reform agenda seems to be the involvement of the private sector in the delivery of public services. Section 3.2 describes the pattern of private sector involvement across government departments and outlines the potential benefits and costs of increasing reliance on public–private partnerships.

3.1 Issues for Spending Review 2002

The affordability of increases in 'priority' areas – such as education, health and transport – will largely depend on the extent to which spending growth can be constrained in other areas. This section looks in detail at the current spending growth in health and education and discusses the extent to which savings from elsewhere might be possible.

Spending on health

Taken together, the increases in NHS spending that were announced under the July 1998 Comprehensive Spending Review (CSR) and the July 2000 Spending Review were large when compared with the increases that the NHS has received in the past. Table 3.1 shows that spending should grow by an annual average of 6.4% a year in real terms between April 1999 and March 2004. This is equal to the rate achieved during the five-year period with the biggest spending increases in NHS history, from April 1971 to March 1976.

While the current period is clearly one of large NHS spending increases, it follows on from four years in which spending growth was extremely low by historical standards – averaging just 1.5% a year. At least part of the current spending increases might therefore be thought of as 'catch-up' – the necessary after-effect of several years of very tight growth if current standards are to be preserved. For example, NHS wages may have been squeezed in the years up to 1999, and so may now need to rise significantly in real terms simply to retain existing staff.

In the last 20 years, the NHS has often experienced periods of relatively high increases in funding followed by periods of lower increases. But if the current plans are adhered to, the April 1999 to March 2004 period will represent

growth in the NHS budget that is both relatively strong and sustained, so improvements in the quality of healthcare provided might well be expected.

Table 3.1. Real increases in NHS spending

	Annualised average real increase, %
Current planned expenditure for next two years: *April 2002 to March 2004*	5.5
Period since Labour came into power: *April 1997 to March 2002*	5.0
Conservative years: *April 1979 to March 1997*	3.1
Four-year period preceding the first CSR: *April 1995 to March 1999*	1.5
Five-year increase from start of first CSR: *April 1999 to March 2004*	6.4
Highest five-year increase in history of the NHS: *April 1971 to March 1976*	6.4
Long-term NHS trend (since April 1954)[a]	3.8

[a] NHS trend is assessed since 1954, rather than from the foundation of the NHS, because the first few years involved atypically high costs as a backlog of previously untreated cases was dealt with.

Notes: NHS spending is defined here as UK National Health Service expenditure net of NHS charges and receipts. For the periods in office of each political party, we assign financial years according to who was in office for the majority of months in that financial year.

Sources: Department of Health, *The Government's Expenditure Plans*, various years (most recent – www.doh.gov.uk/dohreport/report2000/dr2000.html); Office of Health Economics, *Compendium of Health Statistics*, various years; HM Treasury, *Financial Statement and Budget Report*, Hc279, London, March 2001 (www.hm-treasury.gov.uk/Budget/Budget_2001/bud_bud01_index.cfm). Spending figures deflated using the latest GDP deflators from the Office for National Statistics.

International comparisons

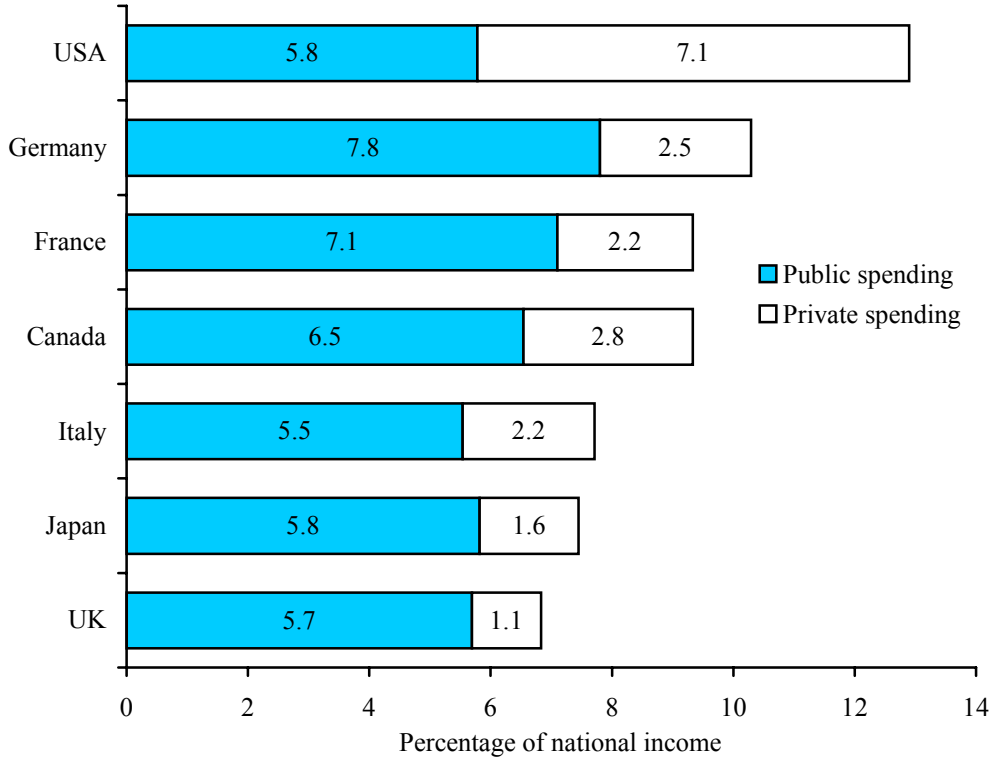
The result of these increases in spending is that UK NHS spending is forecast to rise from 5.3% of national income in 1996–97 to 6.2% of national income in 2003–04.[1] Despite these large increases in public spending, the UK is still unlikely to be devoting as high a proportion of national income to spending on health as many other developed economies. Figure 3.1 shows the total proportion of national income spent publicly and privately on health in the G7 countries in 1998 – before the current period of significant NHS spending increases got underway.[2] These data are constructed by the OECD using its definition of health spending – in the case of the UK, this differs from the share of national income consumed by the NHS not only because of the

[1] NHS spending is forecast to be £69 billion in 2003–04. Due to changes being introduced under full resource accounting, this figure will, under the new accounting methodology, rise to £71.7 billion. The government has clarified that it will continue to use the existing accounting system for international comparisons rather than the new system. See paragraphs 4.44 to 4.48 of HM Treasury, *Better Management of Public Services: Resource Budgeting and the 2002 Spending Review*, London, 2001 (www.hm-treasury.gov.uk/mediastore/otherfiles/ResourceBudgeting2002.pdf).

[2] Information on health spending in various countries comes from OECD Health Data 2001, CD-ROM. Unfortunately, the most up-to-date information on health spending across all countries is for 1998, although data for some countries are available for 1999. For more details of the OECD Health Data, see www.oecd.org/els/health/software.

inclusion of private spending, but also because some non-NHS public expenditure is included.

Figure 3.1. Public and private health expenditure as a percentage of national income in the G7 countries, 1998



Source: OECD Health Data 2001, CD-ROM.

On this measure, the UK spent a total of 6.8% of national income on health in 1998, of which 5.7 percentage points were spent publicly and a further 1.1 percentage points were spent privately. Amongst the G7, the USA is the biggest spender, with almost 13% of its 1998 national income going to healthcare. Germany and France also have relatively large healthcare sectors, taking up 10.3% and 9.3% of their 1998 national income respectively. Japan and Italy spend similar amounts on public healthcare to the UK, but they have more private healthcare spending.

If instead of the G7 we look across the 15 member countries of the European Union (EU), we see that only Luxembourg, at 6.0% of national income, devoted a significantly smaller share of its 1998 national income to health. The Prime Minister has stated that he would like to see UK health spending reach the European average by 2005.[3] If EU countries are all treated equally, then average health spending among the other 14 countries in the EU in 1998 was 8.0% of national income. This is known as the unweighted average.

The level of health spending undertaken by, or on behalf of, EU citizens is better captured by the alternative 'weighted' measure. This is calculated by

[3] See *Hansard*, 28 November 2001, col. 964.

dividing the total health spending undertaken in other EU countries by their combined national incomes. The advantage of this measure is that it allows large countries to count for more than small countries. As large European countries, such as France and Germany, tend to spend more of their income on health than small countries, such as Luxembourg and the Republic of Ireland, this measure of average health spending is higher – it is estimated to have been 8.9% of national income in 1998.

Whether the UK reaches the average level of spending seen across the EU depends not only on NHS spending, but also on what happens to other public and private elements of UK health spending and on spending levels in other EU countries. If health spending in other European countries and non-NHS UK health spending remain constant as a share of national income, then, by 2003–04, UK health spending will be just £1 billion short of the unweighted average but would remain some £9.9 billion short of the more meaningful weighted average.[4] This compares with NHS expenditure in 2001–02 of just under £60 billion.

Regardless of the precise way in which financial input into healthcare is measured, ultimately one would think that relative performance in terms of health outcomes should be the real concern. Different countries' healthcare systems are likely to operate with varying levels of efficiency, and if, for example, the NHS were especially efficient, then it could be that the UK could achieve world-class health outcomes while spending relatively little. Also important is demographic variation, as older people have higher healthcare needs. This would imply, for example, that if the UK population had an unusually high average age, then it might need to spend even more of its national income than other countries if it were to match the standard of their healthcare, which would mean that the degree of 'catch-up' required would be understated by the raw expenditure numbers. In either of these scenarios, if the aim were to match the quality of healthcare in other countries, then a policy that pursued their level of spending would seem misdirected.

So what sort of targets in terms of health outcomes could policy work towards? No single measure can fully capture the quality of healthcare. Life expectancy has the advantage of being quite general, although, of course, it takes no account of the effect of healthcare on quality of life. An even more important problem is that cross-country variations in life expectancy reflect differences in populations' underlying health (in turn reflecting variation in diets, smoking habits and other socio-economic factors) alongside the effect of the national healthcare systems. This makes it difficult to infer much about whether the UK is underspending on health from the fact that it performs

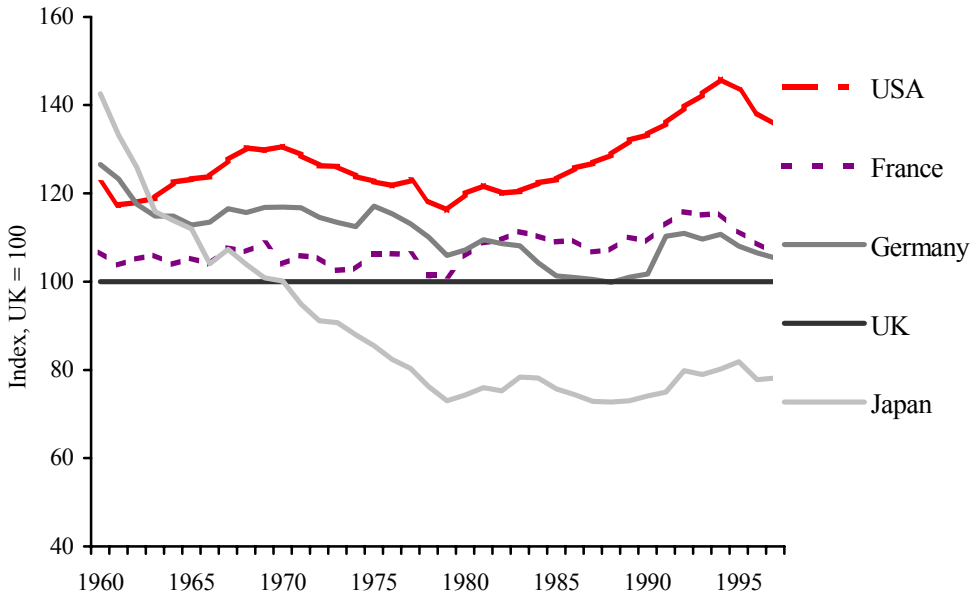
[4] Cash figures are derived as a proportion of current national income. For more details of how the different averages are calculated and how long it will take the UK to reach the 1998 weighted average level of spending if NHS spending continues to grow at its current rate, see C. Emmerson, C. Frayne and A. Goodman, *How Much Would It Cost to Increase UK Health Spending to the European Average?*, Briefing Note no. 21, Institute for Fiscal Studies, London, 2002 (www.ifs.org.uk/health/bn21.pdf).

Box 3.1. Measuring quality of healthcare systems: potential years of life lost through preventable causes

An indicator that focuses a little more directly on the performance of the healthcare system is the potential years of life lost (PYLL) through 'preventable' causes amongst those aged under 70. Deaths are preventable either where they reflect a failure to apply the best treatment adequately or where they are attributable to particular environmental or behavioural factors, such as smoking. Some of the non-healthcare influences on life expectancy are thereby stripped out, but others, such as smoking, remain.

The recent Wanless Report looks at several variants of this measure and finds that 'the UK does not generally compare well with comparator countries in terms of [PYLL]'. Here, we focus on the broadest measure of PYLL (including suicides as preventable deaths) in G5 countries over time. Unsurprisingly, the number of PYLL has fallen considerably over the last 40 years across most countries, as healthcare systems have improved – in the case of the UK, from just over 8,300 years per 1,000 people in 1960 to under 4,000 in 1997. Figure 3.2 shows how the performance of other G5 countries compares with that of the UK in each year from 1960 to 1997. In 1997, the UK performed slightly better than France or Germany and considerably better than the USA, although it was substantially inferior to Japan. Japan's strong performance dates to very large improvements relative to other countries between 1960 and 1979, a time when its population was becoming rapidly richer. The poor US performance reflects a failure to match improvements seen in other countries since 1979.

Figure 3.2. Potential years of life lost among those aged under 70 per 100,000 population in G5 countries, relative to the UK



Source: OECD Health Data 2001, CD-ROM.

Source: D. Wanless, *Securing Our Future Health: Taking a Long-Term View*, HM Treasury, London, 2001 (www.hm-treasury.gov.uk/Consultations_and_Legislation/wanless/consult_wanless_index.cfm).

relatively badly on the life expectancy measure in the G7 league table.[5] Indeed, the USA, which spends more of its national income on health than any other major economy, actually performs the worst on this measure. In part, this discrepancy may reflect the inefficiency of US healthcare spending, but it might also reflect factors unrelated to healthcare inputs.

An indicator that focuses a little more directly on the role of the healthcare system is the potential years of life lost (PYLL) through 'preventable' causes amongst those aged under 70. This is discussed in more detail in Box 3.1. In 1997, the UK performed slightly better than France or Germany and considerably better than the USA, although it was substantially inferior to Japan.

The outcomes of healthcare policy can be even more directly focused on by looking at survival rates from particular diseases. When this is done for selected important diseases, such as breast and lung cancer, the UK performs relatively badly.[6] Such measures might indeed be taken as evidence that the quality of UK healthcare is undesirably low, and that extra expenditure is therefore needed. But even this is not conclusive. These measures might be thought of as undesirably narrow, ignoring as they do the role of healthcare in treating the whole range of diseases and its impact on quality of life. Part of the reason why the current political debate over the NHS focuses on inputs rather than outcomes is that there is no single straightforwardly quantifiable measure of what the NHS would ideally deliver.

Public attitudes towards health

Evidence that the recent increase in NHS resources had not yet fed through into improvements in the quality of healthcare by 2000 is provided by the British Social Attitudes Survey (BSAS). Respondents are asked how satisfied they are with a range of institutions, including the NHS. In the 2000 survey, which is the most recent for which results are available, 42% of respondents stated that they were very or quite satisfied with the NHS while 39% reported that they were very or quite dissatisfied. This is actually a higher level of dissatisfaction than in either the 1998 or the 1999 survey.

As shown in Figure 3.3, the current levels of satisfaction and dissatisfaction are comparable to those seen in 1993 and 1994. The highest levels of satisfaction, and the lowest levels of dissatisfaction, with the NHS over the period covered by the BSAS were back in 1983 and 1984. Care should be taken with the interpretation of these figures since it may be that the levels of satisfaction partly reflect respondents' satisfaction with the government of the day in general, in addition to the quality of any NHS services that they have received.

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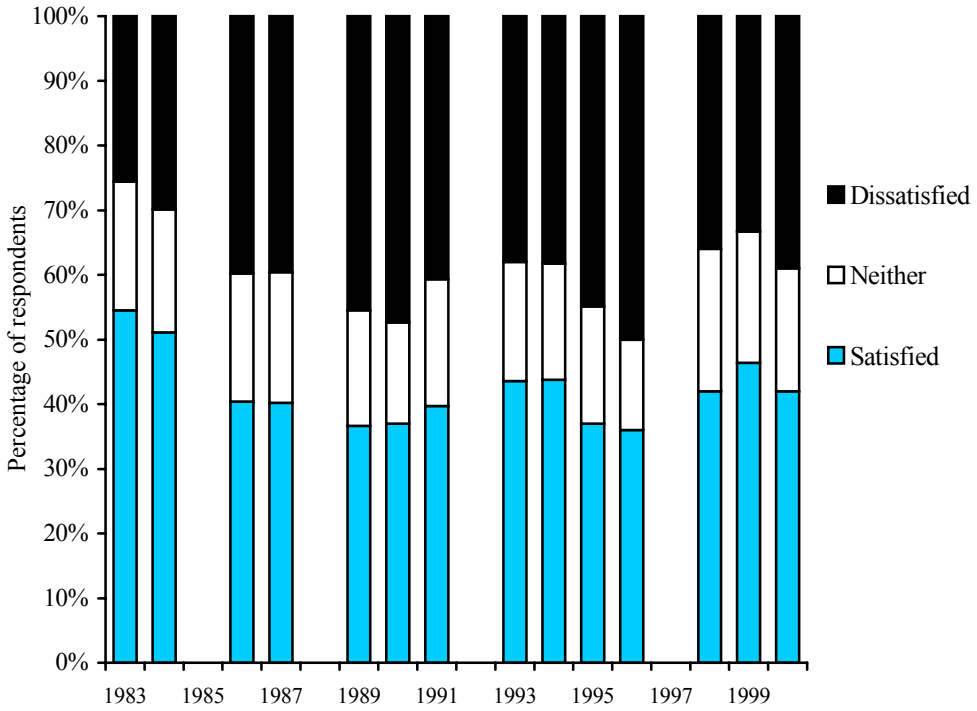
[5] For a more detailed discussion, see Chapter 4 of C. Emmerson, C. Frayne and A. Goodman, *Pressures in UK Healthcare: Challenges for the NHS*, Commentary no. 81, Institute for Fiscal Studies, London, 2000 (www.ifs.org.uk/health/nhsspending.pdf).

[6] Source: M. P. Coleman, *Cancer Survival Trends in England and Wales: 1971–1995: Deprivation and NHS Region*, Series SMPS no. 61, The Stationery Office, London, 1999.

Figure 3.3. Levels of satisfaction with the National Health Service



Notes: 'Satisfied' refers to those responding that they were very or quite satisfied, while 'dissatisfied' refers to those reporting that they were quite or very dissatisfied. For a more detailed discussion of attitudes towards the NHS, see, for example, J. Mulligan and J. Appleby, 'The NHS and Labour's battle for public opinion', in A. Park, J. Curtice, K. Thomson, L. Jarvis and C. Bromley (eds), *British Social Attitudes, The 18th Report: Public Policy, Social Ties*, Sage, London, 2001.
Source: British Social Attitudes Survey, various years.

Given the differences between countries in the resources that they devote to healthcare, the way in which their healthcare system is arranged and the variation in health outcomes delivered, it is of interest to look at how attitudes towards healthcare systems vary across countries. Recent studies suggest that the level of satisfaction in the healthcare system is higher in the UK (57%) than that in either the USA (40%) or Canada (46%), is similar to that in Germany (58%) but is lower than that in France (65%), the Netherlands (70%) or Denmark (91%).[7] Again, care should be taken in interpreting these figures since cultural or linguistic factors may affect responses differentially. Nonetheless, they may still be indicative of the relationship between the desired level of healthcare quality and what the combination of healthcare spending and organisation in each country achieves.

[7] Figures reported are the percentage saying 'fairly or very satisfied' with their own healthcare system. Sources: R. J. Blendon, M. Kim and J. M. Benson, 'The public versus the World Health Organization on health system performance', *Health Affairs*, vol. 20, no. 3, May–June 2001.

Spending on education

As with spending on the NHS, the years covered by the July 1998 Comprehensive Spending Review and the July 2000 Spending Review represent periods of relatively large increases in education spending. Over the next two years, spending on education will, under current plans, grow by some 5.5% a year in real terms, as shown in Table 3.2. This will lead to education spending continuing to increase as a share of national income, as it has done since April 1999. Again as with health, the period of high spending growth since April 1999 follows on from four years of very small increases. It is therefore likely that some of the increased expenditure will simply be making up for the effects of the preceding period of very low spending growth, rather than contributing towards significant improvements in the quality of education provided.

Table 3.2. Real increases in education spending

	Annualised average real increase, %
Current planned expenditure for next two years: *April 2002 to March 2004*	5.5
Period since Labour came into power: *April 1997 to March 2002*	4.0
Conservative years: *April 1979 to March 1997*	1.5
Four-year period preceding the first CSR: *April 1995 to March 1999*	0.5
Five-year increase from start of first CSR: *April 1999 to March 2004*	5.4
Long-term education trend (1953 to 1996)	4.0

Notes: UK education spending, excluding the sale of the student loan book in 1997–98 and 1998–99. For the periods in office of each political party, we assign financial years according to who was in office for the majority of months in that financial year.
Sources: HM Treasury, *Public Expenditure Statistical Analyses*, London, various years (most recent – www.hm-treasury.gov.uk/mediastore/otherfiles/32.pdf); HM Treasury, *Financial Statement and Budget Report*, London, various years (most recent – www.hm-treasury.gov.uk/Budget/Budget_2001/bud_bud01_index.cfm); long-term trend figure from *Blue Book* (various years, 1965 to 1997). Spending figures deflated using the latest GDP deflators from the Office for National Statistics.

For example, in order to preserve the quality of education provided, wage increases may be needed merely to achieve sufficient staff numbers. This problem is demonstrated by the number of teacher vacancies in England and Wales – in January 2001, there were 4,793 vacancies in maintained nursery, primary and secondary schools. This is a vacancy rate of 1.3% and it represents an increase on previous years – for example, in 1997, the vacancy rate was 0.5%. There is also considerable regional variation in vacancy rates, ranging from 3.5% in London to 0.5% in both the North West and Yorkshire and Humberside.[8]

[8] For more details on these figures, see Table 15 of Department for Education and Skills, *September 2001 Evidence from the Department for Education and Skills to the School Teachers' Review Body on the Pay and Conditions of Employment of School Teachers – 2001/2002*, London, 2001 (www.dfes.gov.uk/teachingreforms/rewards/teacherspay/strb_evidence/index.shtml).

Compared with health, the increases in education spending experienced under the 1979 to 1997 Conservative governments appear to be much more dramatically below the long-term trend. Of course, when comparing the spending rises seen in different eras, it is important to bear in mind that the school population has changed in size significantly. In particular, it increased sharply between the 1950s and 1960s, as the 'baby-boomer' cohort entered education, and fell back somewhat in the 1980s. Even so, the fact that education spending growth has been relatively low for two whole decades might be expected to exacerbate the extent to which current increases will be used in making up for the effects of earlier low spending.

International comparisons

As a result of the relatively large increases in education spending since April 1999, spending on education as a share of national income is set to rise from 4.7% in 1996–97 to 5.2% in 2003–04. Table 3.3 uses OECD data to show how UK levels of spending on education compare with those seen in other countries. According to this definition of education spending, which includes public and private spending, in 1998 the UK devoted a larger proportion of national income (4.9%) to spending on education than Japan (4.7%) but a smaller proportion than Italy, Germany, France or the USA.

Table 3.3. Spending on education in selected major economies, 1998

	Education spending, % of GDP	£ per student spent on:			Spending per student per unit of average income, relative to UK		
		Primary	Secondary	All tertiary	Primary	Secondary	All tertiary
Japan	4.72	4,120	4,782	8,014	140	103	93
UK	**4.92**	**2,344**	**3,683**	**6,830**	**100**	**100**	**100**
Italy	5.01	3,429	3,917	3,819	169	123	64
Germany	5.55	2,621	4,609	7,038	102	114	94
France	6.24	2,774	4,883	5,342	114	128	76
USA	6.43	3,928	5,047	12,871	124	102	140

Note: £ per student measured using the average spot exchange rates over the entire year from OECD Health Data 2001, CD-ROM. An alternative methodology is to use Eurostat purchasing power parities. The main effect of this would be to reduce spending in relatively expensive Japan and increase spending in relatively less expensive Italy.
Source: OECD, *Education at a Glance*, Paris, 2001.

One potential problem with looking at these raw figures is that differences may, in part, reflect different numbers of students. Looking at spending per student, the UK is still a relatively low spender on primary and secondary education (£2,344 and £3,683 per student respectively), but it actually spends more on each student in tertiary education than either France or Italy. In part, this could reflect differences in the average length of tertiary education courses and the extent to which students tend to live at home with parents.

The numbers we have discussed so far have been calculated using average exchange rates to convert spending in other countries into UK pounds. But differences in expenditure per student may partially reflect differences in the cost of providing the same standard of education. Unfortunately, at least to our knowledge, no index of the relative costs of education in each country exists at present. If spending is measured to adjust for the general cost of living in

different countries (purchasing power parities), then spending in relatively expensive Japan is reduced while spending in relatively cheap Italy is increased. But the UK's position is little affected: it remains the lowest spender per student on primary and secondary education, although it does overtake Germany in terms of tertiary education spending.

It is also of interest to take account of differences in overall national incomes in order to get a sense of the relative priority given to each sector of education spending. The last three columns in Table 3.3 show spending per student relative to the UK once differences in national income per head are controlled for. Even after considering the fact that Japan and the USA are considerably richer countries than the UK, it remains the case that the UK devotes a relatively small amount of resources to primary and secondary education. In sharp contrast, in tertiary education only the USA spends more per student than the UK relative to per capita national income. This is principally due to US private spending being twice as high as that of the UK on this relative measure.

Other areas of spending

While education and health are probably the most discussed areas of public expenditure, combined they actually consume just over a quarter (28%) of government spending. Given any overall level of tax and borrowing, the scope for further increases in these areas will depend on savings in other spending areas that can be identified by the forthcoming Spending Review. This is unlikely to be an easy task. Saving money from social security is difficult, as expenditure largely depends on factors (such as demographics) that are beyond the government's control. And the share of government spending on most other areas has already declined over the last 50 years (as an increasing share has been consumed by health, education and social security), which might mean that savings from these other areas are becoming increasingly difficult to find. This perhaps explains why neither the public expenditure reviews of the last Conservative and Labour governments – respectively the 1994 Fundamental Expenditure Review and 1998 Comprehensive Spending Review – succeeded in finding areas of government spending where large savings could be made.

Table 3.4 shows growth in total public spending and particular programmes within it for various periods. The relatively large real growth in education and health spending under Labour so far has occurred within relatively low growth in total spending. Current estimates suggests that public spending outside of the NHS and education should have risen by an average 0.9% a year in real terms over the period 1996–97 to 2001–02. This is due to very low growth in discretionary public spending during 1997–98 and 1998–99 and also due to savings arising from the favourable effect of reduced unemployment on social security spending and of lower government debt and long-term interest rates on debt interest payments.

Table 3.4. Real increases in selected components of public spending

	Real average annual increase over:		
	Conservatives, April 1979 to March 1997	**Period since Labour came into power, April 1997 to March 2002**	**Labour's planned increase, April 2002 to March 2004**
Total government revenues	1.8	3.6	2.3
Total government spending	1.6	1.8	3.6
Education	1.5	4.0	5.5
NHS	3.1	5.0	5.5
Total spending excluding health and education	1.4	0.9	2.9
Of which:			
Social security	3.6	1.9	1.8
Defence	–0.2	–1.1	–0.4
Transport	n/a	–0.1	14.4
Debt interest	n/a	–6.6	–0.3
Memo: GDP growth	2.2	2.8	2.5

Notes: Includes spending financed by the windfall tax. UK education spending excludes the sale of the student loan book in 1997–98 and 1998–99. UK NHS spending is net of NHS charges and receipts. Social security spending includes expenditure on the working families' tax credit and the disabled person's tax credit in order to ensure consistency over time. Spending on defence excludes revenues from the sale of married quarters in 1996–97 and 1997–98. Debt interest is gross central government interest payments only. For 1996–97, this has been approximated by adding £400 million to net central government borrowing, in line with footnote 3, Table B13 (p. 182) of HM Treasury, *Pre-Budget Report*, Cm. 5318, The Stationery Office, London, 2001 (www.hm-treasury.gov.uk/pre_budget_report/prebud_index.cfm). For the periods in office of each political party, we assign financial years according to who was in office for the majority of months in that financial year.
Sources: Department of Health, *The Government's Expenditure Plans*, various years (most recent – www.doh.gov.uk/dohreport/report2000/dr2000.html); Office of Health Economics, *Compendium of Health Statistics*, various years; Department of the Environment, Transport and the Regions, *Transport 2010: The 10 Year Plan*, London, 2000 (www.detr.gov.uk/trans2010/index.htm); HM Treasury, *Public Expenditure Statistical Analyses*, London, various years (www.hm-treasury.gov.uk/Documents/Public_Spending_and_Services/Public_Spending_Statistics/pss_pss_pesaindex.cfm?); HM Treasury, *Financial Statement and Budget Report*, London, various years (www.hm-treasury.gov.uk/budget/bud_index.cfm). Spending figures deflated using the latest GDP deflators from the Office for National Statistics.

Growth in non-education and non-NHS public spending is forecast to be faster, at an average of 2.9% a year, over the next two years. This reflects higher growth in certain spending programmes, such as transport, and also the fact that interest repayments are not expected to continue declining as rapidly as they have done over the last few years.

Social security spending

Social security spending is forecast to grow at an average of 1.8% a year over the next two years which is a similar growth rate to that seen under the first five years of the current Labour government. This is an extremely low rate of growth by historical standards – over the past half century, social security

spending has grown in real terms by an average of 4.2%,[9] reflecting changes in demographics, work patterns and benefit increases.

Spending on social security will depend on the numbers receiving benefits and their generosity. The low overall growth during Labour's first five years is the product of two distinct phases: the first two years, when social security spending actually fell, by an average 0.9% a year, and the next three years (1999–2000, 2000–01 and 2001–02), in which spending is forecast to rise by an annual average of 3.8%. The low growth in the first period reflected falls in unemployment and very little growth in the generosity of social security benefits. The subsequent three years, during which spending grew, saw selective but large increases in benefit generosity, most notably directed towards low-income pensioners and families with children.

Looking forward, the future growth in social security expenditure shown in Table 3.4 for the next two years is likely to be an understatement. These figures exclude the additional expenditure likely to arise from the planned introduction of the working tax credit and child tax credit in 2003–04. More generally, if progress is to be made towards meeting the government's aim of reducing child and pensioner poverty, then further significant real increases in benefit levels beyond those it is already committed to will very likely be needed. (For a discussion of the kind of measures that might be implemented, see Chapter 5.) Finally, in contrast to Labour's first term, it seems that significant reductions in unemployment to offset the cost of the benefit increases are unlikely. Indeed, the government plans shown in Table 3.4 are formed on the basis that unemployment will rise modestly. As discussed in Chapter 2, these forecasts are in fact less cautious than they have been in recent years.

Defence and security spending

Defence spending has been considerably reduced by successive governments from 5.2% of national income in 1984–85 to 2.5% in 2000–01. The total effect of this reduction is now a saving of more than £27 billion a year. In Labour's first five years, defence spending was cut by an average 1.1% a year in real terms compared with cuts averaging 0.2% a year over the 18 years of consecutive Conservative governments. According to the latest published plans, over the next two years, defence spending will continue to be cut in real terms, albeit by just 0.4% a year on average. Whether defence expenditure can continue to be constrained in this way will depend partially on whether large efficiency savings can be found and partially on what choices are made over the role that the UK defence force should play. A combination of these factors has allowed spending to be reduced since 1984–85 – they have meant, for example, that the total number of civilian and service personnel has fallen from 605,000 in 1980 to 487,000 in 1990 and 322,900 in 2001.[10]

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[9] Average annual real increase in social security expenditure from 1949–50 to 1999–2000 was 4.2% – source: C. Emmerson and A. Leicester, *A Survey of the UK Benefit System*, Briefing Note no. 13, Institute for Fiscal Studies, London, 2002 (www.ifs.org.uk/taxsystem/benefitsurvey.pdf).

[10] Figures from Section 2.1 of Ministry of Defence, *UK Defence Statistics 2001*, London, 2001 (www.dasa.mod.uk/ukds.html).

While the actual conflict in Afghanistan may have had little direct financial cost to the UK exchequer, world events since 11 September might mean that the government will now be less likely to continue reducing the role of the armed forces or, perhaps, will scale back their role more slowly. If so, the extent to which savings from the defence budget can contribute towards higher growth in areas such as health and education will be reduced. Similarly, the government may now approach any possible cutbacks in areas of spending such as intelligence and law and order with more caution than it would previously have done.

Public spending on investment

Since coming to power in 1997, the government has repeatedly stressed its belief in the importance of public investment and its concern about the cuts in this element of spending seen since the mid-1970s. It has argued that, over recent decades, investment spending has been given a low priority for political reasons and that increased investment is now required in order to deliver improvements in public services and the economy in general.[11]

The fall in public investment since the mid-1970s has indeed been dramatic, as shown in Box 3.2. The downward trend that began in the mid-1970s continued through the 1979–97 Conservative governments and the first years of the 1997–2001 Labour administration. The total decline was from 8.9% of national income in 1975 to 1.7% in 2000. The post-war record low was reached in 1999, when just 1.6% of national income was spent on public investment.[12]

Looking forward, investment spending is due to grow at a rapid rate over the next few years. But this growth is from such a low base that, even at the end of the current spending round, in 2003–04, public investment will probably remain below the level that was seen in the early 1990s.

The inclusion of capital spending under the Private Finance Initiative (PFI; see Section 3.2 for more details) does not alter this story because it is small relative to total public investment. Even if it is included, the rates of public investment seen over the years 1997 to 2000 remain lower than at any time since the Second World War. The effect of planned PFI capital spending over the next few years will also be relatively modest.[13]

So far, much of the planned increases in investment spending have not ended up being realised within the intended time frame. But there are signs that this is changing – £7.1 billion of public sector net investment has been undertaken between April and December 2001 compared with £2.9 billion in the same period last year. These figures suggest that investment is now rising rapidly, although investment underspends in 1999–2000 and 2000–01 mean that the

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[11] See, for example, HM Treasury, *Planning Sustainable Public Spending: Lessons from Previous Policy Experience*, London, 2000 (www.hm-treasury.gov.uk/mediastore/otherfiles/86.pdf).

[12] Source: *Blue Book*, various years.

[13] For more details on British public investment, see T. Clark, M. Elsby and S. Love, *Twenty-Five Years of Falling Investment? Trends in Capital Spending on Public Services*, Briefing Note no. 20, Institute for Fiscal Studies, London, 2001 (www.ifs.org.uk/public/bn20.pdf).

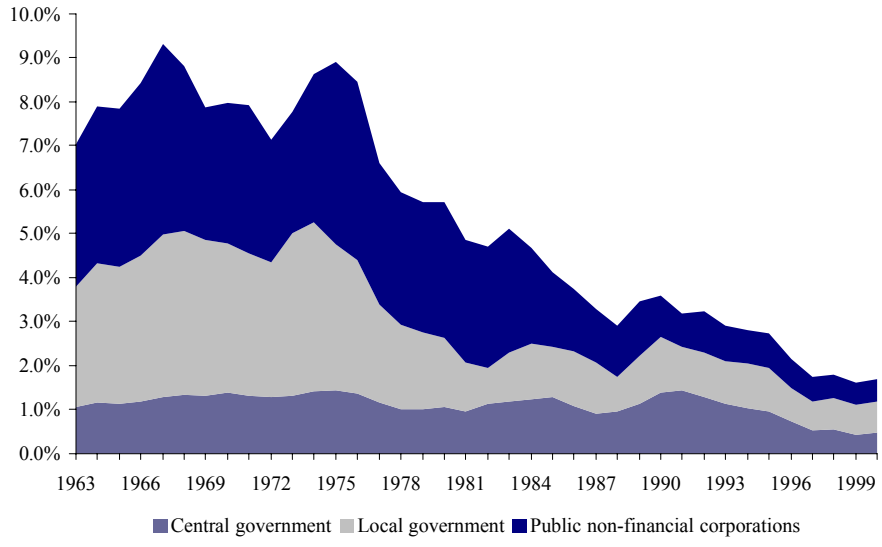
public sector capital stock is considerably smaller than it was envisaged to be in the government's original plans. Given that public investment remains very low by historical standards, the government may want to consider further increases.

Box 3.2. Twenty-five years of falling investment in public services?

Figure 3.4 breaks down public investment into the capital spending undertaken by different branches of the State – central government, local government and the public corporations. This enables us to see that the decline in public investment is made up of three distinct phases:

- Local authority investment cuts dominate over the years 1975–82. The biggest single casualty was council house building, but local authority investment in schools was also sharply reduced. Public investment has failed to recover significantly in either service since the early 1980s.
- The effect of privatisation of the nationalised industries dominates over most of the 1980s, as investment by public corporations fell away extremely rapidly in the years 1984–1988. The investment carried out by companies such as British Telecom will now count as private rather than public investment.
- The years after 1992, when there was a general decline, with investment by central government falling most dramatically. Health was amongst the services most significantly affected.

Figure 3.4. Public sector gross investment, by different branches of the State, as a percentage of national income



Source: *Blue Book*, various years.

3.2 Private involvement in public services

The government has stated that it wants to deliver world-class public services.[14] As shown in the previous section, the government has pledged to increase spending on public services, in particular health and education, at least until March 2004. In addition to increased resources, the government has also stressed the need for reform of public services. And central to what it seems to mean by 'reform' are public–private partnerships (PPPs), which it sees as 'a key element in the Government's strategy for delivering modern, high quality public services'.[15] This section assesses the current and likely future scale of private sector involvement in public service delivery, and then turns to consider the validity of various arguments for and against this involvement. Before looking at either, though, it will be useful to try to pin down some definitions.

Public–private partnerships and the Private Finance Initiative

Understanding PPPs requires a contrast with purely public and purely private service delivery. Pure public provision would see the State fully finance, control and deliver a service, as well as owning and providing any infrastructure it required. By contrast, pure private provision occurs when companies fulfil all these roles. At a minimum, PPPs are arrangements where some of these roles are fulfilled by private companies and others are provided by the State. But this definition would probably be too general. NHS hospitals have always been built by private companies and its GPs are self-employed, but we are not used to thinking of the service as a partnership with the private sector. And since the BT sell-off, the telecommunication industry is thought of as fully privatised, even though regulation through Oftel means that the State retains significant control over it.

Tighter definitions have been attempted but none is likely to prove watertight.[16] It might be better to supplement our minimal definition (that some aspects of service delivery are public while others are private) with features that are characteristic but not universal amongst those arrangements called 'PPPs' in the current debate:

- The private sector increases its role in sectors that have traditionally been primarily public.
- The private sector's involvement is defined in long-term contracts.

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[14] See Section 2, 'World class public services: how investment and reform will improve public services', in Labour Party, *Ambitions for Britain* (Labour's manifesto 2001), London, 2001 (www.labour.org.uk/lp/new/labour/labour.wwv_main.main?p_cornerid=364778).

[15] See page 8 of HM Treasury, *Public Private Partnerships: The Government's Approach*, The Stationery Office, London, 2000 (www.hm-treasury.gov.uk/mediastore/otherfiles/80.pdf).

[16] On page 40 of IPPR, *Building Better Partnerships*, London, 2001, PPPs are defined as 'A risk-sharing relationship' between the sectors 'based upon a shared aspiration to bring about a desired policy outcome'. But the authors claim this only as a 'working definition', and point out that 'it is far easier to say what a partnership is not rather than what it is'.

- Finance required for any capital projects is borrowed by the private partner, not the government.
- The State retains the role of providing the main source of ultimate funding for the service by paying an income (often tax-financed) to the private partner.

Other characteristics vary greatly between cases. For example, sometimes the ownership of assets remains with the public sector, sometimes it is completely transferred to the private sector and sometimes it is temporarily transferred before reverting to State ownership.

Interest in 'partnerships' in general developed as first Conservative and then new Labour governments began to push the use of a particular form of PPP, the Private Finance Initiative (PFI). Under the PFI, private companies invest in an asset required for the provision of a publicly sponsored service. The private partners' role includes financing and organising both upfront construction and maintenance. The public sector contracts to purchase use of the asset over a prolonged period. For example, the private sector could design, build and maintain a hospital in order to provide the public sector with hospital beds over 25 years in return for a stream of annual payments. Similar examples exist in the provision of classrooms, roads and prisons.

The PFI was in part initially advanced as a way of getting additional revenue into public investment. This argument hinged on its apparently favourable effects on the public finances, but over time the rationalisation has come to focus instead on the potential to transfer risk away from the public sector and to increase efficiency. But if the private sector really can improve the general efficiency of public services, then it ceases to be obvious why its involvement should have to centre around providing an asset. So forms of PPP broader than just the PFI have now moved up the agenda.[17] This simple chronological story is complicated by the recognition that certain arrangements that have been established for a considerable time might be thought of as PPPs. For example, had the current parlance been in circulation when the contracting-out of services such as refuse collection and cleaning was initiated, they might well have been dubbed 'PPPs'.

Much of the data that are available relate exclusively to the PFI, so in the rest of this section our focus will sometimes be restricted to this. When dealing with general principles, however, we will focus on PPPs, the more general case.

How important is the Private Finance Initiative?

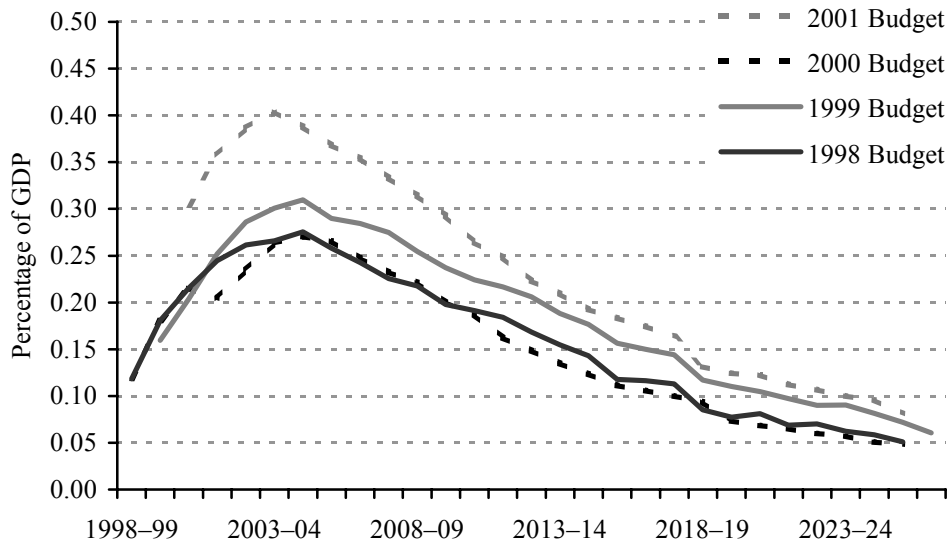
The PFI is still only a fairly small component of overall government expenditure. In 2000–01, payments under the PFI (from the State to private contractors) totalled £2.9 billion, just 0.8% of total government expenditure

[17] For more details of the different kinds of partnerships between the public and private sector that the government envisages, see HM Treasury, *Public Private Partnerships: The Government's Approach*, The Stationery Office, London, 2000 (www.hm-treasury.gov.uk/mediastore/otherfiles/80.pdf).

and 0.3% of national income.[18] Given that much government spending is on transfer payments (such as debt interest and social security), which could not, in principle, be converted into PFI spending, we might be more interested in the share of spending on public services that PFI expenditure represents. As about 50% of government spending is on services, the share of this that payments under PFI represent would be around 1.6%.[19]

Figure 3.5 shows the expected payments over the next 25 years from PFI contracts that have already been agreed. It shows that if no further contracts are agreed, payments should rise to 0.4% of national income in 2003–04 before falling to less than 0.1% of national income in the mid-2020s. But this decline is actually unlikely to materialise because current policy is that new contracts should be signed. The signing of new contracts shows up in Figure 3.5, for example, in the upward revision to the projected future flow of payments under the PFI between the 2000 and 2001 Budgets. If current policy continues, further upward revisions will follow.

Figure 3.5. Estimated future payments under Private Finance Initiative contracts, as a percentage of national income



Sources: Table B16 (p. 126) of HM Treasury, *Financial Statement and Budget Report*, Hc620, London, March 1998; Table B17 (p. 163) of HM Treasury, *Financial Statement and Budget Report*, Hc298, London, March 1999; Table C15 (p. 208) of HM Treasury, *Financial Statement and Budget Report*, Hc346, London, March 2000; Table C18 (p. 206) of HM Treasury, *Financial Statement and Budget Report*, Hc279, London, March 2001 (www.hm-treasury.gov.uk/budget/bud_index.cfm).

[18] Spending under PFI contracts from Table C18 (p. 206) of HM Treasury, *Financial Statement and Budget Report*, Hc279, London, March 2001 (www.hm-treasury.gov.uk/budget/bud_index.cfm).

[19] We might class as 'public service' expenditure investment and 'final government consumption'. The 2001 *Blue Book* shows that, in 2000, these together comprised 50.4% of government expenditure.

The numbers presented so far describe income paid out to the private sector under PFI contracts. These figures show that the PFI represents a small share of government spending but tell us little about the amount of capital spending that the private sector is currently undertaking on behalf of the public sector. This is because the cost of any PFI capital spending carried out will be shared across future payments made to the private sector. Another way in which we might want to gauge the quantitative significance of the PFI is therefore to look directly at the amount of investment that private companies are doing under the PFI and to compare this to the total amount of publicly sponsored investment.

Despite the very low level of public sector investment (as discussed in Box 3.2), it is still the case that most publicly sponsored investment expenditure is conducted through conventional means rather than through the PFI. Table 3.5 shows that, in 2000–01, total publicly sponsored investment was £23.3 billion, which comprised £19.0 billion financed by the government and £4.3 billion financed by private companies. Whether the proportion of publicly sponsored investment that is financed by the private sector increases or declines in future will depend on how much publicly funded investment actually materialises and how many new PFI contracts are agreed.

Table 3.5. Estimated capital spending by the public sector under both conventional finance and the Private Finance Initiative, by year and status of the contract

	2000–01	2001–02	2002–03	2003–04
Total signed deals (£bn)	3.9	3.5	3.1	2.4
Total at preferred bidder stage (£bn)	0.4	0.8	0.5	0.4
Total PFI investment (£bn)	4.3	4.4	3.6	2.8
Public sector gross investment (£bn)	19.0	26.0	28.8	33.2
Total publicly sponsored gross investment (£bn)	23.3	30.4	32.4	36.0
PFI investment as a percentage of total publicly sponsored gross investment	18.4%	14.5%	11.1%	7.9%

Sources: Figures on investment financed under the PFI from Tables C16 and C17 (pp. 205 and 206) of HM Treasury, *Financial Statement and Budget Report*, Hc279, London, March 2001 (www.hm-treasury.gov.uk/budget/bud_index.cfm). Public sector gross investment from Table B17 (p. 187) of HM Treasury, *Pre-Budget Report*, Cm. 5318, The Stationery Office, London, November 2001 (www.hm-treasury.gov.uk/pre_budget_report/prebud_index.cfm).

The role of the PFI in providing capital spending is not equally spread across government departments, as Table 3.6 shows. And, indeed, it turns out that there is considerable variation across departments in the *proportion* of capital spending that is now being undertaken privately. In defence, for example, only 2.2% of capital expenditure is undertaken under the PFI, whereas in health the proportion is far higher, at 25.9%.

As well as differences between types of public service programmes, it seems that there are significant differences in the extent to which different branches of government rely on the PFI. Table 3.6 shows that a large proportion (37.6%) of total PFI capital spending is carried out for local authorities. This is disproportionate, given the total amount of investment that councils sponsor. Looking at local authority sponsored gross investment, 34.3% was undertaken under the PFI in 2000–01, compared with the 18.4% shown in Table 3.5 for

the total of publicly sponsored investment.[20] We will touch later on possible reasons for this.

Table 3.6. Estimated capital spending under the Public Finance Initiative, by department, 2000–01

Department	£bn	% of total PFI capital spending
Defence	0.121	2.8
Foreign & International Development	0.007	0.2
Agriculture, Fisheries & Food	0.000	0.0
Trade & Industry	0.046	1.1
Environment, Transport & Regions	0.619	14.4
Education & Employment	0.015	0.3
Home Office	0.171	4.0
Legal Departments	0.040	0.9
Culture, Media & Sport	0.000	0.0
Health	0.559	13.0
Social Security	0.042	1.0
Scotland	0.559	13.0
Wales	0.190	4.4
Northern Ireland	0.061	1.4
Chancellor's Departments	0.104	2.4
Cabinet Office	0.155	3.6
Local authorities	1.618	37.6
Total	**4.307**	**100.0**

Source: Tables C16 and C17 (pp. 205 and 206) of HM Treasury, *Financial Statement and Budget Report*, Hc279, London, March 2001 (www.hm-treasury.gov.uk/budget/bud_index.cfm).

We have examined the relative importance of PFI investment by examining it as a proportion of total publicly sponsored *gross* investment – which includes both the construction of new assets and the restoration of old ones. Our focus partly reflects the data that are available, but it risks underestimating the significance of the private sector's role as a provider of new facilities. This is because the large stock of existing public sector assets makes it likely that a higher proportion of public than PFI investment will be concerned with repair, given that the private sector does not currently possess a large capital stock geared to public service delivery. This helps explain, for example, how it is that the PFI should provide the majority of new hospitals envisaged under the NHS plan, even though less than a third of publicly sponsored health investment is currently under the PFI.[21]

Costs and benefits of greater private sector involvement

Various arguments have been advanced to support the expansion of PPPs – most importantly, financial considerations (especially in the case of the PFI),

[20] Authors' calculation based on capital spending for local authorities, as reported in Table 3.6, and data on local authority gross investment reported on page 25 of HM Treasury, *Public Finances Databank*, December 2001.

[21] 'The 100 hospital schemes [in the NHS plan] include the 34 major and 29 medium sized PFI hospital schemes already in procurement or completed', Department of Health, *Departmental Report 2001–02*, The Stationery Office, London, 2001.

the management of risk and general efficiency improvements. Here, we evaluate the merit of each in turn, and also consider offsetting considerations, which argue for more conventional forms of public service delivery.

To determine whether a particular investment project should be delivered and financed publicly or privately, the Treasury contrasts the expected cost of privately run provision with a 'public sector comparator'. Whether this comparison is a fair test of best value hinges on the assumptions about the extent to which the risk-transfer and efficiency-saving arguments apply. So we consider this process in the light of our evaluation of these arguments.

Reduced borrowing and therefore interest payments by the public sector?

Under conventional public procurement, investment spending leads to an immediate increase in government borrowing and hence greater future interest payments. In contrast, under the PFI, private firms borrow to undertake publicly sponsored investment and so neither borrowing nor government debt interest payments increase. This has given rise to the argument in favour of the PFI, which asserts that it allows the public sector to secure from the private sector *additional* resources for public investment – in other words, that it eases an economic constraint and so allows new facilities to be built that would not otherwise be built.

The argument is flawed because, although government debt and interest payments are indeed reduced, the annual payment to the private sector provider will naturally include the interest and capital repayments that company has to make on the money that it has borrowed on the government's behalf. If the private sector could borrow at the same rate as the government, and all else were equal, then the two methods of delivering the service should give rise to no differences in the government's underlying financial position: PFI investment would merely replace the stream of interest flowing from the debt incurred under traditional public procurement with a contractual obligation to pay the same amount. If real resources were being released by such a switch, then it would seem to be because accounting rules were failing to pick up the equivalence between a debt and a pledge to pay an income stream, in which case economics would suggest that it was the accounting rules, rather than the method of public service delivery, that needed to change.

Given that this 'balance sheet' argument seems erroneous, any attempt to use it to push the PFI in place of traditional public procurement could result in the PFI being inappropriately pursued.[22] It is therefore unsurprising (and welcome) that, in recent years, the Treasury has downplayed it. The aim of meeting the Chancellor's fiscal rules should not produce an incentive to pursue PFI investment for 'balance sheet' reasons – the golden rule explicitly allows borrowing for investment, and the sustainable investment rule, as currently defined and in current circumstances, would potentially allow the government to invest substantially more than it does at the moment without raising tax, since, in 2000–01, public sector net debt was just 31.2% of national income, 8.8 percentage points below the 40% limit prescribed by

[22] See, for example, P. Grout, 'The economics of the Private Finance Initiative', *Oxford Review of Economic Policy*, vol. 13, no. 4, pp. 53–66, 1997.

Gordon Brown.[23] A quick, back-of-the-envelope calculation suggests that, had all of the projects carried out under the PFI been delivered publicly, public sector net debt would, in March 2002, be around 2% of national income higher, still comfortably below the 40% limit.[24]

The 'balance sheet' argument may still have some influence in at least some parts of the public sector, however. We saw in the previous subsection that local authorities were doing significantly more of their investment through the PFI than was central government. It could be that local authorities are responsible for spending that is better suited to use of the PFI; but an alternative explanation is that local councils (which need central government approval before they can borrow money to spend on capital projects) experience cash constraints that leave them with incentives to minimise the amount of debt appearing directly on their balance sheets.[25] In addition, individual departments still have an incentive to minimise the borrowing that they engage in directly since their budgets do not yet include a full cost of capital charge. This should be put right in Spending Review 2002, when full resource accounting will be introduced.[26]

The discussion so far has assumed that financing costs are the same in the public and private sectors. In fact, private sector financing costs are higher than those of the public sector. This is because the cost of borrowing is higher for private sector firms than it is for the government. The difference principally arises because the risk of default is higher for any private firm than for the government, since future governments can always increase taxes to pay for any outstanding commitments while private firms always have a risk of bankruptcy. This might seem to suggest that strong countervailing gains are required before private finance is ever used to build public sector infrastructure. But this effect should not be overstated, because estimates suggest that only 22% of expenditure under the PFI actually represents the initial capital investment – in other words, most of the payments under the PFI are for services other than finance.[27]

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[23] The government is not free to increase debt right up to the limit of the sustainable investment rule: if it increased investment by 8.8 percentage points of GDP, it would, in absence of other tax increases or spending cuts, miss the golden rule since the resultant increase in debt interest and depreciation figures would score against current spending.

[24] 2% of GDP is approximately equal to the sum of the cash value of all capital spending under PFI projects agreed to date.

[25] Indeed, sometimes it seems that the Treasury is still advancing the 'additionality' argument. In comparing public corporations' bonds with PFI finance, it recently offered as a consideration in favour of the PFI option the fact that 'bonds issued by state-owned businesses represent public sector borrowing' – page 34 of HM Treasury, *Public Private Partnerships: The Government's Approach*, The Stationery Office, London, 2000 (www.hm-treasury.gov.uk/mediastore/otherfiles/80.pdf).

[26] HM Treasury, *Resource Budgeting and the 2002 Spending Review*, London, 2001.

[27] Source: Arthur Andersen and Enterprise LSE (2000), *Value for Money Drivers in the Private Finance Initiative*.

Transfer of risk?

Public–private partnerships typically see the private sector being guaranteed a specified stream of income in return for guaranteeing the provision of a contractually defined service. In theory, this arrangement should mean risk is transferred away from the public sector: without the PPP, the State would have to provide the service directly itself, in which case it would face uncertainty about how expensive it will turn out to be to provide a particular quality of service over a prolonged horizon; under the PPP, both the quality and the cost should be fixed for the State.

The transfer of risk per se is not necessarily desirable. For example, consider a project where the State commissions a company to provide some buildings, and assume that world-market-determined building materials costs are a major determinant of the total cost of the work. A fixed-fee contract would pass the risk flowing from material cost variations on to the private company; an alternative arrangement would be to allow full cost pass-through for building materials, in which case the government would keep the risk. Assuming the cost of materials is known to both parties, the second arrangement should be preferable, as the large scale of the public sector and its very diverse interests probably make it more likely than the private company to be able to offset any cost overrun on this project against savings on other projects.[28] As a result, the extra expected profit that the company would need to take on the risk would be likely to exceed the cost to the public sector of maintaining it.

Risk transfer becomes desirable when it alters the private contractor's incentives in a manner that means that the risk the public sector would otherwise face is not just transferred, but also reduced. For example, if the government pays a company a fixed sum to construct a road, and if it cannot accurately monitor the quality of the work, then the company has an incentive to cut costs even where this produces a high risk of the road eventually proving defective. If the government can instead use a PPP contract to purchase 25 years of the road 'services' of a specified quality, then the consequences of the road proving defective are transferred to the company, and this should ensure it reduces the risk of this happening. Similar conclusions hold when the different elements of the project's costs cannot be separately monitored, producing the risk that it will be run inefficiently because the company could pass the resulting costs on to the government. If, instead, a fixed-payment-for-fixed-output agreement is reached, the company should be incentivised to manage efficiently.

An offsetting consideration is the risk resulting from the impossibility of writing complete contracts. If a PPP ties a government into a 25-year arrangement to purchase, say, health services, then there is a risk that, over this period, the contractor will find a way to cut costs (and so increase profits) in a way that is detrimental to the quality of service in a manner that was not anticipated in the contract. Other 'risks' arise if there is some chance the State will want to alter the quality of the service it is sponsoring during the period of

[28] This difference will depend on the ability of private sector investors to diversify risk effectively. If diversification is cheap and effective, then private firms may be as happy to accept risk as cheaply as the State.

the contract. For example, the government might want to increase the quality of service offered in a particular hospital 10 years after it has signed a 25-year contract purchasing the use of its beds. Unless the contract specified what happened in such circumstances, the provider might be able to charge well above cost for the unforeseen service improvement on the grounds that the State was already tied into using it as a provider of the basic service.

Transferring risk in a manner that promotes value for money for the State is an important argument in favour of the use of PPPs. This helps us understand why it is that the decision to use a PPP often hinges on the amount of risk transferred.[29] But we should not lose sight of the fact that the desirability of this transfer taking place hinges on the type of risk transferred, nor of the fact that an imperfectly written PPP contract involves new risks. The difficulty in accurately and separately quantifying the various types of risk involved makes the decision about whether to use a PPP more difficult and potentially more subjective.

How much risk is being transferred?

We have seen that transfer of the right type of risk to the private sector could be an important reason why PPPs might deliver better results than traditional public procurement: it could mean that project managers face sharpened incentives to improve efficiency. This makes it interesting to ask how much risk has, in fact, been transferred. Given that the actual costs of delivering a PPP contract are unknown, the rate of return a firm will require to finance a PPP project will depend on the amount of risk that the markets believe the firm has undertaken. For the PFI, project-specific bond ratings give us an idea of how much risk investors believe they are assuming.

In fact, the bond ratings of PFI projects suggest that investors in these projects do not think that they are taking on significant risks.[30] But inferring anything from this about how much risk is transferred is extremely difficult. It does not necessarily mean that little risk is being transferred from the public sector, as the low PFI bond ratings could arise for one of three reasons. First, the markets may see that the risks that the State would otherwise have faced have been dramatically reduced by their transfer to the private sector, which is exactly what should happen if risk transfer works well. Second, the project may involve very little risk for the contractor, either because it is inherently unrisky or because the contractors anticipate that political pressures will result

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[29] One study concluded 'In all of the business cases we have examined, the value-for-money of the PFI option is dependent on the valuation of the risk transferred to the private sector' (page 24 of UCL Health Policy and Health Research Unit, *Public Services, Public Finance*, Unison, London, 2001).

[30] UCL Health Policy and Health Research Unit, *Public Services, Public Finance*, Unison, London, 2001. In the specific example of project-specific bonds sold to finance NHS PFI contracts, Standard and Poors have stated that 'Compared with many other types of project financings, the U.K. hospital Private Finance Initiative (PFI) projects display a number of strong credit characteristics, including a relatively stable income stream that covers debt service and more limited operational risk' (Standard and Poors, *Rating U.K. NHS PFI Projects*, 10 November 1999 (www.standardandpoors.com/ResourceCenter/RatingsCriteria/NonUSPublicFinance/Articles/111099_ratinguknhs.html)).

in them being bailed out by the State if things turn out badly. Third, significant risk may have been transferred, but the markets may be underestimating it.

Even though the extent of genuine risk transfer is a crucial determinant of whether the private sector can realise efficiency savings, it is (unfortunately) extremely difficult to quantify.

Does the public sector comparator correctly gauge risk transfer?

The risks transferred also bear importantly on whether the 'public sector comparator' – against which the desirability of doing a project through the PFI is established – is a fair yardstick. Grout (2001) points to two reasons why the private sector firm will bear more risk than the public sector comparator. First, the company runs the risk of large costs if it proves impossible to finish the project on time.[31] Secondly, under a PPP arrangement, any future uncertainty regarding the costs of providing a public service are borne by the private firm, effectively insuring the State against future changes to input costs. Ignoring any advantage from the private sector assuming these risks might mean that use of a public sector comparator discriminates against private sector involvement.

This is not the only potential problem with the use of a public sector comparator. There are offsetting risks that the 'comparator' process may also overlook. These follow from the loss of public sector discretion that PPP deals involve. We have already argued that long-term contracts with the private sector for public service delivery can involve risks when there is a chance that there might be a desire to change the standard of service provision in a way not provided for in the contract. These increased risks to the public sector from using the PFI will not be picked up in the comparator process. Their importance is likely to vary across public services – for example, it might be easier to assess the quantity and quality of roads that we want in 2020 than it is to anticipate the quantity and quality of healthcare. This bias against the use of the public sector might therefore be especially likely in some sectors.

Ex post *evaluation of value for money and the Railtrack affair*

The true cost of delivering a PFI contract is uncertain. This means it is possible for a private sector firm to be observed making large profits from a PFI contract without it necessarily following that it originally overcharged for the contract. Similarly, just because some projects lead to private sector losses does not necessarily mean that the charge made was too low or that the original deal was an especially good one for the public sector. The important distinction here is between what was expected at the time the contracts were signed and what subsequently occurred.

If the markets had underpriced the risk that contractors were assuming, then this would imply that the public sector should have gained, by effectively

[31] Normally, a delay to a project would be costly since it would delay the date at which payments would start. Under PFI contracts, it is actually more costly since the end-date is fixed. For example a five-year delay to a 25-year project would lead to the private firm only receiving 20 years of payments. Source: P. Grout, *Is the Private Finance Initiative a Good Deal?*, *Leverhulme Centre for Market and Public Organisation Bulletin*, Issue 6, December 2001.

acquiring especially cheap insurance against some risk. This gain would not have been due to greater efficiency but would have been at the direct expense of bondholders, who would have found themselves assuming more risk than expected. This underpricing of risk transfer could have led the government to use the PFI even where it was not efficient.

If the risk bondholders had taken on was initially underestimated, then, over time, as the risks actually acquired become clearer to bondholders, we would expect the cost of borrowing to finance PFI arrangements to increase. Although this should increase overall economic efficiency, it would also make it harder to show that the PFI or PPP offered value for money when compared with conventional public sector service delivery. It is possible that the recent decision to bring Railtrack PLC into administration will increase the market's assessment of the risk undertaken by companies whose value is largely dependent on future payments from the UK government. However, a leading credit-rating agency has stated that 'the Railtrack affair has no direct implications for rated PFI projects'. It also highlighted a number of differences between many PFI/PPP projects that it had not rated and the Railtrack case (including differences in scale and regulatory frameworks) which it argued could generally limit the implications of Railtrack for PFI financing costs.[32]

Relative efficiency in the public and private sectors

Aside from any gains that may flow from the transfer of risk, advocates of PPPs point to additional reasons to expect them to improve efficiency and so reduce the cost of providing public services. Sometimes it is asserted that private sector management is, in general, superior; sometimes the emphasis is on the removal of particular purported public sector weaknesses, such as a tendency to have inappropriate patterns of employment or distorted pay rates. In practice, in healthcare at least, the government's election manifesto may constrain the private sector's ability to deliver such savings – 'We have said that Private Finance Initiative (PFI) should not be delivered at the expense of the pay and conditions of the staff employed in these schemes'.[33]

Private sector efficiency savings might be expected if, for example, the threat of bankruptcy or the presence of competition means that private sector managers will be forced to push harder for efficiency than their public sector counterparts. But if private sector efficiency only reflects incentives produced by such factors, then it might be that changing the incentives for the public sector workers – for example, through the increased use of performance-related pay and targeting – would be an alternative to using PPPs to deliver public services. Indeed, it might even be that the possibility of public sector managers being replaced by outsiders (as in the PPP bidding process) could be sufficient to drive up efficiency even if the public sector continues to run public services. But if overhauling public sector incentives produces its own

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[32] Source: Standard and Poors, *Off the Rails or on Track? U.K. Government Support after Railtrack PLC*, Commentary, 23 October 2001 (www.standardandpoors.com/Forum/RatingsCommentaries/NonUSPublicFinance/).

[33] Pages 20–21 of Labour Party, *Ambitions for Britain* (Labour's manifesto 2001), London, 2001 (www.labour.org.uk/lp/new/labour/labour.wwv_main.main?p_cornerid=364778).

problems, or if the private sector has more general managerial advantages, it might still be that PPPs would deliver better value.

Again, however, there are countervailing considerations. For one, there are the possible effects of a public sector ethic, which might mean that public sector personnel are willing to work harder than their private sector counterparts because their workplaces are especially infused with a sense of dedication. Such forces must be distinguished from any general professional ethic that applies in, say, health and education: the point is that employees have to care about whether their employer has the sole aim of service delivery rather than making a profit, not just the nature of their work. If public sector employment can have this special effect, then the State would have a special ability to deliver high-quality services efficiently.

Another consideration is the potentially significant legal and accounting costs that arise when services are farmed out and it becomes necessary to draft and monitor long-term contracts that need to be complex enough to cover all envisaged contingencies.[34] Interactions with the remaining public sector element of the service provision could also become more legalistic. Finally, the market power that certain large public sector organisations possess will be diluted as they are joined by private sector operators. For example, the ability of the NHS to contain the prices of drugs or the wages of its employees might be undermined, which could reduce value for money.

3.3 Conclusion

UK spending on health and schools is relatively low in an international context. But current increases in health and education spending are large by historical standards, and are planned to continue at least until 2003–04. By this time, they should have been sufficiently sustained to exert a discernible effect on the quality of service provision. Beyond this, if continued substantial spending increases in the health and education budgets are deemed necessary, then one option would be to try to fund them from savings out of other departments. But this does not look easy – it seems unlikely that falling unemployment will continue to provide significant savings on social security, and the claims of many other spending departments – for example, transport and defence – might be seen as relatively strong at the moment. It seems likely, therefore, that continued large increases in health and education spending beyond 2003–04 would need finance from increased borrowing or taxation.

Alongside increased public expenditure, the government sees reform of public services as an important means of improving their quality. In particular, it hopes that it can find new ways to involve the private sector and that this will increase efficiency. We have seen that, at the moment, economics can provide more arguments both for and against this process than it can hard evidence,

[34] Tender costs as a proportion of total project cost were found to be far larger in PFI projects than traditionally financed projects in E. Butler and A. Stewart, *Seize the Initiative*, Adam Smith Institute, London, 1996.

and this limits our ability to reach a firm conclusion. Our overview of these suggests that the arguments for greater private sector involvement are likely to be strongest in cases where the public sector is confident in its own ability to anticipate its needs over a long time horizon. Conversely, the arguments against tying the State into a long-term deal with the private sector seem most compelling when there is significant uncertainty about exactly what type of services we will want in the future.

Tom Clark and Carl Emmerson

4. Options for increasing tax

There are at least two reasons why the government may want to put up taxes in Budget 2002. First, as discussed in Chapter 2, the Chancellor may need to raise around £5 billion as a result of the implementation of the measures currently under consultation (such as the new credits) and a possible desire to restore the level of caution in the public finance forecasts seen in the last two Budgets. Second, there may be a need to fund any increase in public expenditure that is being planned for Spending Review 2002. This chapter considers possible options that the government has for increasing tax. We shall see that election tax promises should not prevent the government from raising new revenue, if that is its objective.

4.1 The range of possible tax rises

There are many potential sources of additional tax revenue available to the government. Some of the main ones are listed in Box 4.1.

The government clearly has a huge number of tax increases that it could theoretically make while adhering to its manifesto pledges. But few of these look like attractive ways to raise significant revenue. Excise duty increases, which were a major source of extra revenues during Labour's first term, look unlikely during this Parliament. Although tax on beer and wine could be increased, there is evidence that cross-border shopping would mean that increasing the duty on spirits could actually lower revenues.[1] Concerns over increased smuggling may also limit attempts to raise significant new revenue from tobacco tax. Higher fuel taxes, meanwhile, while beneficial to the environment, might look politically unappealing after the fuel protests.

Increases in the rates of several other taxes would involve a direct reversal of the policy that the government has hitherto been promoting, which might make for political difficulties. For example, the government has given heavy emphasis to the cuts it has made to the rates of corporation tax and capital gains tax, and so it might be loath to increase these now.

The government could try to raise revenue from corporate profits without increasing the corporate tax rate, something it succeeded in doing during its first term. For example, it could look at further broadening the corporation tax base. However, economic downturns have traditionally been accompanied by increases in the generosity of capital allowances aimed at stimulating investment. The government has also ruled out the most obvious method of expanding the tax base that has arisen in recent consultations.[2] Given this and

[1] See I. Crawford, Z. Smith and S. Tanner, 'Alcohol taxes, tax revenue and the Single European Market', *Fiscal Studies*, vol. 20, pp. 287–304, 1999.

[2] The government ruled out introducing restrictions to the deductibility of interest costs related to overseas investments. See page 11 of HM Treasury, *Large Business Taxation: The Government's Strategy and Corporate Tax Reforms*, London, July 2001.

the lack of any tax-raising proposals in the Pre-Budget Report, it would be surprising if the government turned to the corporate sector for additional revenue in this Budget.

Another option would be to introduce new taxes, although this would take time, assuming adequate consultation is undertaken. Any proposals for new taxes made in the Budget would likely be of a tentative nature, with scope for significant modification before eventual introduction in a few years' time. On these grounds, it seems unwise to devote much space to the large number of potential taxes that the government could introduce.

Box 4.1. Possible revenue-raising tax reforms

Tax	Reform	Ruled out by manifesto pledge?
Income tax	Increase basic rate	Yes
	Increase higher rate	Yes
	Increase lower rate	No
	Decrease personal allowance	No
	Restrict personal allowance to basic rate	No
	Lower basic-rate threshold	Yes
	Lower higher-rate threshold	No
National Insurance	Increase employee rate	No
	Increase employer rate	No
	Increase rate for self-employed	No
	Raise or abolish upper earnings limit	No
	Reduce earnings at which payment starts	No
VAT	Increase rate	No
	Extend to extra goods	Partially
Corporation tax	Increase standard rate	No
	Increase lower rate	No
	Increase 10% rate	No
	Lower profit thresholds	No
	Reduce capital allowances	No
Capital gains tax	Increase rates	No
	Increase taper length	No
	Reduce individual allowance	No
	Reduce trust allowance	No
	Reduce investment reliefs	No
Excise duties	Increase fuel duties	No
	Increase alcohol duties	No
	Increase tobacco duties	No
Inheritance tax	Increase rate	No
	Increase taper length	No
	Raise threshold	No
Stamp duty	Increase rates	No
	Reduce thresholds	No

Given all these difficulties, we will concentrate on the three biggest taxes in terms of revenue raised: income tax, National Insurance and VAT. These together currently provide 57% of all tax revenue.[3]

4.2 VAT

Value added tax (VAT) is charged at 17.5% on most purchases and accounts for 15% of tax receipts.[4] One way to raise revenue using VAT would be to extend it to some of those goods that are currently tax-exempt or zero-rated. However, the scope for raising revenue in this way is severely limited if the government sticks to its manifesto pledge 'not to extend VAT to food, children's clothes, books, newspapers and public transport fares',[5] since these items account for approximately half of the revenues forgone in exemption and zero-rating.[6] The alternative of increasing the rate at which VAT is charged has not been ruled out, and we discuss this reform here.

We model the effects of increasing the rate of VAT by 2.5 percentage points, which would take the rate to 20%. The reform package considered leaves the rate unchanged on those goods – for example, domestic fuel and energy supplies, children's car seats and women's sanitary products – that are currently taxed at 5%. This tax increase would raise a little less than £9 billion, equivalent to a little over 3 percentage points on the basic rate of income tax. Although large, this increase is not without recent precedent – Norman Lamont increased VAT by 2.5 percentage points in the March 1991 Budget when revenue was wanted to reduce community charge bills.

Figure 4.1 plots losses as a percentage of disposable income for households at different points in the income distribution. At least in the middle of the income distribution, the effect is seen to be approximately proportional. That is, on average, the VAT increase costs households at most income levels around 2% of their disposable income. Given that poorer households might be expected to spend a higher proportion of their income, this might seem surprising, for we might have expected more of their income to be liable to this point-of-sale tax. But this effect is offset by the fact that the poor spend a greater proportion of their income than do the rich on essentials such as food and children's clothing, which are not subject to VAT.

Still, there are two notable exceptions to the pattern of proportionality. Households in the poorest tenth lose more, with a 3.5% reduction in the purchasing power of their disposable income. And households in the richest 10% lose only 1.8% of their disposable income. This is because income that is not spent is not immediately liable to VAT, and the richest households save

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[3] Source: HM Treasury, *Financial Statement and Budget Report*, Hc279, London, 2001 (www.hm-treasury.gov.uk/budget/bud_index.cfm).

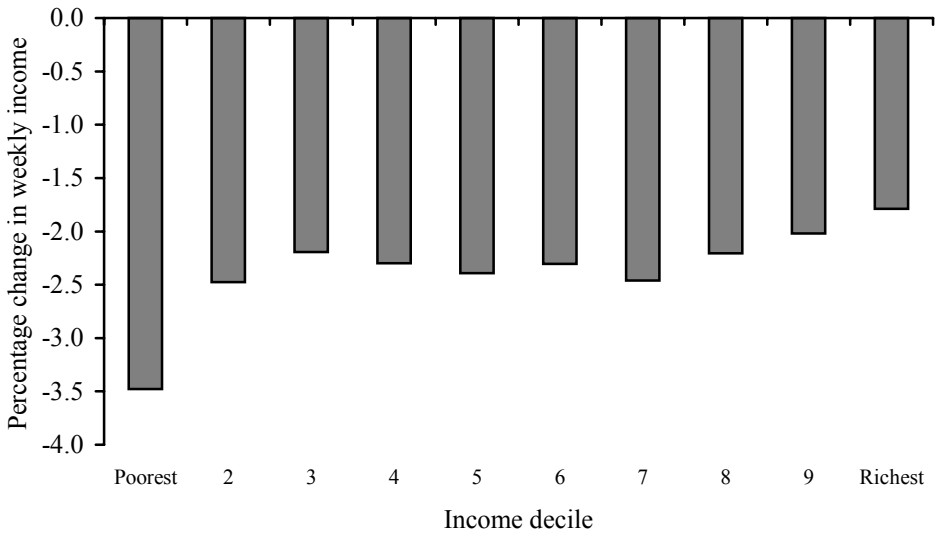
[4] Source: HM Treasury, *PBR: A Summary Leaflet*, London, 2001.

[5] Page 10 of Labour Party, *Ambitions for Britain* (Labour's manifesto 2001), London, 2001 (www.labour.org.uk/lp/new/labour/labour.wwv_main.main?p_cornerid=364778).

[6] Source: Table A3.1 of HM Treasury, *Financial Statement and Budget Report*, Hc279, London, 2001 (www.hm-treasury.gov.uk/budget/bud_index.cfm).

most heavily (and spend least heavily) out of their income, while the poorest households spend most heavily.

Figure 4.1. Losses across the income distribution from increasing VAT to 20% on goods currently taxed at 17.5%



Note: Income deciles are derived by dividing the total population into 10 equally sized groups according to household income adjusted for family size. Decile 1 contains the poorest tenth of the population, decile 2 the next poorest 10% and so on, up to the richest tenth in decile 10.
Source: IFS tax and benefit model, TAXBEN, run using data from the Family Expenditure Survey 1997–98; scale adjusted for consistency with government figures due to systematic underestimate of VAT take.

The salience of these departures from proportionality is reduced by two additional considerations. First, some households at the bottom of the income distribution may be spending a lot relative to their income because they anticipate that their low income is only temporary. Secondly, when higher-income households spend the wealth that they are building up, VAT will be levied then.

This reform to VAT has been seen to be approximately proportional across most of the income distribution but regressive in its treatment of households at the extremes of the income distribution. Implementing this reform in isolation would therefore represent something of a break with the redistributive direction of reforms introduced in Budget packages during Labour's first term in office. The government might, therefore, prefer to use direct taxation if it wants to raise tax revenue, because this would offer greater scope for progressive packages. We now consider some methods of raising revenue using direct taxes.

4.3 Income tax

Income tax is the largest source of government revenue, accounting for over a quarter of receipts.[7] But there are significant constraints on the ability to raise new revenue from it. The government has pledged not to 'raise the basic or top rates of income tax',[8] which rules out the most obvious means of raising significant revenue. In addition, there are limits on the alternative means to raise income tax that were used at various points over the 1990s. Reductions in the generosity of 'fringe' allowances, such as the married couple's allowance and MIRAS, are now less of an option as most have already been abolished. Freezing in cash terms the main income tax parameters (explained in Table 4.1) would raise relatively little – just under £1 billion[9] – because of low inflation and would be incompatible with the government's pledge to widen the 10% tax band in real terms. So, if significant extra income tax revenue is to be raised, an 'imaginative' way of doing it must be found. One option is restricting the value of the personal allowance.

Table 4.1. The 'default' 2002–03 income tax system

Term	Definition	Gross income when reached	Taxable income when reached
Personal allowance	Gross income on which no tax is paid. Income immediately above this is taxed at 10% (the starting rate).	£4,615	£0
Basic-rate threshold	Taxable income at which 22% tax rate (the basic rate) begins.	£6,535	£1,920
Higher-rate threshold	Taxable income at which 40% tax rate (the higher rate) begins.	£34,515	£29,900

Note: The table is for a childless single person under 65 receiving only earned income and paying no tax-deductible pension contributions from their income. It shows the values that the main tax parameters will assume under the default indexation that occurs if the Budget makes no announcements on these.

Restricting the personal allowance to the basic rate of tax

One revenue-raising reform to income tax that has been discussed in the past,[10] and which could still be implemented, would be to restrict the personal allowance (PA) to the basic rate of tax. The income tax system in the UK

[7] Source: HM Treasury, *PBR: A Summary Leaflet*, London, 2001.

[8] Page 10 of Labour Party, *Ambitions for Britain* (Labour's manifesto 2001), London, 2001 (www.labour.org.uk/lp/new/labour/labour.wwv_main.main?p_cornerid=364778).

[9] Source: HM Treasury, *Tax Ready Reckoner and Tax Reliefs*, London, 2001 (www.hm-treasury.gov.uk/mediastore/otherfiles/TRR01Draft6%20-%20final.pdf).

[10] See, for example, J. McCrae, 'Simplifying the formal structure of UK income tax', *Fiscal Studies*, vol. 18, pp. 319–34, 1997.

currently has three tax bands (a starting rate of 10%, a basic rate of 22% and a higher rate of 40%) and an unrestricted PA. The PA allows taxpayers to reduce their tax rate to zero on £4,615 of their income in the 2002–03 tax system.

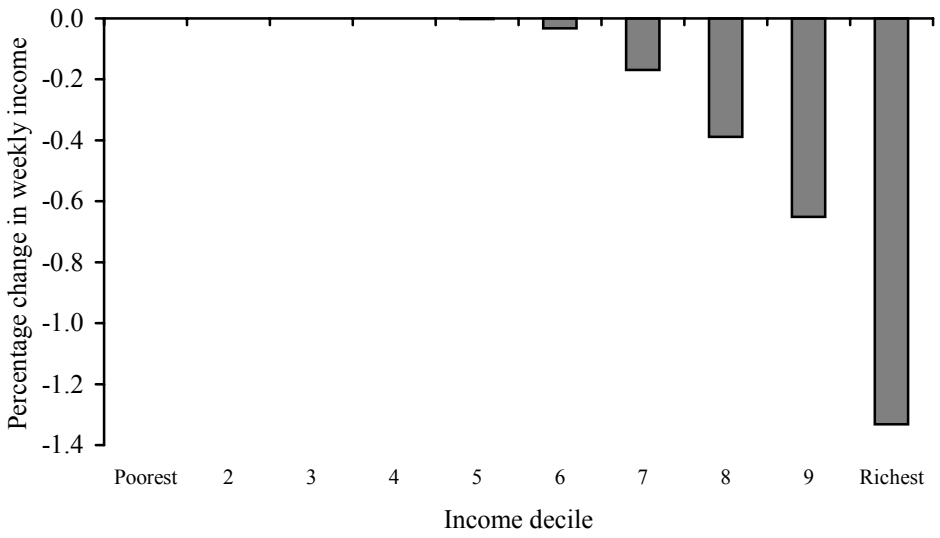
An unrestricted allowance affects the level of gross income at which other tax bands begin: each tax band becomes effective when gross income exceeds its threshold *plus* the PA. (The figures in the third column of Table 4.1 are calculated by adding £4,615 to the figures in the final column in the table.) This structure means that the PA offsets the tax liability on the top tranche of income – the segment taxed at the highest rate. For higher-rate taxpayers, the allowance reduces the tax rate from 40% to 0% on the top £4,615 of income, making the year's allowance worth £1,846. But for an individual whose income places them in the middle of the basic-rate tax band, the allowance is worth less: its effect is to reduce the tax rate from 22% to zero on the top tranche of income, so the allowance is worth just 22% of £4,615, or £1,015.30.

Restricting the PA to the basic rate of tax would mean that it could only be offset against basic- and starting-rate liabilities, and so could never be worth more than its value to a basic-rate taxpayer – £1,015.30. The reform would decouple the amount of gross income at which higher-rate tax starts being paid from the level of the PA. That might appeal to the government because it would then be able to raise the PA in the future without giving greater benefit to higher-rate taxpayers than to basic-rate taxpayers. This would mean that the level of gross income at which the higher-rate marginal rate of tax becomes effective is reduced from £34,515 to £29,900. Anybody with an income of more than £29,900 loses out from this reform. An individual earning more than £34,515 loses a total of £830.70 each year (about £16 per week) from the reform. In total, the reform would raise about £2.6 billion.

Figure 4.2 shows the effect of this reform on the average incomes of families across the income distribution. Since only those with incomes above £29,900 can lose from the reform, the losses are confined to the top half of the income distribution. It is unsurprising that the reform is progressive, taking (on average) a greater proportion of family income from richer households. The largest losses are felt amongst the richest 10%, in which families lose an average of 1.3%, or £11.20 per week.

Restricting the personal allowance would have the effect of floating about a million people onto the higher, 40%, income tax rate. From an economic point of view, it is not obvious why the government should be concerned about this growth – it is the *average* tax rate that matters for people's living standards, and the average tax rate of those people who are floated into higher-rate tax by the reform will change only modestly as the great bulk of their income would continue to be taxed at 22%. Also, in terms of incentives, 40% is not an especially high marginal tax rate, being only 8 percentage points higher than the 32% effective tax rate paid by many basic-rate taxpayers (made up of a 22% marginal income tax rate and a 10% employee National Insurance rate).

Figure 4.2. Losses across the income distribution from restricting the personal allowance to the basic rate of tax



Note: As for Figure 4.1.
Source: IFS tax and benefit model, TAXBEN, run using data from the Family Resources Survey 1998–99.

But there might be political or presentational difficulties. The increase in the number of higher-rate taxpayers would reinforce a long-standing trend – their number has increased to 2.6 million in 2001–02 from 2.1 million in 1997–98 and 1.7 million in 1990–91, mainly because thresholds have generally risen only in line with prices while earnings have risen more quickly. If, for some non-economic reason, the growing numbers of modestly high earners on a marginal income tax rate of 40% were seen as problematic, then the reform would become less attractive.

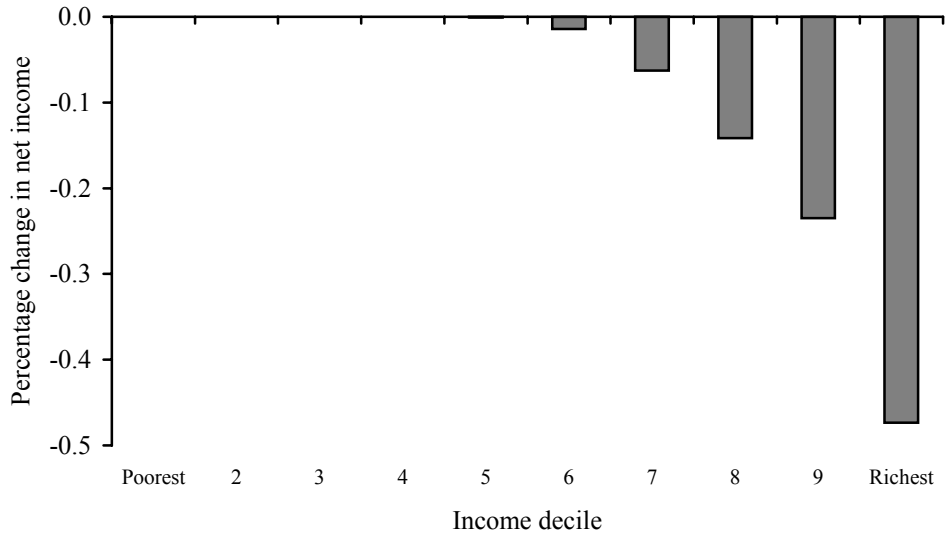
4.4 National Insurance

National Insurance has been widely seen as a likely target for increasing taxes, especially since the government's refusal to rule out increases during the general election campaign. The mechanics of National Insurance mean that changes could not be announced with immediate effect, but the government could use the Budget to pre-announce reforms. Perhaps an obvious target would be to scrap or increase the cap – the upper earnings limit (UEL) – above which no further employee contributions are payable. Other possibilities would be to raise more money from the self-employed or to increase the main National Insurance rates. Finally, it would also be possible to extend National Insurance to those sources of unearned income currently covered only by income tax.

Increase or abolish the upper earnings limit

One possibility would be to raise the UEL (and the upper profits limit – UPL – the equivalent cap that applies to the self-employed) from the currently planned level of £585 per week to £664 per week (from £30,420 to roughly £34,515 per year), so that it matches the higher-rate income tax threshold. This could be seen as consistent with previous Labour reforms, such as the increase to the level of the personal allowance for the point where National Insurance becomes payable, in that it would better align the income tax and National Insurance systems.

Figure 4.3. Losses across the income distribution from raising the UEL and UPL to the higher-rate income tax threshold



Note: As for Figure 4.1.
Source: IFS tax and benefit model, TAXBEN, run using data from the Family Resources Survey 1998–99.

Increasing the UEL and UPL to the higher-rate threshold would raise approximately £0.9 billion. The reform would be very progressive, as shown in Figure 4.3: the richest 10% would provide two thirds of the revenue, losing on average 0.5% of their disposable income. The bottom half of the income distribution would be almost entirely unaffected by the change because the effect is limited to high earners (those on more than £585 per week). In cash terms, the highest loss would fall on anyone earning over £664 per week, representing a flat-rate loss of £6.64 a week (£345.28 a year) for individuals in this position.[11]

The government could go further and abolish the UEL (and UPL) altogether. This would raise far more – around £5.9 billion – since this would mean that *all* earnings above the UEL would be newly liable for National Insurance at

[11] This illustrative calculation is for an individual who is opted out of SERPS, the State Earnings-Related Pension Scheme. If they were opted in, the loss would be larger, at £7.90 per week.

10%.[12] Abolishing the UEL would be highly progressive. Indeed, it would be an even more progressive reform than merely raising the ceiling, as the amount of extra tax paid by high earners would rise continuously with earnings for all those being paid more than £585 per week.

The abolition of the UEL, like an increase in higher-rate tax, would hit couples where one person did most of the earning harder than it would those where the earnings were split equally between partners. This is because no one would pay any extra National Insurance on the first £585 (£30,420 a year) of earnings each week, so, for example, a couple earning £25,000 a year each would escape the extra charge entirely, whereas a couple with the same gross income but with one partner earning £50,000 a year would have to pay an extra £37.65 a week (or around £1,960 a year). In practice, the hardest-hit group of families would be single-earner couples with children: on average, they would lose £15.98 per week.[13]

A potential objection to the abolition of the UEL would be that it would further weaken the 'contributory principle' of National Insurance. The link between contributions and benefits has been in decline since 1961, when contributions that graduated with earnings were first introduced. Abolishing the ceiling would weaken the link further as it would see the contribution of the highest earners increase significantly, without there being any commensurate increase in the benefits they were entitled to.

The dilemmas of compensation

Although we have seen that the effects of abolishing the ceiling on National Insurance contributions are actually very heavily concentrated in the upper reaches of the income distribution, the government might wish to offer some compensation to certain groups. In particular, it might want to protect moderately high earners – those on, say, £30,000 to £40,000 a year (people who are often labelled 'middle Britain' in spite of their relatively high position in the income distribution).

One way of compensating such people would be to reduce the rate of employee National Insurance contributions. A 2 percentage point reduction in the employee rate would be sufficient to compensate someone on earnings of around £37,000 per year fully and would ensure that the tax increase could not cost more than £4.82 per week for anyone earning less than £40,000. But this would cost the exchequer £6.5 billion, which is more than the abolition of the ceiling would raise in the first place. This is because so much money would end up being directed towards people on lower earnings and because the yield

[12] We assume that the UEL would be maintained at its current level in its role as a cap on the band of income where the contracted-out (of SERPS) rebate applies on both employer and employee contributions. If the UEL were not maintained as the upper limit on income where this discount ceased being available, then the scale of the tax rise would be very significantly reduced. But there would be no justification for abolishing the limit on this discount unless SERPS were to be increased for the highest earners, which would be out of line with recent pension policy which has concentrated on increasing pension entitlement for the poorest.

[13] Source: IFS tax and benefit model, TAXBEN, run using data from the Family Resources Survey 1998–99.

from abolishing the UEL itself would be reduced. In short, it is an infeasible means to compensate if the aim is to raise revenue.

Another means of compensation, which might seem more targeted, would be to cut the higher rate of income tax from 40% to 30% for all gross income up to £40,000 per year, after which the 40% rate would continue to apply. This would cost £2.0 billion, and so reduce the yield from abolishing the ceiling from £5.9 billion to £3.9 billion.[14] This change to higher-rate tax would mean that the effective marginal rate of tax on the tranche of income between £34,515 and £40,000 would remain unchanged at 40% (post-reform, this would be made up of 30% income tax and 10% National Insurance), whereas the 10 percentage point increase in the marginal rate of tax would still be felt in full by those earning over £40,000. But the policy has serious flaws.

First, such higher-rate tax adjustments cannot have any impact on the taxation of earners in the £30,420 to £34,515 bracket, the lowest-income people to be hit by the initial reform. This is because their earnings are liable to the extra National Insurance when the ceiling is abolished but are not sufficient to attract higher-rate tax, so the reduced higher rate is of no value to them. Second, compensation would be incomplete for those in the £34,515 to £40,000 bracket because they too would lose out on the increased effective tax rate on that part of their income that falls between £30,420 and £34,515. Indeed, a higher proportion of the tax increase represented by the abolition of the ceiling is being offset for someone on £40,000 than for someone on £35,000, because in the former case full advantage can be taken of the reduced 30% higher rate.[15]

Any compensation based on the introduction of a new reduced income tax band would have disadvantages that are additional to the failure to compensate effectively. It would mean creating an extra tax band, a complication that might have adverse consequences for self-assessment and the reconciliation of income that is taxed at source. It would also involve redistribution towards those paying higher-rate tax on unearned income, which is not liable for National Insurance.[16] For example, a high-income pensioner on £50,000 a year would see their tax liability fall on that part of their income covered by the new tax band. Redistributing to such well-off groups might seem undesirable when policy is aiming to raise revenue overall.

These attempts to compensate particular groups for the abolition of the UEL essentially amount to attempts to mimic the effects of income tax reform – an increase in the higher rate of income tax, possibly coupled with a modest increase in the higher-rate threshold. The problems of complexity and

[14] Source: IFS tax and benefit model, TAXBEN, run using data from the Family Resources Survey 1998–99.

[15] Better-targeted compensation could be achieved by introducing a new 12% income tax band in the £30,420 to £34,515 income bracket, although justifying an income tax schedule in which marginal rates rise from 0% to 10% to 22% and then fall back to 12% before finally rising to 40% might seem to pose presentational difficulties!

[16] In this chapter, we count pension income as unearned because it is not liable for National Insurance, although in other contexts it might be classified as earned.

unwanted distributional effects that emerge when attempting such a simulation suggest that income tax reform might be better done directly.

Increase contributions from the self-employed

A different system of National Insurance applies to the self-employed and it is much more generous: the contribution rate is lower than for employees (at 7% compared with 8.4% for employees contracted out of SERPS and 10% for employees contracted into SERPS) and there is no equivalent to the employer element. The self-employed do pay an additional flat-rate contribution of £2 per week and also have reduced benefit entitlement. But even accounting for this reduced benefit entitlement, the government calculates that, in 2000–01, the earnings of the self-employed gave rise to £2.3 billion less in National Insurance contributions than they would have done had they been taxed under the Class 1 (employer/employee) system.[17]

Increasing National Insurance contributions for the self-employed is therefore an option that would raise revenue and simultaneously alleviate an apparently unfair anomaly in the existing system. This could be done in a number of ways: the rate could be increased to 8.4% to match that paid by employees (opted out of SERPS); it could be further significantly increased, reflecting the fact that the self-employed do not currently pay employer contributions; and the UPL could be scrapped, since for employees there is no cap on employer contributions. The government might also wish to abolish Class 2 (flat-rate) contributions, which would remove another anomaly and provide a little compensation in a form worth proportionately more to low-earning self-employed.[18]

Increase the rate of National Insurance contributions

Rather than reforming the structure of National Insurance, the government could instead choose simply to increase the main National Insurance rates. It could do this either on the employee or the employer side. Economic theory suggests that, in the long run, the incidence of the tax should not be affected by who initially pays it – if employer contributions increase, then wages will eventually decline relative to what they would otherwise have been. So, here we model in detail only one option – an increase in the employee rate. The eventual effects of an increase in the employer rate should be similar, but more progressive as there is no cap on contributions on the employer side. We assume that the rate on self-employed profits increases in line with the employee rate.

A 1 percentage point rise in employee and self-employed rates would raise approximately £3.3 billion[19] and would be fairly progressive, as shown in

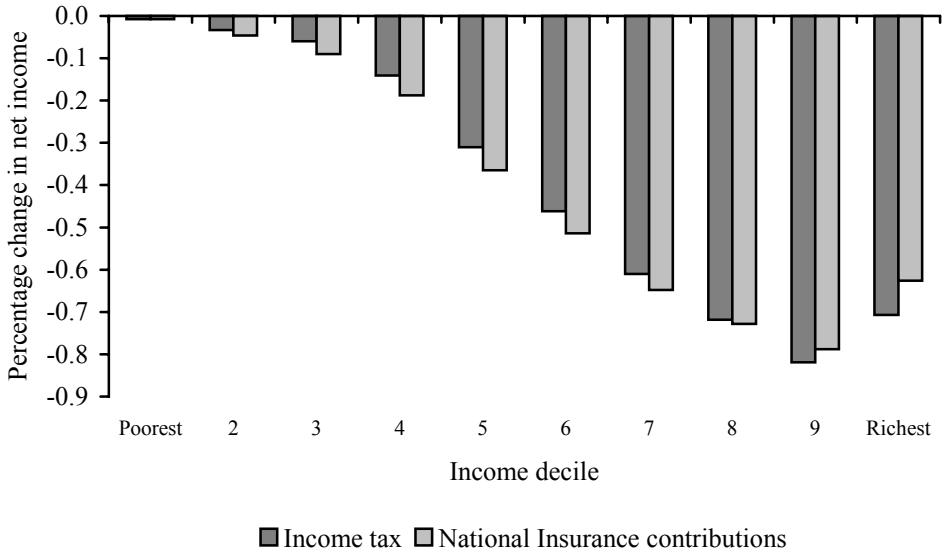
[17] Source: HM Treasury, *Financial Statement and Budget Report*, Hc279, London, 2001 (www.hm-treasury.gov.uk/budget/bud_index.cfm).

[18] For a fuller discussion of the treatment of the self-employed in the National Insurance system, see L. Chennells and A. Dilnot (eds), *The IFS Green Budget: January 1999*, Commentary no. 76, Institute for Fiscal Studies, London, 1999.

[19] Source: HM Treasury, *Tax Ready Reckoner and Tax Reliefs*, London, 2001 (www.hm-treasury.gov.uk/mediastore/otherfiles/TRR01Draft6%20-%20final.pdf). An increase of 1

Figure 4.4. The hardest-hit would be two-earner couples, who would lose a little over £4 per week on average.[20] As can be seen from the graph, the reform has very similar effects to putting a penny on the basic rate of income tax; it also raises a comparable amount. Raising income tax would, in fact, be slightly more progressive: the basic rate takes effect at a higher income level than National Insurance contributions (because of the 10% income tax band) and stops being paid at a higher income level (the higher-rate threshold is higher than the UEL), so raising the basic rate of income tax would tax low earners less and high earners more than increasing the rate of employee National Insurance contributions.[21] But the fact that income tax rises can be closely mimicked by National Insurance again indicates the lack of economic consequence from keeping to the income tax pledge.

Figure 4.4. Losses across the income distribution from raising the basic rate of income tax and the employee National Insurance rate by 1 percentage point compared



Notes: As for Figure 4.1. Employee National Insurance reform incorporates 1 percentage point increase in the rate of self-employed contributions.
Source: IFS tax and benefit model, TAXBEN, run using data from the Family Resources Survey 1998–99.

Integrate National Insurance and income tax

A more radical way to raise revenue from National Insurance would be to integrate employee National Insurance contributions into the income tax

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percentage point in the employer rate (together with an increase of 1 percentage point on the self-employed) would raise more – £4 billion – because contributions are uncapped.

[20] Applies to two-earner couples both with and without children. Source: IFS tax and benefit model, TAXBEN, run using data from the Family Resources Survey 1998–99.

[21] This is complicated slightly by the disproportionate amounts of unearned income at the top (savers) and the bottom (pensioners) of the income distribution.

system. This would leave National Insurance as a pure employers' tax. This might help simplify the tax system, and it would also raise revenue because of differences between the two taxes. In particular, it would increase taxation on sources of unearned income that are subject to income tax but not National Insurance. This would hit pensioners particularly hard, but that could be prevented by simply excluding them. The extra tax payable on unearned income for non-pensioners alone would yield around £1.6 billion a year.

4.5 Conclusion

Possible sources of significant extra tax revenue in the 2002 Budget are National Insurance and VAT. But the decision to rule out the main forms of income tax increases might come to be seen as disadvantageous should the government want to increase tax significantly. For the pledge limits the potential to raise revenue from the single biggest tax, and it does so more severely now than it did in Labour's first term, as many of the means used to increase income tax revenue without changing the rates are now exhausted. It might also seem disingenuous if income tax rate rises are simulated using National Insurance. Indeed, the National Insurance option might seem less distributionally appealing than the income tax option: National Insurance cannot be used to raise money from the unearned income of the wealthy and would have a greater impact on moderately high earners.

Stuart Adam, Tom Clark and Matthew Wakefield

5. Personal tax reforms: the child tax credit and the working tax credit

The government has promised to announce the rates of two new tax credits – the child tax credit and the working tax credit – in Budget 2002. These credits will be introduced in 2003–04 and are likely to have a full-year cost of £2–3 billion a year. In addition, after a lamentable lack of public discussion and openness, many of the operational details may be announced in the Budget; these details will determine whether the people who the credits are aimed at understand them and choose to claim them.

This chapter explores some options for the initial rates and total exchequer cost. As the child tax credit is the most direct mechanism the government will have to meet its child poverty targets, we show by how much the new tax credits could reduce child poverty. We also discuss what operational details need to be announced in the Budget and whether the credits will succeed as a new form of means test. Box 5.1 summarises what the credits are and how they will work.

Box 5.1. What do we know about the new tax credits?

In 2003–04, two new tax credits will be introduced: the *child tax credit* will bring together three parts of the existing tax and benefit system that support families with children, and the *working tax credit* will support those with or without children in low-paid work.

Some of the details of how the credits will work are known:

- They will be based on gross taxable income, jointly assessed for a couple, including savings income. The capital limits in existing means-tested benefits will not apply.
- They will depend on annual income. Most families will initially apply in the summer, at which point an interim award will be made, based on annual income in the previous tax year. Payments may change if circumstances change during the year and will be reconciled at year-end if the interim award proves to be inaccurate.
- People who apply in mid-year, or whose income changes significantly, will have an award based on their estimate of current-year income. Payments will be reconciled at year-end if this estimate was inaccurate.
- The child tax credit will be paid direct to the main carer. It will not depend on whether the main carer or his or her partner is working, nor will recipients face any new obligations to look for work.
- The working tax credit will be paid by employers. The self-employed will receive it direct from the Inland Revenue.

5.1 What are these credits? Why are they being introduced?

The child tax credit and the working tax credit are being introduced for different reasons. The aim of the child tax credit is to simplify support for families with children, so that parents have a clearer idea of how much they can expect to receive in respect of their children and so that families do not need to claim different benefits or tax credits when their circumstances change. The government thinks that the present system is complicated because there are four main ways by which financial support is directed to families for their children, three of which depend on income (see Box 5.2). From 2003–04, there will be just two: universal, non-means-tested child benefit and the new, means-tested child tax credit. All families will continue to be entitled to child benefit and around 80% will be entitled to the child tax credit. The structure of the child tax credit and the working tax credit, and how they correspond to the existing tax and benefit system for families with children, are shown in Figures 5.1 and 5.2.

Box 5.2. Tax credits and changes in support for children under Labour

What is being abolished?

The *children's tax credit* reduces income tax bills of 5 million income-taxpaying families with children. It was introduced in 2001, partly paid for by abolishing the married couple's allowance. It will be subsumed within the child tax credit in 2003–04.

The *working families' tax credit* (WFTC) provides in-work support to 1.2 million low-paid families working 16 or more hours a week. It was introduced in 1999 to replace a benefit called 'family credit'. It will be subsumed within the child tax credit and the working tax credit in 2003–04.

The *childcare tax credit* pays 150,000 families also receiving the WFTC up to 70% of eligible childcare costs. It was introduced in 1999 and is formally part of the WFTC. It will be subsumed within the working tax credit in 2003–04.

Child allowances in income support provided extra money to 1.5 million families with children claiming income support. Income support was introduced in 1988, and the child allowances will be subsumed within the child tax credit in 2003–04.

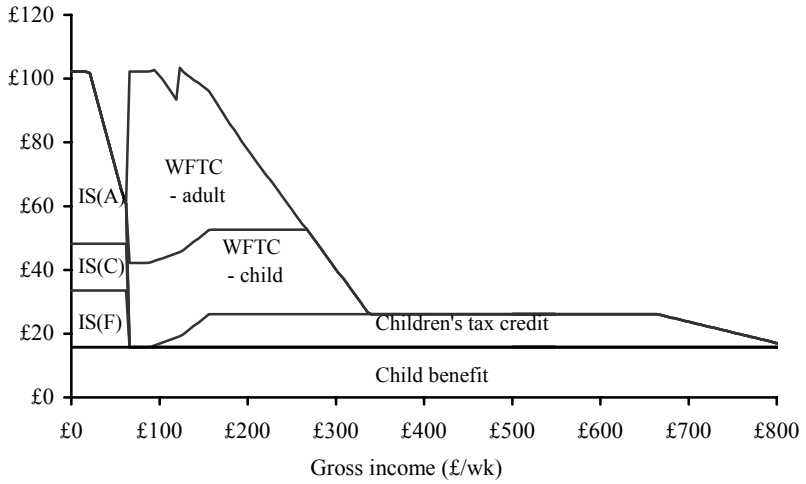
What's new?

The *child tax credit* will provide income-related support to the main carer. Around 5.7 million families – all but the richest 20% – should receive it. The *working tax credit* provides in-work support to around 1 million single people or couples in low-paid work. Both will be introduced in 2003–04.

What's staying?

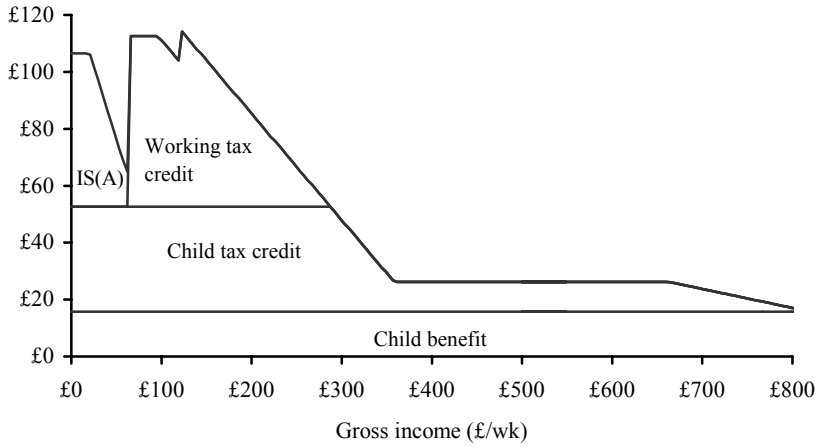
Child benefit is a universal, non-means-tested payment for all mothers and lone fathers. All 7 million families with children in the UK receive it. It was introduced in 1977, and nothing is due to happen to it in 2003–04.

Figure 5.1. Financial support for a family with a child under the current system



Notes: April 2002 rates. IS(A) is the adult allowance, IS(C) is the child allowance and IS(F) is the family premium in income support.

Figure 5.2. Forming the new tax credits from the present system



Note*:* Assumes that new tax credits are implemented immediately and that a family qualifies for working tax credit at 16 hours of minimum-wage work.

The child tax credit is replacing the child credits in the working families' tax credit (WFTC), so the government needs to introduce some new form of compensation if existing WFTC claimants are not to lose out when it is abolished (compare Figures 5.1 and 5.2). The working tax credit will play this role, but it will be available to families in full-time work and on a low income whether or not they have children.

The stated aim of the working tax credit is to reduce poverty and improve work incentives amongst those without children. There is little evidence, though, to support the introduction of an instrument such as the working tax

credit to tackle these aims.[1] First, people working full-time tend not to be in poverty on government definitions, so the direct impact of the working tax credit on poverty looks likely to be small. Second, the government has presented no evidence that an insufficient financial reward is deterring families without children from working, which contrasts strongly with the research findings that supported the introduction of the WFTC.[2] And, as we discuss later, the working tax credit might improve the reward to work for some but it will worsen it for others.

5.2 Issues for Budget 2002 (I): What will the credits cost and who will gain?

The government has promised to announce the initial rates of the new tax credits in Budget 2002. This will allow the new tax credits, finally, to be included in its public finance projections. Since it announced them in November 1999, the government has kept the cost of the new tax credits out of the public finance projections. Its reasoning is that it is impossible to give a costing until it has decided on the final rates and operational details. However, it would have been (and still is) perfectly possible for the government to publish indicative initial rates and cost estimates, even if these are not the actual rates used when the credits are introduced, or to estimate their cost under a range of assumptions. This would have been much more in keeping with the spirit of the government's 'Code for Fiscal Stability'.[3]

We present below four options for the child tax credit. In our baseline system, the new tax credits closely replicate the existing structure of support for families with children assuming that no low-income families lose out. We then present three more generous alternatives: an option where no better-off couples with children lose from the abolition of the old children's tax credit, and two options that do more for the poorest families to help the government meet its ambitious child poverty targets. We then present two possible options for the working tax credit for those without children. For all options, we model the cost, the distributional impact and the change in poverty rates and we discuss the impact on work incentives.

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[1] For more details, see M. Brewer, T. Clark and M. Myck, *Credit Where It's Due? An Assessment of the New Tax Credits*, Commentary no. 86, Institute for Fiscal Studies, London, 2001 (www.ifs.org.uk/taxben/taxcred.shtml). At the time that that document was written, the credit now known as WTC was called the employment tax credit.

[2] HM Treasury, *Work Incentives: A Report by Martin Taylor*, The Modernisation of Britain's Tax and Benefit System no. 2, London, 1998.

[3] The about-to-be-abolished children's tax credit, for example, was included in the public finances two years before it was introduced, but was finally introduced at £520 a year rather than the Budget 1999 suggestion of £416 a year. Cost estimates of the WFTC were published 18 months before its introduction, and then altered as the government changed its forecasts, increased the rates and changed various operational rules before it was finally introduced.

Four options for the child tax credit

We modelled the impact of four different systems for the child tax credit. The parameters are summarised in Table 5.1. This table also gives the aggregate cost of each option and its impact on poverty. All these reforms are expensive: under our assumptions, the new system of credits for families with children would cost £2 billion a year to introduce, and a system with no well-off losers would cost a total of £2.7 billion. The anti-child-poverty options necessarily cost even more money: our options are £1.4 billion and £3.4 billion more expensive than the base system – such large spending increases might not occur in Budget 2002, but they illustrate what scale of spending will be needed to reduce child poverty according to the government's definition. These costs exclude the cost of extending the working tax credit to those without children, discussed below. These costings imply that the child tax credit will be worth around £11 billion a year in total: the additional £2–2.7 billion cost of introducing it comes on top of £9 billion a year that is currently spent on the existing children's tax credit and the child allowances in WFTC and income support. This is a substantial sum – more than is spent on child benefit (£9 billion in 2001–02) – and it makes clear just how much the tax and benefit system supports families with children.

The main gains and losses from introducing our base system for the child tax credit are the following:[4]

- Out-of-work families will gain. The combination of our child tax credit and child benefit is greater than income support child rates, by £4.35 a week for the first child and by £3.50 for each subsequent child (April 2002 values).
- Families currently receiving WFTC cannot take full advantage of the existing children's tax credit for two reasons. First, people with incomes less than around £8,000 a year pay insufficient income tax to benefit fully from the existing children's tax credit. Secondly, people on the WFTC taper see the tax cut that the old children's tax credit represents partially offset by a reduction in WFTC. When the existing children's tax credit is incorporated into the new child tax credit, these families will gain by up to £10 a week.
- The new tax credits will be assessed against gross income rather than net income as currently used by the WFTC. This is likely to benefit two-earner couples currently receiving WFTC.
- Some couples higher up the income distribution will be worse off because the child tax credit will be withdrawn against joint income, whereas the existing children's tax credit is withdrawn only against the higher income

[4] For more details, see M. Brewer, T. Clark and M. Myck, *Credit Where It's Due? An Assessment of the New Tax Credits*, Commentary no. 86, Institute for Fiscal Studies, London, 2001 (www.ifs.org.uk/taxben/taxcred.shtml).

Table 5.1. Some options for the child tax credit

	Value of per-child credit, £/wk	Value of family credit, £/wk	Higher threshold, £/wk (£/yr)	No. of families who will gain	No. of families who will lose	Cost each year	Reduction in child poverty, % points
Base option	£26.45	£10.40	£663.75 (£34,515)	3.6m	900,000	£2.0bn	3–4
No 'better-off' losers	£26.45	£10.40	£1,327.50 (£69,030)	4.4m	<50,000	£2.7bn	3–4
Child poverty 1	£31.45	£10.40	£663.75 (£34,515)	3.8m	900,000	£3.4bn	6–7
Child poverty 2	£36.45	£10.40	£663.75 (£34,515)	4.0m	900,000	£5.4bn	7–11

Notes: We assume that the child tax credit is made up of a small fixed amount per family, with low-income families receiving extra credit for each child. The 'higher threshold' is the point where the fixed amount per family starts to be withdrawn (see Figure 5.2). There are around 12 million children in the UK, so a fall of 10 percentage points in child poverty represents around 1.2 million children. Poverty estimates are very sensitive to modelling assumptions, and so a range has been given. 'Winners' are families gaining by £1 or more a week. 'Losers' are families losing by £1 or more a week. Details common to all systems are summarised in Table 5.2 and further explained in M. Brewer, T. Clark and M. Myck, *Credit Where It's Due? An Assessment of the New Tax Credits*, Commentary no. 86, Institute for Fiscal Studies, London, 2001 (www.ifs.org.uk/taxben/taxcred.shtml). Costs are given in April 2002 prices and effects modelled as if the new tax credits were introduced in April 2002.
Source: IFS tax and benefit model, TAXBEN, based on 1998–99 Family Resources Survey.

Table 5.2. Assumptions common to all options

Structure of the credits	The child tax credit consists of a payment for each child and a fixed payment for each family. The working tax credit consists of a payment for each family (with a full-time bonus for families with children working 30 hours or more per week).
Lower threshold and taper	The taper rate for both credits is 37.4%. The working tax credit starts to be withdrawn when gross family income exceeds the 'lower threshold', assumed to be £94.50 a week (£4,914 a year). For families with children, it will be fully withdrawn once gross income reaches around £255 a week (£13,260 a year). Beyond this point, the per-child payments of the child tax credit start to be tapered away. Once they are fully withdrawn, families are left with just the £10.40 a week per family payment.
Higher threshold and taper	Beyond the 'higher threshold', the per-family payment part of the child tax credit is withdrawn at 6.66% of income.
Working tax credit	When modelling the child tax credit options, the working tax credit for families with children was assumed to be £60 a week. Values for those without children are given in Table 5.3.
Definition of income	We assume that the credits are assessed against gross taxable income jointly assessed for couples.
Interactions with other benefits	The parameters of housing benefit and council tax benefit are adjusted so that none of the extra child support for those currently on income support is offset by reductions in housing benefit or council tax benefit.

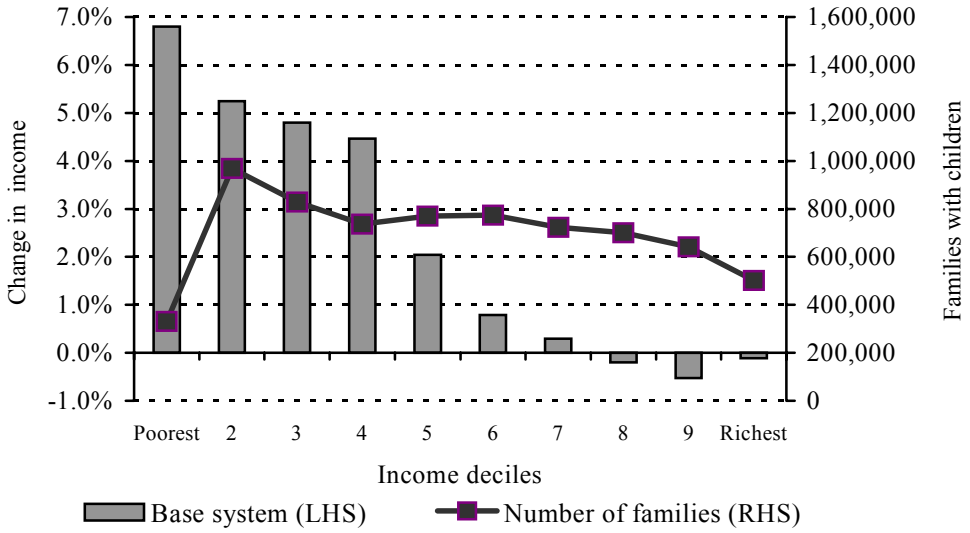
Note: Full details available from the author.

in a couple. This will affect some couples where both adults earn but neither earns more than £42,000.[5] They could lose up to £10 a week.

Under our assumptions, 5.7 million of the 7 million families with children in the UK will be entitled to some child tax credit. Looking at all families with children, 3.6 million families will gain more than £1 a week from the reform, 2.5 million will be relatively unaffected financially and 0.9 million will lose by more than £1 a week. Almost all of the losers are two-earner couples who suffer from the move to full joint assessment – about 26% of two-earner couples with children could lose, many losing the full value of the children's tax credit, or £520 a year at present. The other losers are families with high amounts of non-earned income which is currently disregarded by the WFTC.[6]

Poorer families will gain substantially more as a proportion of their income than richer families from the introduction of the new tax credit. The full distributional impact on families with children is shown in Figure 5.3,

Figure 5.3. Likely effect of the child tax credit and the working tax credit on incomes of families with children



Notes: Income deciles are derived by dividing all families (with and without children) into 10 equally sized groups according to income adjusted for family size. Decile 1 contains the poorest tenth of the population, decile 2 the second poorest and so on, up to the top decile (decile 10), which contains the richest tenth. This graph shows the impact of introducing the child tax credit and working tax credit on families with children only: the interpretation is that the new tax credits will increase incomes of working-age families with children in the poorest tenth of the population by 6.8%.
Source: IFS tax and benefit model, TAXBEN, based on 1998–99 Family Resources Survey.

[5] Depending on decisions in Budget 2002, £42,000 will be approximately the maximum income someone can have and still benefit from the existing children's tax credit from April 2002.

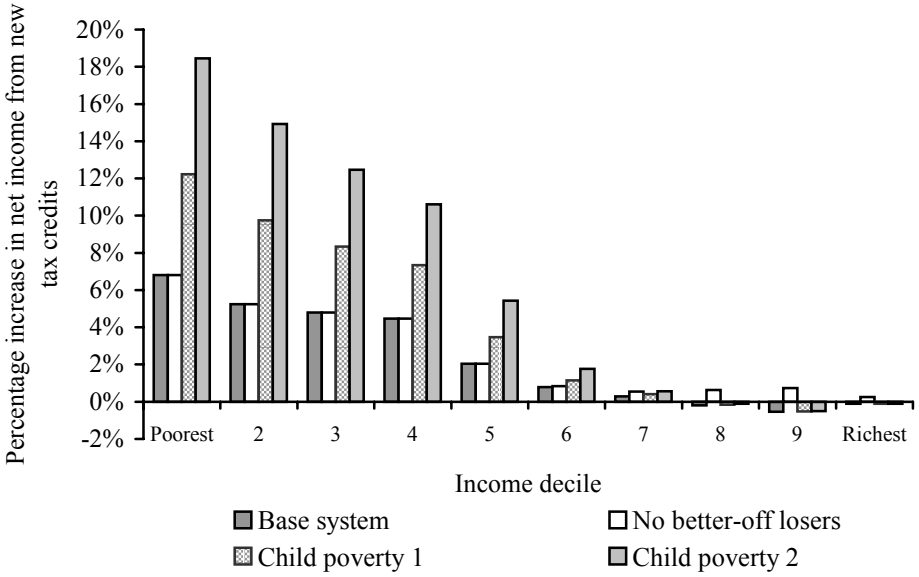
[6] Government numbers suggest that 1.4 million better-off families with children could lose in this way – a greater estimate than ours as it counts families that lose at all, rather than losing by at least £1 a week. (See reply to question from Mr Webb, *Hansard*, 2 November 2001, col. 880W.)

which also shows the number of families with children in each income decile. The gains for the poorest families with children are substantial – an average gain of £12 a week for families with children in the bottom four deciles – especially when considered on top of the significant increases in benefits and tax credits for the poorest families with children since April 1999.[7] Lone parents gain by more, on average, than couples with children (£10.70 a week rather than £4.06 a week) because they tend to be found at the bottom end of the income distribution.

The impact on work incentives is small and mixed.[8] The incomes that families with children can receive if they do not work will rise, which will reduce the incentive to work at all, but the net incomes people on low wages can obtain in work have also increased, partially offsetting the first effect. The reforms will change the effective tax rates[9] of about a third of parents: around 2.3 million will see their marginal deduction rates increase (as the increased generosity of the child tax credit means more people will face a tax credit withdrawal) and 1.8 million will see them decrease (mostly because the credits will be assessed against gross income, which helps second earners in couples).

Our other options for the child tax credit have qualitatively similar impacts (except that there are no better-off losers under the appropriately titled option), and these are summarised in Table 5.1 and Figure 5.4.

Figure 5.4. Four options for the child tax credit



Notes and source: As for Figure 5.3.

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[7] See M. Brewer, *The Structure of Welfare*, Election Briefing Note no. 11, Institute for Fiscal Studies, London, 2001 (www.ifs.org.uk/election/ebn11.pdf).

[8] It is analysed in more detail in M. Brewer, T. Clark and M. Myck, *Credit Where It's Due? An Assessment of the New Tax Credits*, Commentary no. 86, Institute for Fiscal Studies, London, 2001 (www.ifs.org.uk/taxben/taxcred.shtml).

[9] An effective tax rate (or marginal deduction rate) measures how much of an extra pound of income is lost in income tax and National Insurance payments and withdrawn benefits or tax credits.

The child tax credit will help the government reduce child poverty as it attempts to hit its target for 2003–04.[10] Our base option could reduce child poverty by around 3–4 percentage points (360,000–480,000 children), and spending a further £3.4 billion on increasing the child credits could reduce child poverty by a total of 7–11 percentage points (840,000–1,320,000 children). The latter is an expensive and generous option: as Figure 5.4 shows, it would involve increasing incomes for families with children in the bottom three deciles by over 12%. Box 5.3 discusses what these figures actually mean for the government's target.

Box 5.3. Measuring the impact of the child tax credit on child poverty

The Treasury has recently clarified that its claim to have reduced child poverty by 1.2 million children in 2001 was compared with a hypothetical world where benefits and tax credits had been increased only in line with inflation since 1997 (see HM Treasury, *Tackling Child Poverty: Giving Every Child the Best Possible Start in Life*, London, 2001). The combined effect of underlying changes in demographics, employment and the earnings distribution over the past four or five years has worked in the opposite direction, so the actual fall in child poverty will be less than 1.2 million.

In 1996–97, there were 4.4 million children in families below 60% of median income after housing costs. The Chancellor is reported to have said that if the government had only increased benefits and tax credits in line with inflation, then child poverty would have risen to 4.7 million by 2001–02. But the result of government tax and benefit reforms is modelled to have reduced child poverty to 3.5 million, a fall of 1.2 million (John Carvel, 'Tories scorn Brown on child poverty', *The Guardian*, 13 December 2001). So, if this forecast is accurate – and we won't know for sure until official figures are released in Spring 2003 – child poverty will only be 900,000 lower in 2001–02 than it was in 1996–97. Even this forecast could be optimistic, though: child poverty had fallen by only 300,000 to 4.1 million by 1999–2000 (IFS Press Release, 'Latest poverty and inequality figures', 13 July 2001); official figures for 2000–01 (published on 11 April) will show whether the further fall of 600,000 needed to meet the Chancellor's forecasts actually materialised.

Our estimates of the impact of the child tax credit are on the same basis as the government's: they estimate how much child poverty will fall compared with a hypothetical world where the new tax credits are not introduced. The actual change in child poverty between now and 2003–04 could be higher or lower than we estimate, depending on factors such as changes in earnings and employment, and the take-up rate for the new tax credits.

[10] The Department for Work and Pensions and the Treasury have a joint target to reduce the number of children in poverty by 'at least a quarter by 2004' against the 1998 baseline, defined as children in households with income below 60% of median (Department of Social Security, *Public Service Agreement, 2001–2004: Technical Note*, London, 2002 (www.dss.gov.uk/publications/dss/2000/psa_tech/psatech.pdf)).

The impact of the working tax credit on those without children

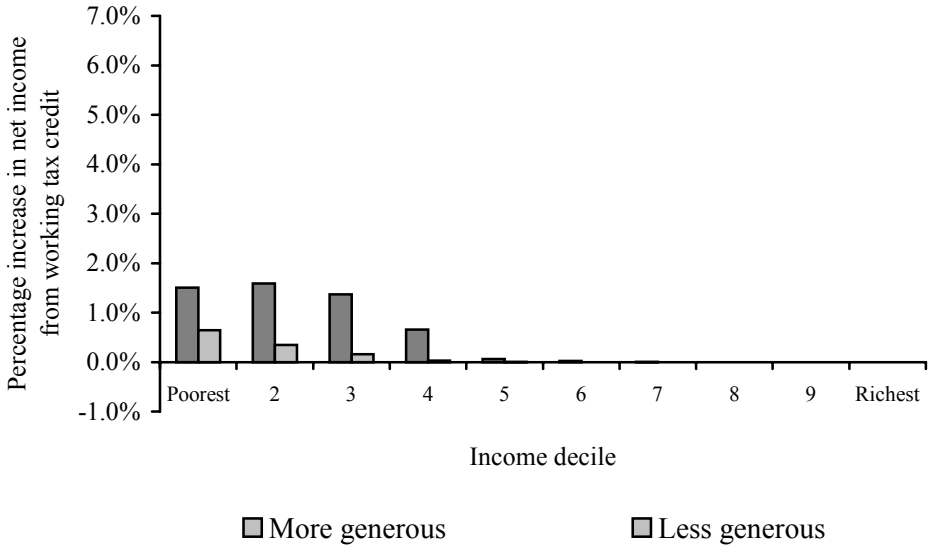
The impact of the working tax credit on those without children is straightforward: people working full-time but on a sufficiently low income to qualify for some tax credit will see their income rise. No one will lose from the reform. The size of the increase depends upon the levels of the credits chosen by the government: we present two options in Table 5.3. The more generous option assumes that the value of the working tax credit for couples without children will be equal to the current basic credit in WFTC, and that single adults will receive less (with the £30 difference approximately equal to the difference in income support rates for a single person and a couple); the less generous option uses figures mentioned in press articles around the time of the 2001 Pre-Budget Report.[11]

Table 5.3. Some options for the working tax credit for those without children

	Value of credit for couples, £/wk	Value of credit for single people, £/wk	Number of families entitled	Cost each year	Reduction in adult poverty, % point
More generous option	60	30	450,000	£370m	0.4
Less generous option	35	10	300,000	£290m	<0.1

Source: Author's calculations using IFS tax and benefit model, TAXBEN, based on 1998–99 Family Resources Survey.

Figure 5.5. Distributional impact of the working tax credit for families without children



Notes: As Figure 5.3. The vertical scale is directly comparable to the left-hand one in Figure 5.3.
Source: IFS tax and benefit model, TAXBEN, based on 1998–99 Family Resources Survey.

[11] See, for example, Larry Elliot, 'Chancellor to extend tax credits', *The Guardian*, 26 November 2001.

Entitlement to the working tax credit for those without children is limited to those on low incomes: under our options, couples will need a joint weekly income of less than about £255 or £185 for the more and less generous options respectively to be entitled to anything, and single people less than £175 or £120. Combined with the restriction to workers over 25 working full-time, this means that very few people will be entitled. The overall distributional impact of our two options on non-pensioner families without children is correspondingly small, as shown in Figure 5.5. The more generous option goes to 450,000 families and costs around £370 million, and the less generous option goes to 300,000 families and costs around £290 million (a 'family' meaning either a single person without children, or a cohabiting or married couple without children). The direct impact on poverty is negligible: a fall of 0.4 of a percentage point or 20,000 adults for our more generous option and nothing at all for the less generous option.

In a document accompanying the Tax Credits Bill, the Inland Revenue said that

> The working tax credit will provide support for working households which have neither dependent children nor a worker with a disability or illness, provided the applicant is in full-time employment. *This will increase work incentives for all low-income households* … Specifically, the working tax credit will help tackle the unemployment trap that arises when the difference between in and out of work incomes is too small to provide an incentive for those currently out of work to take a job. *The new tax credits will also help tackle the poverty trap which discourages those already in work, or with working partners, from working longer hours, moving to a better paid job or entering work*, because higher in-work income is offset by reduced in-work support and higher tax and National Insurance Contributions.[12]

This only tells half the story: the impact on work incentives is ambiguous. The working tax credit will improve the financial reward from moving into work for some and worsen it for others. But it will also worsen the poverty trap for almost all those without children who become entitled to it: on our estimates, around 500,000 people will see their effective tax rate increase while around 50,000 will see a fall, and the net effect is to increase the number of adults facing marginal deduction rates between 50% and 70% by around 250,000.[13]

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[12] Emphasis added. Source: Inland Revenue, *The New Tax Credits: A Regulatory Impact Assessment*, London, 2001 (www.inlandrevenue.gov.uk/ria/ntcria.pdf).

[13] For more detail, see M. Brewer, T. Clark and M. Myck, *Credit Where It's Due? An Assessment of the New Tax Credits*, Commentary no. 86, Institute for Fiscal Studies, London, 2001 (www.ifs.org.uk/taxben/taxcred.shtml).

5.3 Issues for Budget 2002 (II): How will the credits work in practice?

The child tax credit replaces three parts of the tax and benefit system that currently work very differently: different methods of payment, different periods over which income is assessed, different obligations on recipients to inform the authorities of changes in circumstances and different degrees of responsiveness to changes in entitlement. All of these details need to be decided upon for the new tax credits, and getting them right is vital if the credits are to succeed. First, these details will directly determine whether the reform manages to introduce a less intrusive form of support than traditional means-tested benefits. Secondly, they will determine the degree of responsiveness built into the new credits, which will affect the operation of the safety net and determine how efficiently resources are targeted.

Some details were announced in a consultation document in July 2001 and some immediately after the 2001 Pre-Budget Report.[14] In summary, claimants should certainly find the new credits very different from existing means-tested benefits. The Inland Revenue hopes that an annual system will be simpler to understand and administer, and less intrusive for claimants. But the conflicting aim of targeting the credits effectively has forced the government to compromise on achieving simplicity and predictability for families whose composition or income changes significantly during a year. Indeed, the apparent need for families to monitor their annual income, average hours of work and childcare costs may well increase complexity and uncertainty for some families.

What do we know about how the credits will work?

The innovative feature of the new tax credits is that they will depend on annual income (rather than a snapshot of income assessed every six months, as with the WFTC). The attraction of this is simplicity. But there are two problems with assessing support on annual income. First, it may give a very misleading impression of income for families whose circumstances have suddenly changed dramatically. Secondly, annual income is only known with a lag: tax-year income is only known, for example, in about July after the end of the tax year. For these two reasons, the new tax credits will not be a 'pure' annual system.[15] The safety net will be preserved because the Inland Revenue has said that families with children who claim income support or jobseeker's allowance will automatically receive the maximum amount of child tax credit regardless of their previous income; this is entirely sensible. The Inland Revenue will get round the second problem – that annual income is only

[14] See: Inland Revenue, *New Tax Credits: Supporting Families, Making Work Pay and Tackling Poverty*, London, 2001; HM Treasury, Press Release 132/01, 2001.

[15] The earned income tax credit in the USA, by contrast, is a pure annual system: see M. Brewer, 'Comparing in-work benefits and the reward to work for families with children in the US and the UK', *Fiscal Studies*, vol. 22, pp. 41–77, 2001, which compares the USA and UK systems for supporting families with children.

known with a lag – by initially setting interim tax credit awards based on estimates of annual income.[16] This is more problematic. To prevent people from systematically underestimating their income and claiming too much tax credit, the Inland Revenue will need to check these estimates against actual annual income (when it is finally known), and make retrospective changes to tax credit awards if the estimates are wrong by a 'significant' amount.

This is a substantial drawback as it will add uncertainty: families cannot be sure that they will not have to pay back the credits they are currently receiving. To give a specific example, a couple with two children who earned £17,000 in the previous tax year might have a provisional tax credit award of around £2,500 a year. But if their income rose to £19,000 early in the tax year, then – depending on what the Inland Revenue's definition of a 'significant' income change is – they might have to repay up to £748 of tax credits at the end of the tax year if they forgot to inform the Inland Revenue when the pay rise happened.[17] It is theoretically possible for some people to be liable to hand back almost all of their provisional annual award.

Widespread occurrence of these sorts of overpayments would clearly pose major difficulties for the Inland Revenue and for claimants. But the Inland Revenue has given no idea of how many people experience these sorts of income changes. It is possible that the administrative costs of the new system could be greater than those of the systems it replaces, although, again, the Inland Revenue has given no estimates of these.

What needs to be announced in Budget 2002?

Two crucial details that ought to be known by Budget 2002 are:

- what the Inland Revenue defines as a 'significant' income change;
- how the working tax credit will depend on hours of work.

By defining a 'significant' income change, the Inland Revenue is determining how large a change in annual income needs to be before a recalculation of tax credits is triggered. As discussed in Brewer, Clark and Myck (2001),[18] there is a trade-off between targeting/responsiveness and simplicity of administration of the new system:

- Small or narrow thresholds improve the targeting and responsiveness of the system but increase compliance and administrative costs.
- Broad thresholds could mean that the government would continue to pay tax credits to families whose circumstances have improved dramatically

[16] In fact, there will be two ways that tax credit awards are assessed. Most families will initially apply for tax credits in the summer, and their interim award will be based on their past year's annual income. But people who apply in mid-year or who suspect that their previous year's income is a very bad estimate of their current year's income could have their award based on their own estimate of current-year income.

[17] This assumes that the taper rate is 37.4%.

[18] M. Brewer, T. Clark and M. Myck, *Credit Where It's Due? An Assessment of the New Tax Credits*, Commentary no. 86, Institute for Fiscal Studies, London, 2001 (www.ifs.org.uk/taxben/taxcred.shtml).

and leave families whose circumstances have deteriorated going without. On the other hand, broad thresholds would be simpler for all to operate, and they would dull the impact of the high marginal deduction rates typically associated with benefit or tax credit withdrawal.

The working tax credit will only be paid to families with children who work 16 or more hours a week and to those without children who work 30 or more hours a week. This weekly hours-of-work requirement sits oddly with an annual system. Clearly, some form of averaging needs to take place, so the challenge is to find a definition of average hours worked that is easy for all to understand and implement. As payment of the working tax credit is conditional on working sufficient hours, it seems that there will be a responsibility on people claiming the working tax credit to monitor their (average) hours of work and to report to the Inland Revenue if they are no longer working sufficient hours to qualify. The new system risks producing considerable hassle and uncertainty for people whose hours of work fluctuate between above and below the required level: they might have to make repeated claims for the working tax credit within a year (by contrast, the WFTC has six-month fixed awards, so people currently make a maximum of two claims a year).

5.4 Will the Inland Revenue manage to increase take-up of the new tax credits?

The new tax credits confirm the Labour government's belief in targeted, means-tested support assessed against joint family income. The main practical disadvantage of means-tested benefits is that people have to apply for them and not everyone does, either because they do not know they are eligible or because they decide not to apply. The WFTC take-up rate has been estimated at 62%, lower than that of family credit (72% in Summer 1999) and much lower than the estimated take-up rates for income support and housing benefit (over 95% in 1999–2000). Only 72% of entitled families with children had claimed the children's tax credit by December 2001 (although some of those who have not yet claimed can claim it through self-assessment).[19] People who do not claim benefits or tax credits tend to be entitled to small amounts; even so, non-take-up of the WFTC, for example, saved the government £1.4 billion a year in 2000–01.[20] By contrast, income tax cuts affect income taxpayers

[19] Sources: WFTC take-up rates from S. McKay, *Low/Moderate Income Families in Britain: Work, WFTC and Childcare in 2000*, DSS Research Report no. 161, Corporate Document Services, Leeds, 2002. Family credit take-up rates from A. Marsh, S. McKay, A. Smith and A. Stephenson, *Low-Income Families in Britain*, DSS Research Report no. 138, Corporate Document Services, Leeds, 2001. Take-up rates of other means-tested benefits from Department for Work and Pensions, *Income Related Benefits: Estimates of Take-Up in 1999–2000*, London, 2001 (www.dss.gov.uk/asd/tu9900f.pdf). Children's tax credit take-up rates from *Hansard*, 4 December 2001, col. 203W, answer to question by Mr Webb.

[20] Author's calculations from S. McKay, *Low/Moderate Income Families in Britain: Work, WFTC and Childcare in 2000*, DSS Research Report no. 161, Corporate Document Services, Leeds, 2002.

automatically, and most universal benefits are claimed by virtually all who are entitled.

There are many ways that the introduction of the child tax credit might change take-up behaviour compared with the existing tax credits and benefits:

- The child tax credit will go to the majority of families with children, with all save the richest fifth (on our 'base case' assumptions) entitled to something. This could reduce the number of families that do not claim benefits or tax credits because they do not know that they are entitled, and could reduce the number of families that do not bother claiming benefits or tax credits because they think they will only be entitled for a short time.
- The nature of the means-test process will be different from existing instruments. Until we see the actual claim forms, though, and know how awards will react to changes in circumstances, it is not clear whether this will increase or decrease take-up compared with the current system. The material released by the Inland Revenue suggests that the claim forms will require more information than the existing children's tax credit, but perhaps less than is required for claiming the WFTC.

There is more cause for concern over the working tax credit for people without children. Even on our more generous assumption, average awards are less than £20 a week. It is impossible to forecast what take-up rates will be for this group, but related reforms in the past suggest that it could be very low – and even lower initially because people seem to take time to realise that they are entitled to support.

5.5 Tax credits and the public finances

The Inland Revenue has said that 'In line with the accounting treatment of the existing tax credits, WFTC and [the disabled person's tax credit], the child tax credit and the working tax credit will be accounted for out of the Inland Revenue's gross revenues, that is, the direct taxes collected by the Inland Revenue'.[21] If the government goes through with this, it will reclassify £4 billion of social security expenditure into forgone tax revenues, immediately lowering the government's favoured definition of the tax burden by 0.5 percentage points.

The tax burden is, of course, not a number of any real economic significance – what matter for the macroeconomy are the size of public sector net borrowing (PSNB), the quality of public services and the degree of redistribution that the tax and benefit system achieves, and what matters for individuals is how the tax and benefit system affects incentives; none of these factors should be affected by the decision to label a transfer as a tax credit rather than as expenditure. It is also difficult to decide on what is the 'correct' way to classify tax credits, particularly when they are assessed on joint income. Given this, the crucial factor is that the Treasury and Inland Revenue treat a certain

[21] Source: paragraph 210 of Inland Revenue, *Tax Credits Bill: Explanatory Notes*, London, 2001.

area of government activity in a consistent manner in their accounts. So far, this government is failing to do this: in common with previous governments, it counted family credit (the predecessor of the WFTC) as social security spending; but it treated WFTC as negative tax revenue. The quote above shows that the new tax credits look set to continue this shift. Under the European System of Accounts (1995), used by the Office for National Statistics, it is likely that only some of the child tax credit and the working tax credit would count as forgone tax revenue, with the majority counting as government spending.

Mike Brewer

6. Tax policy and companies

The Pre-Budget Report (PBR) contained no unexpected measures affecting the taxation of companies. One reform to the tax system for companies where the government has chosen to consult widely is the introduction of the research and development (R&D) tax credit for larger firms. Section 6.1 assesses the government's proposed options for the design of the new credit. The PBR did announce new proposals to pilot new initiatives to increase training among low-skilled employees. Section 6.2 discusses the case for intervention in training and assesses the government's proposals to date.

But the government has not always chosen to consult before making changes to the tax system. In June 2001, neither the time of the Budget nor the Pre-Budget Report, the Chancellor announced modifications to the capital gains tax regime to take effect in April 2002. In light of these changes, Section 6.3 considers what the Chancellor is trying to achieve through the design of the capital gains tax system and whether any further changes might be necessary. The final section looks more generally at pressures on the structure of the UK corporate tax system, in particular those driven by developments in international taxation.

6.1 The R&D tax credit for larger firms

The government intends to introduce a further R&D tax credit open to larger firms in Budget 2002. Following the PBR, it issued a further consultation document on the final design of the credit.[1] This section discusses which firms are most likely to benefit from the new credit, and the likely costs and effectiveness of the designs proposed.

A rationale for the introduction of an R&D tax credit is that, in the absence of government intervention, firms may undertake too little R&D because of the difficulty in capturing the full returns to innovative activity.[2] Spillover benefits from R&D – that is, the ability of other firms to capitalise on the discoveries of others – benefit the economy as a whole but are not captured by the innovating firm. This inability to appropriate the full returns to R&D leads to underinvestment in innovative activity. An R&D tax credit aims to address this by bringing the private return to a firm closer to the social return to the economy as a whole. Evidence also shows that R&D tax credits are effective in generating additional R&D.[3]

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[1] HM Treasury and Inland Revenue, *Designs for Innovation: A Consultative Note*, London, December 2001 (www.hm-treasury.gov.uk/Consultations_and_Legislation/innovation/consult_innovation_index.cfm).

[2] The government does already intervene in this area – for example, through the patent system and through the public funding of R&D.

[3] B. Hall and J. Van Reenen, 'How effective are fiscal incentives for R&D? A review of the evidence', *Research Policy*, vol. 29, pp. 449–69, 1999.

The new R&D tax credit will operate alongside the existing R&D tax credit for small and medium-sized enterprises (SMEs) that was introduced in April 2000. The R&D tax credit for SMEs is volume-based – that is, it is payable on all R&D carried out by the firm. The government has decided that the new credit will also be based on the volume of R&D. As a guide to which firms will benefit from the new credit, the next subsection looks at how R&D activity is distributed across firms.

Eligible R&D

In this subsection, we estimate the amount of R&D expenditure eligible for the tax credit using data for 1999 from the enterprise-level data underlying the Survey of Business Enterprise Research and Development (the BERD survey).[4] It is useful to start by considering which types of R&D expenditure will not be eligible for the credit. The consultative document suggests that qualifying R&D expenditure is likely to be defined as current expenditure on R&D that is conducted by the firm in the UK. This excludes capital expenditure, R&D conducted overseas and R&D paid for by the firm but conducted outside the firm.[5] R&D conducted by SMEs that are claiming the SME credit will also be ineligible. Under the SME credit, R&D that is either directly or indirectly funded by the government (UK or EU) is not eligible. This makes a big difference to the amount of eligible R&D, but it is not clear whether similar exclusions will apply for the new credit.

In the 1999 BERD survey, total in-house R&D expenditure is around £10.6 billion for the sample of enterprises surveyed.[6] Large firms carry out the vast majority of R&D expenditure. In 1999, SMEs accounted for only approximately 10% of total in-house R&D expenditure. Table 6.1 shows in-house R&D expenditure by larger firms by industrial sector. Firms in the R&D services sector conduct nearly 30% of in-house R&D expenditure. But most of the expenditure in this sector represents R&D carried out by the R&D subsidiaries of manufacturing firms, particularly those in the pharmaceuticals and chemicals sectors. The second column shows that around 90% of total in-house R&D expenditure is current expenditure.

Under the R&D tax credit for SMEs, R&D expenditure that is directly funded by grants or subsidies from government is not eligible for the credit. The final column of Table 6.1 shows the percentage of in-house R&D that is not directly funded by government. Sectors with a relatively high proportion of defence spending, such as mechanical engineering and aerospace, receive the most government funding for R&D. In addition, under the SMEs credit, if part of the costs of a particular project are funded by a 'notified State Aid' such as a

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[4] The survey covers all R&D expenditure *undertaken* in the UK. It differs from accounting data in that it does not include R&D carried out by overseas subsidiaries of UK firms but does include R&D carried out by UK subsidiaries of foreign firms.

[5] An exception to the latter will be made for some collaborative research carried out outside the firm – for example, in conjunction with universities.

[6] All of the numbers reported are for the sample. This is not likely to affect estimates of R&D expenditure eligible for the large-firm credit significantly, as these firms will generally be included in the sample.

Smart award,[7] this is considered to be indirectly funded and none of the R&D expenditure incurred on the project is eligible. If a similar rule were adopted for the new credit, this will lower further the proportion of R&D expenditure that is eligible for the credit.[8]

Table 6.1. In-house R&D by non-SMEs, 1999

Sector	Total, £ million	Percentage current expenditure	Percentage not publicly funded
Pharmaceuticals	407	86%	100%
Chemicals	313	91%	100%
R&D services[a]	2,706	82%	95%
Mechanical engineering	601	95%	51%
Electrical machinery	1,110	90%	98%
Transport equipment	781	90%	95%
Aerospace	1,157	91%	76%
Other manufacturing	1,093	91%	73%
Other services	1,709	93%	95%
Other	114	89%	96%
Total	9,991	89%	89%

[a] Most of the expenditure in the R&D services sector represents R&D carried out by R&D subsidiaries of manufacturing firms, particularly in the pharmaceuticals and chemicals sectors.
Source: Enterprise-level Survey of Business Enterprise Research and Development, 1999.

Options for the design of the new credit

The government has opted for a volume-based credit rather than an incremental credit targeted at additional R&D spending above some base. Volume-based credits give firms a subsidy on every pound of qualifying R&D they undertake. This includes the R&D they would have done in the absence of the credit and the additional R&D induced by the credit. In a previous consultation document,[9] the government sought views on an incremental credit. Although incremental credits can be more cost-effective than volume-based credits in terms of generating additional R&D, they can also, depending on the design, introduce perverse incentives, and they are more complex to design and implement.

At present, current expenditure on R&D can be deducted from taxable profits in the year that it is incurred.[10] The new credit will take the form of an additional deduction. The three options set out in the consultation document are described below.

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[7] Smart is a discretionary award scheme for R&D carried out by SMEs.

[8] For further details on qualifying R&D expenditure under the new credit, and a comparison of the design options, see R. Griffith, M. Hawkins and H. Simpson, *Response to Consultative Document 'Designs for Innovation'*, Briefing Note, Institute for Fiscal Studies, London, forthcoming.

[9] HM Treasury and Inland Revenue, *Increasing Innovation: A Consultation Paper*, London, March 2001 (www.inlandrevenue.gov.uk/budget2001/innovation.pdf).

[10] The research and development allowance allows firms to deduct 100% of capital expenditure on R&D from their taxable profits.

- *Option 1: simple volume scheme* – an extra deduction, applying to all qualifying R&D expenditure. This is the simplest scheme and can be operated at the company rather than at the group level.
- *Option 2: two-tiered volume scheme* – two rates of extra deduction, with a higher deduction on R&D expenditure below some threshold. The consultation document gives an example threshold of £100 million. This scheme would operate at the group level.
- *Option 3: baseline volume scheme* – an extra deduction on R&D expenditure above some baseline level. The consultation document gives an example baseline of 50% of R&D expenditure in 2000. Again, this would operate at the group level. Under this scheme, there is an implicit requirement to uprate the baseline level of R&D at some point.

As discussed in the government's consultation document,[11] for a given exchequer cost, option 3 implies a higher headline credit rate (the rate of the additional deduction) than option 1, because under option 1 the credit is payable on all qualifying R&D expenditure. Again compared with option 1, option 2 allows a higher headline credit rate for R&D expenditure below £100 million, but a lower headline credit rate for R&D expenditure above £100 million.

Comparison of policy options

The advantages and disadvantages of the three options for the tax credit are set out in the consultative document. The main criteria against which each option will be judged are

- cost-effectiveness;
- simplicity.

The cost-effectiveness of the policy will depend on how much additional R&D is generated relative to the cost, and can be calculated as the value of additional R&D generated per pound of exchequer cost.[12] A cost-effectiveness ratio of one would imply that the tax credit generated an increase in R&D that was equal to the exchequer cost.

The simplicity of the policy is important because of its effect on two related factors: first, the level of compliance costs (the cost to firms of claiming the credit) and administrative costs (the cost to the government of administering and policing the credit);[13] and second, the degree of certainty that companies have over the amount of tax credit that they will receive on a given R&D project.

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[11] HM Treasury and Inland Revenue, *Designs for Innovation: A Consultative Note*, London, December 2001.

[12] This calculation ignores the cost of raising other taxes, or cutting public expenditure, to pay for the tax credit.

[13] The level of compliance and administrative costs could, in theory, be incorporated in the cost-effectiveness calculation, if reliable estimates were available.

As is often the case in tax policy, there is a trade-off between the simplicity of the policy and its cost-effectiveness in terms of delivering the desired change in economic behaviour – in this case, boosting business R&D expenditure.

Cost-effectiveness of policy options

This subsection looks at the relative cost-effectiveness of each of the options, calculated as the value of additional R&D generated per pound of exchequer cost. The additional R&D generated by the credit will depend on firms' responsiveness to a reduction in the 'price' of R&D. This can be measured in a number of ways, depending on how we think decisions about R&D investment are made. In our calculations below, we use the user cost of R&D, which measures the impact of the tax credit on the marginal pound of R&D expenditure.[14] It has been estimated that a 1% reduction in the user cost, or price, of R&D would lead to an immediate 0.1% increase in R&D expenditure and to a 1.0% increase in the long run.[15] The exchequer cost of the R&D tax credit will depend on the tax base to which it is to be applied, the credit rate and the additional R&D generated by the credit.

Table 6.2 shows estimates of additional R&D generated under each of the three options in the short and long run, assuming an exchequer cost of £300 million. It also shows the cost-effectiveness of each option in the short and long run. The calculations are based on the data from the 1999 BERD survey. The definition of qualifying R&D used excludes R&D expenditure that is directly publicly funded. The credit rates under each option are set so that each option generates an exchequer cost of £300 million.

Option 2 is the least cost-effective of the three options. This is because around half of qualifying R&D is carried out by firms that undertake more than £100 million of qualifying R&D expenditure and therefore receive the lower credit rate on their marginal pound of R&D expenditure. This means they face a lower incentive to increase R&D expenditure, but they still receive a large payment from the higher rate applied to the first £100 million of their expenditure.

The cost-effectiveness of option 3 will vary depending on how the government chooses to uprate the baseline level of R&D. Two versions of option 3 are considered: perfect indexation – that is, uprating of the base by the annual average growth rate of R&D – and annual uprating of the base with respect to a firm's own R&D expenditure. The two versions considered are extreme cases, and in practice it is likely that the government would opt for something between the two if it chose option 3 (for example, it could uprate by the growth rate of GDP).

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[14] Firms' R&D investment decisions might be influenced by the average tax rate, which measures the impact of the tax credit on firms' total earnings, or by the headline rate, which is the most visible measure. Which of these influences firms' R&D investment decisions will affect the relative attractiveness of each option.

[15] N. Bloom, R. Griffith and J. Van Reenen, 'Do R&D tax credits work? Evidence from an international panel of countries 1979–96', *Journal of Public Economics*, forthcoming.

Table 6.2. Additional R&D generated and cost-effectiveness at £300 million exchequer cost

	Option 1	Option 2	Option 3 Perfect indexation[a]	Option 3 Annual uprating[b]
Additional R&D (£ million 1999)[c]				
Short run	41	34	74	43
Long run	410	340	740	430
Cost-effectiveness (£ additional R&D / £ exchequer cost)				
Short run	0.14	0.12	0.29	0.16
Long run	1.37	1.15	2.47	1.42

[a] Option 3 with perfect indexation is an extreme case. In practice, if uprating is less than the annual growth rate of R&D, the cost-effectiveness will be lower.
[b] The cost-effectiveness of this type of scheme depends on a number of factors, including firms' discount rates.
[c] Figures for additional R&D are in 1999 prices and reflect 1999 R&D volumes.
Notes: Calculations based on the enterprise-level BERD survey, 1999. The definition of qualifying R&D used excludes R&D expenditure that is directly publicly funded. Option 1 is the simple volume scheme, Option 2 the two-tiered volume scheme and Option 3 the baseline volume scheme.

The third column of Table 6.2 shows the amount of additional R&D generated and the cost-effectiveness of the credit if the base is uprated in line with annual average R&D growth. This is the most cost-effective option, but it should be noted that if the uprating were less than the annual average growth rate of R&D, the long-run cost-effectiveness figure given in the third column would be an overstatement, as exchequer costs would rise over time as the base declined relative to the level of R&D expenditure. In an extreme case, if the base is not indexed or is never uprated, this 'fixed-base' scheme will tend towards a volume-based scheme.

The last column of Table 6.2 shows the amount of additional R&D generated and the cost-effectiveness of the credit under option 3 if the base is uprated annually using the firm's own R&D expenditure. This is equivalent to an incremental credit with a one-year moving-average base, but with the base set to half the level of R&D expenditure in the previous year. The cost-effectiveness of this version of option 3 is much lower. This is because firms will take into account that increasing their R&D expenditure this year will also increase their base next year. This will significantly reduce the incentive effect of the credit. If, in addition, the rules for uprating the baseline level of R&D are not set out in advance, this will make the future price of R&D very uncertain. It is possible that this uncertainty would be so great as to reduce still further the effectiveness of this option at encouraging more R&D.

Compliance and administrative costs

It is important to note that the measure of exchequer cost used in the cost-effectiveness estimates excludes the compliance costs faced by firms and the administrative costs faced by government of operating the new credit. Option 1 is the simplest option, because the credit is given on all qualifying R&D expenditure by a given company. It does not require complicated group rules,

and the amount of credit to be granted is therefore likely to be easily predictable by companies.

Because both options 2 and 3 target the tax credit at expenditure above or below a certain threshold, they would require more complex rules than option 1 to ensure that groups of companies could not manipulate R&D expenditure in order to maximise the value of the deduction to the group, without necessarily conducting any more R&D. Option 3 is the most complex scheme, since, as well as requiring the group rules of option 2, the R&D base would need to be uprated in some way on a pre-announced or ad hoc basis. For this reason, it would probably involve the highest compliance and administrative costs and provide the least predictable tax credit for companies.

Conclusion

Option 1 is the simplest volume-based credit and will very likely have the lowest compliance and administrative costs. Option 3 is more cost-effective, but the cost-effectiveness of this option will vary considerably with how the base is increased over time and with firms' expectations about how it will be increased. The choice between options 1 and 3 therefore rests on whether the cost of the greater complexity and uncertainty of option 3 outweighs its additional cost-effectiveness. But, given the government's progression from favouring an incremental credit to favouring a volume-based credit on the basis of simplicity, option 1 looks like the most likely choice.

6.2 A training tax credit?

The 2001 Pre-Budget Report outlines proposals to pilot new initiatives to improve the acquisition of basic skills and level 2 qualifications among employees.[16] The proposals include entitlement to paid leave to attend training courses, and financial support for employers whose employees take time off to train. This represents a further reform to the provision of post-school education and training, following the introduction and subsequent withdrawal of Individual Learning Accounts. This section examines the case for intervention in the provision of training, including employer provided training, and looks at the incidence of training among employees. In light of this, we then assess the government's proposals to date.

Why intervene in the provision of training?

Government intervention to increase skill levels may be justified on efficiency grounds if the existence of market failures means that too little training is provided by individuals and firms from the point of view of society. Training generates 'positive externalities' if the social benefits to the acquisition of skills exceed the benefits to the individual or firm financing the training.[17] An

[16] Level 2 qualifications are five GCSEs grades A*–C or equivalent.

[17] For a non-technical summary of the evidence on the returns to education and training to the individual, the firm and the wider economy, see R. Blundell, L. Dearden, C. Meghir and B. Sianesi, 'Human capital investment: the returns from education and training to the individual, the firm and the economy', *Fiscal Studies*, vol. 20, pp. 1–23, 1999.

example of how these additional benefits might arise is if an individual's own productivity is increased by working with other individuals who have received training. A social benefit may also arise if a more highly skilled workforce is better able to advance or adapt to technological developments, which in turn leads to spillover benefits for other firms that are able to capitalise on these innovations. These two potential sources of externalities raise questions about at what skill levels intervention to increase training might most improve efficiency – at all skill levels or by targeting the highly skilled?

Too little training may also be undertaken from the point of view of society as a whole if individuals cannot raise funds from financial institutions to finance education or training. Private lenders might be unwilling to finance training for individuals with few or no assets other than their potential future earnings.

Many forms of training, such as training in IT, produce 'transferable' skills – that is, skills that the trainee will be able to use even if he or she moves to a different firm. The transferability of these skills between firms may lead to too little of this form of training being provided by employers. Employers providing 'transferable' training may be unable to capture the full benefits if other firms can poach trained employees. And if employees are unable or choose not to pay for such training themselves, the poaching problem may lead to underprovision.

The PBR highlights the possible existence of information failures for both individuals and employers, who might not realise the benefits of skills acquisition. Furthermore, it suggests that an underestimation of the returns to training by both individuals and their employers might be more severe for those individuals with lower existing skills. This would lead to too little training for this group in particular: these individuals being less likely to demand training, and employers being less likely to supply it.

In addition to the efficiency-based reasons given above, there may also be equity arguments for intervention to provide training for some groups, as training should increase their earnings potential. Society as a whole may want to raise the wages of the low-paid or better enable those unemployed to find work, and, in doing so, reduce inequality. If so, there may be an argument for subsidising training for those at the lower end of the income distribution. In this case, it is worth considering whether an employer-based scheme, such as that being proposed by the government, is a suitable way to raise skill levels among individuals at the lower end of the income or skills distribution.

Who receives training?

The PBR illustrates[18] that, among employees, training is more likely to be received by those who have existing qualifications, and this effect increases with the level of qualifications attained. The UK Labour Force Survey (LFS) – a quarterly survey of around 60,000 households – provides evidence on who is undertaking training in the UK labour market. Table 6.3 shows how many people in employment were studying for a vocational qualification at the time

[18] Chart 3.3 (p. 53) of HM Treasury, *Pre-Budget Report*, Cm. 5318, The Stationery Office, London, 2001 (www.hm-treasury.gov.uk/Pre_Budget_Report/prebud_pbr01/prebud_pbr01_index.cfm?).

of interview. Each column shows the percentage of individuals who were studying for each category of qualification. Individuals are classified by their highest educational qualification to date. The table shows that those with no previous qualifications are substantially less likely to be studying for any form of vocational qualification than people with previous qualifications.

Table 6.3. Studies for vocational qualification by education group: employees, Winter 2000

Previous educational attainment	**Qualification being studied for (as a percentage of education group):** Higher vocational	Medium vocational	Lower vocational	None
Degree or equivalent	7.4	0.7	6.4	85.5
A level or equivalent	3.4	1.7	5.6	89.3
GCSE grade A–C or equivalent	1.2	2.9	7.1	88.8
GCSE grade D or below or equivalent	1.3	0.5	5.0	93.2
None	0.2	0.4	2.3	97.2
All	*3.1*	*1.4*	*5.6*	*90.0*

Qualification being studied for:
'Higher vocational' includes degrees and NVQ levels 4 and 5 or equivalent
'Medium vocational' comprises A level and NVQ level 3 or equivalent
'Lower vocational' comprises GCSE and NVQ levels 1 and 2 or equivalent
Previous educational attainment:
'GCSE grade A–C or equivalent' includes O level grade A–C and CSE grade 1
'GCSE grade D or below or equivalent' includes CSE below grade 1, NVQ level 1 or equivalent vocational qualifications
Source: Labour Force Survey.

Table 6.4. Training in the last three months by education group: employees, Winter 2000

Educational attainment	**Percentage of education group:** Did training	No training
Degree or equivalent	43.2	56.8
A level or equivalent	26.7	73.3
GCSE grade A–C or equivalent	26.3	73.7
GCSE grade D or below or equivalent	19.7	80.3
None	10.0	90.0
All	*28.7*	*71.3*

Source: Labour Force Survey.

The LFS also asks a retrospective question. It asks people of working age: 'In the last 13 weeks, have you taken part in any education or training connected with your job, or a job that you might be able to do in the future?'. Table 6.4, which looks at the receipt of training in the last three months among employees, shows that individuals with lower current qualifications were far less likely to be receiving training.

These observations may simply reflect differences in the returns to training across individuals with different skill levels, rather than reflecting market failures. Previous research on the returns to training appears to show that

individuals with previous qualifications receive a significantly higher average return to training courses than the unqualified.[19]

Finally, Table 6.5 looks at participation in training by size of workplace. It shows that individuals in firms with 50 or more employees were around 50% more likely to undertake training in the three months prior to being surveyed than were individuals in firms with 10 employees or fewer.

Table 6.5. Employee training in the last three months by size of workplace, Winter 2000

Number of employees in firm	Percentage of employees of firms of this size:	
	Did training	No training
1–10	21.0	79.0
11–19	28.2	71.8
20–24	31.4	68.6
25–49	32.6	67.4
50 or more	33.9	66.1
All	*30.2*	*69.8*

Note: Figures for '*All*' differ from those in Table 6.4 due to differences in response rates.
Source: Labour Force Survey.

While the existence of market failures, such as externalities and credit constraints, might justify government intervention, it is also important to consider evidence on the magnitude of these potential failures before deciding on the form that any intervention might take. The figures shown above do not in themselves provide evidence of market failures, as they are simply correlations. As we describe in more detail below, the government's proposals lower the cost of provision of training through a number of routes, but the government has not explicitly linked these features of the proposed policy to how they might remedy specific market failures.

Existing and recent government training policy

The latest proposals are far from being the first policy devised to increase the extent of training in the UK labour market. Some of the most important policies currently in existence are

- *Career Development Loans (CDLs):* These are loans available to individuals seeking to undertake particular training courses, higher-education courses or professional qualifications. If a loan is granted, the individual pays back the cost of training over a period after finishing a course, in a similar way to a student loan. In the academic year 1998–99, CDLs totalled just under £50 million.[20]

[19] See, for example, R. Blundell, L. Dearden and C. Meghir, *The Determinants and Effects of Work-Related Training in Britain*, Institute for Fiscal Studies, London, 1996. For an analysis of the returns to different types of qualification, see L. Dearden, S. McIntosh, M. Myck and A. Vignoles, *The Returns to Academic, Vocational and Basic Skills in Britain*, Skills Task Force Research Paper no. 192, Department for Education and Employment, London, 2000.

[20] Table 17a, www.dfes.gov.uk/statistics/DB/VOL/v0233/index.html.

- *Small Firms Training Loans:* These are similar to CDLs but are targeted at employers in small firms who wish to offer extra training to their workforce.
- *The New Deal:* The various New Deal schemes that have been set up for unemployed 18- to 24-year-olds, and for the long-term unemployed in other age groups, offer the prospect of full-time education and training courses to individuals who have been through the New Deal 'gateway'. In addition, the subsidised jobs that are being offered as another option to New Dealers must include at least one day a week of training towards an accredited qualification.

In addition to these schemes, there are two other schemes that existed until recently but have now been abolished:

- *Tax relief:* Under this scheme, individuals who had left school could claim tax relief on income tax for course payments and examination fees for NVQ-related courses. This option was abolished in 2000. There were concerns that the tax relief was being used in part to subsidise benefits in kind rather than genuine training.
- *Individual Learning Accounts (ILAs):* The ILA scheme, started in March 2000, provided a subsidy of up to £150 for each person who opened an account and invested at least £25 of their own money into it. The ILAs were used to provide funds for training courses. The definition of courses that qualified for the subsidy was deliberately made very broad, to minimise bureaucracy and encourage account holders to sign up for courses that they themselves saw as most useful. However, the scheme was scrapped in December 2001 following concerns that many account holders were applying for schemes with little or no educational value, and thus that public money was being wasted.

The failure of the ILAs scheme brings home the point that careful policy design is essential if the stated objectives of the policy are to succeed. A badly designed policy might end up either having no effect at all or, worse, increasing expenditure on training courses that are relatively unproductive. In the next subsection, we discuss the details of pilots for a new scheme that were outlined in the Pre-Budget Report.

The pilot schemes

The pilot schemes announced in the PBR will focus on the provision of training to those individuals who are in work. The schemes will be open to employees without basic or level 2 skills. Key features of the proposals are: free training provision and accreditation; entitlement to paid leave to attend courses; and employer compensation for employees' time spent training.

Full details of the pilots are not yet known, but they aim to evaluate different levels of subsidy for courses and accreditation, different periods of entitlement to paid leave and different levels of financial compensation for employers. In some of the pilot variations, small employers may receive up to 150% of wage costs and the largest employers less than 100%. The pilots will also look at the effectiveness of additional rewards for completing courses successfully.

Features yet to be decided on include: whether employees or employers will choose the type of training undertaken; and how the financial compensation for employers will be delivered. As many smaller firms are not incorporated, it would not be practical to use the corporation tax system if it is intended that all employers be included. Using PAYE would add further complexity to the system, and would probably involve substantial monitoring costs to ensure payments were linked to genuine training being undertaken. Since 1997, the PAYE system has been extended to encompass the payment of benefits and to collect student loan repayments. It may be more sensible to deliver any financial support to employers through a grant-based system based around the actual provision of training, rather than through a separate mechanism associated with PAYE.

Assessment of the schemes

Under the proposals, employees will be entitled to paid leave to undertake free training courses. The government will pay a subsidy to employers that will in many cases cover the full wage costs of employees undertaking training. Employers will then face the costs of replacing these employees while they are training, such as paying overtime to other employees or hiring in temporary workers. If replacement workers who were equally productive could be hired at an identical wage, and with no other costs, employers would face no additional costs when an employee undertakes training.

More generally, replacement costs might be higher or lower than the wage costs of existing employees. It is particularly likely that they will be higher than existing wage costs in smaller firms. The pilot schemes suggest that the government is willing to cover these costs through offering subsidies over and above the full wage costs of the employees away on training.

Of course, if employers would not see any return from basic or fully transferable skills acquired by employees, an efficient policy response could include the government bearing all the employers' costs. But under the schemes, participating employees will also face no cost to undertaking training. They may therefore be prepared to participate in training with little or no economic return. While the existence of credit constraints facing employees might justify interventions such as subsidised loans to *reduce* the cost of training, it is unlikely to justify reducing the cost of training to zero.

As the proposals potentially mean that the government bears all the costs associated with training, a concern is that the proposals will result in inefficient training being undertaken – that is, training where the costs are greater than the expected returns. Without employers or individuals bearing some costs, it is difficult to see how the proposals provide a mechanism for the most productive training to be undertaken.

The pilot schemes also mention the provision of additional incentives for achieving qualifications, but it is not clear whether it would be employers or employees who would be receiving them. Nor is it known whether employers or employees will choose the training courses to be undertaken, or what, if any, restrictions will be placed on the types of training courses open to participants in the scheme.

There are arguments for and against giving the employer, rather than the employee, the right to choose the type of training undertaken. To the extent that training confers skills that are transferable between employers, it probably makes sense to give employees the final choice, given that they, rather than their current firm, will retain the skills if they switch jobs. On the other hand, it may be that employers have a better understanding of the skills that are required for individuals within a business or industry. But, as discussed above, any employer intervention in training decisions is likely to be influenced by the extent to which they bear the costs of training, as well as by the benefits they receive.

It is not clear how large a cost the government envisages bearing under this scheme. Government figures suggest that 45% of the workforce do not have level 2 skills or above.[21] The cost of any scheme along the lines of those considered in the pilots, if taken up by a significant proportion of the target group, could be large.[22]

Conclusion

Few doubt that there is some role for government in the provision of training. But the government should clearly identify, and consider evidence on the magnitude of, the market failures that it is trying to tackle, and develop a policy that addresses these issues. It is not clear that the current proposals have followed this route. A key concern is that the proposals will lead to inefficient training being undertaken, if the existence or extent of market failures has been misjudged or if the schemes are ill designed.

It is therefore sensible that the scheme is being piloted with plans for an evaluation of its effectiveness. Whilst a pilot cannot identify all potential problems with each scheme, it can aid the design of a policy, with the quick identification of a number of drawbacks.

6.3 Capital gains tax

In June 2001, the Chancellor announced further changes to capital gains tax (CGT). From April 2002, a higher-rate taxpayer disposing of a business asset held for at least two years will face a 10% rate of capital gains tax.[23] The

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[21] Cabinet Office Performance and Innovation Unit, *In Demand: Adult Skills for the 21st Century*, London, December 2001 (www.cabinet-office.gov.uk/innovation/2001/workforce/report/Finalrep.pdf).

[22] Assuming a workforce of 25 million, the target group is roughly 11 million. Entitlement to 35 hours' paid leave at the minimum wage (£4.10) would lead to an annual cost of approximately £160 million if take-up were 10% of the eligible group, and an annual cost of approximately £800 million if take-up were 50% of the eligible group.

[23] In practice, the CGT regime is even more generous, since the first £7,500 of tapered gains are exempt from CGT. This implies that, under the proposed change to taper relief for business assets, gains up to £30,000 can be realised on the sale of assets held for at least two years without any CGT charge. A £30,000 gain will be reduced by 75%, to £7,500, by the taper.

Box 6.1. Changes to the capital gains tax regime, Budget 1998 onwards

Budget 1998 changed the base on which capital gains tax would be levied from real to nominal gains. Indexation allowances were replaced by capital gains tax taper relief, which reduces the proportion of nominal gains that are taxable the longer an asset is held. A distinction was drawn between general assets and 'business' assets, with the latter receiving more generous CGT treatment.

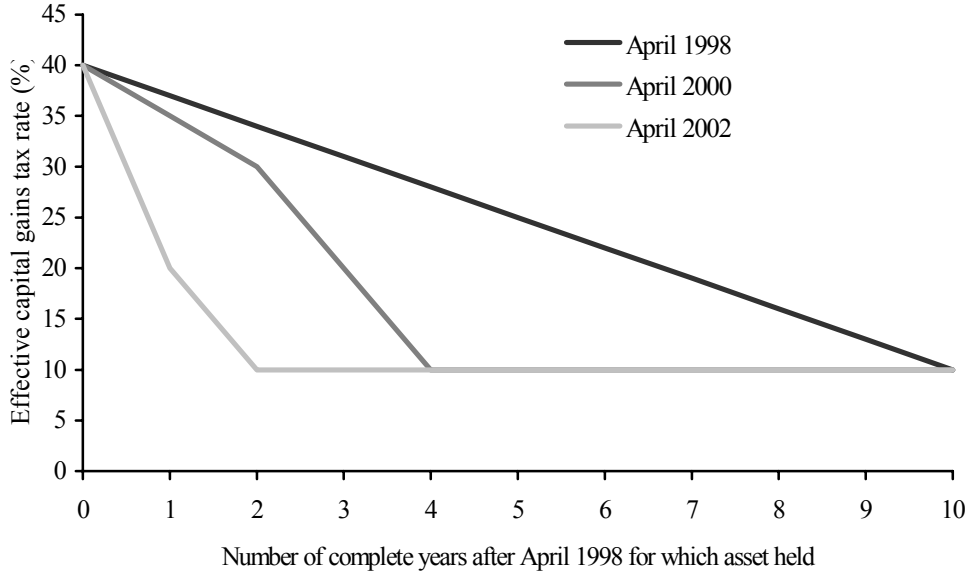
Changes to the definition of business assets

Tangible and intangible trading assets held directly by individuals (i.e. unincorporated businesses) have been eligible for business assets treatment since April 1998. In Budget 1998, shareholdings were classed as business assets if they belonged to an employee shareholder with more than 5% of voting rights or to an external shareholder with more than 25% of voting rights. The definition of qualifying shares was expanded in Budget 2000 to include all employee shareholdings and all shareholdings in unlisted trading companies. The threshold on shareholdings in listed trading companies was reduced to 5%.

Changes to the rate of taper relief for business assets

The government has made the treatment of gains on business assets more generous. Figure 6.1 shows how the business assets taper has become steeper over time. The 10% rate was originally reached after 10 years. In Budget 2000, this was reduced to four years, and, from April 2002, the 10% rate will be reached after two years.

Figure 6.1. Business assets CGT rate for higher-rate taxpayer: effective rates on gains above annual exempt amount, from April 1998, April 2000 and April 2002



government is also considering whether further changes should be made to the system for non-business assets.

The changes announced last June are the latest in a long line of changes to the CGT regime since 1998. These are summarised in Box 6.1. This section assesses the resulting CGT regime and asks whether further modifications are warranted.

Reforms to the capital gains tax system

In recent years, UK policy has stressed the role of CGT as a policy lever to achieve a range of objectives beyond simply raising revenue. The objectives have, to a large extent, evolved with the policy. When the reform of CGT began in Budget 1998, the FSBR stated that 'the Government's objectives are to: encourage long term investment; reward risk taking and promote enterprise; introduce greater fairness for CGT payers'.[24] Budget 1998 also stated that the government wanted a system that would be 'simpler to understand'. In Budget 2000, the business assets taper was shortened to 'bring the CGT incentives more into line with entrepreneurial investment patterns'.[25] In June 2001, the government announced a further shortening of the business assets taper to 'ensure that our regime is among the most favourable to enterprise in the developed world'.[26]

Promoting enterprise

Changes to CGT are often seen as ways to encourage risk-taking behaviour. It is likely that for certain types of investment project, such as those funded by new firms, the rate of CGT affects the investment decision more than for other types of investment, such as those carried out by larger incorporated businesses. The lower rate of CGT on business assets may induce more investment in this class of assets, potentially both through an increased supply of funds and through demand for those funds from individuals – for example, those starting their own businesses.[27]

However, reductions in the CGT rate on business assets are unlikely to have a large effect on overall UK investment levels. Changes to CGT affect a small proportion of individuals. Fewer than 200,000 individuals pay CGT,[28] and

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[24] Page 60 of HM Treasury, *Financial Statement and Budget Report*, London, March 1998 (www.archive.official-documents.co.uk/document/hmt/budget98/budget98.htm).

[25] Page 46 of HM Treasury, *Financial Statement and Budget Report*, London, March 2000 (www.hm-treasury.gov.uk/Budget/Budget_2000/bud_bud00_index.cfm?).

[26] Page 12 of HM Treasury, *Enterprise and the Productivity Challenge*, London, June 2001 (www.hm-treasury.gov.uk/mediastore/otherfiles/26.pdf). In particular, the government has stressed that the UK system is now more generous that the US system. The federal rate of CGT in the USA for taxpayers in the highest income band falls to 20% after one complete year and remains at that rate thereafter. The UK rate for higher-rate taxpayers will also fall to 20% after one year, and to 10% after two years.

[27] See, for example, J. M. Poterba, *Venture Capital and Capital Gains Taxation*, NBER Working Paper no. W2832, July 1989.

[28] Table 14, www.inlandrevenue.gov.uk/stats/capital_gains/menu.htm.

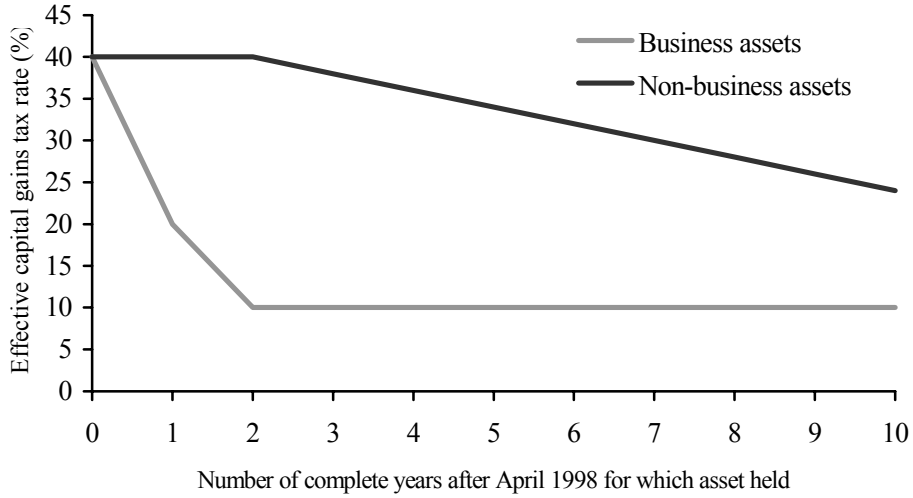
those investing in certain smaller businesses can also receive relief from CGT via the Enterprise Investment Scheme.

Encouraging long-term investment

Since Budget 2000, a tax-induced bias towards long-term holding remains only for non-business assets. The structure of the CGT system would not be expected to affect financial institutions often cited in the debate on 'short-termism'. The non-business assets affected by the CGT taper are individuals' shares in quoted companies. Individual shareholders hold a small proportion of the total equity in UK quoted companies. Most equity is held by financial institutions, such as pension funds and insurance companies, that do not pay CGT or by foreign shareholders.[29] Furthermore, there is no clear evidence that the length of time that shares are held affects firms' investment decisions.

It is equally difficult to make a case for having a tax-induced bias for long-term holding of business assets. So the fact that most of the bias introduced in 1998 for business assets has been removed, by the changes to the business assets taper in 2000 and by those to be implemented in 2002, is to be welcomed.

Figure 6.2. Business and non-business assets CGT rate for higher-rate taxpayer on gains above annual exempt amount, from April 2002



But the removal of this bias, by shortening the business assets taper, has increased another potential distortion. As shown in Figure 6.2, business assets held for at least two years will now be subject to a 10% rate, compared with 40% for non-business assets at this point. There is no clear economic distinction between business and non-business assets. For instance,

[29] For UK quoted firms at the end of 2000, the Office for National Statistics estimates that 38.7% of total equity was owned by pension funds and insurance companies, 32.4% was owned by foreign shareholders and only 16% was owned by individuals. See Office for National Statistics, *Share Ownership: A Report on the Ownership of Shares at 31 December 2000*, London, 2001 (www.statistics.gov.uk/downloads/theme_economy/ShareOwnership2000.pdf).

- shares quoted on the Alternative Investment Market could count as business assets, shares on the FTSE SmallCap do not;
- virtually all employee shareholdings count as business assets, but when an employee leaves the company their shareholdings usually revert to being non-business assets.

Yet the government has made the tax distinction between these two categories of assets wider. In the absence of any clear rationale or evidence supporting a 30 percentage point difference in the tax rates on the two types of assets after a two-year holding period, some concern must exist over whether the differential creates a distortion that induces inefficient investment decisions. However, given that we have argued that the impact of CGT cuts on overall UK investment is likely to be small, this may not be a significant problem.

Complexity and other distortions

One of the government's aims in 1998 was to simplify the CGT system. By June 2001, the system contained considerable complexity, leading the government to consult on simplification of CGT.[30] While this initiative is certainly welcome, it is likely to be confined to rather technical issues. Much of the complexity in CGT is now structural. There are the straightforward compliance costs, such as the problems of calculating the tax liabilities on capital gains and the likely need for anti-avoidance rules to prevent the avoidance of income tax and National Insurance contributions.

Some of the complexity in the system is transitional, with the same gain being potentially taxed under more than one system.[31] But much of the complexity will remain in the long run – for example, in situations where shares change classification from business to non-business assets, such as when a firm floats on the stock market or when an individual changes employer. Such circumstances can also produce rather perverse incentives, with the average tax rate on any unrealised gains increasing due to the non-business assets taper being less generous than the business assets taper. So, in addition to the complexity, we may also be worried about distortions to behaviour, such as how the CGT system affects a firm's decision to float on the stock market.

Further reform?

In addition to consulting on issues of complexity, the government is considering whether further changes to the CGT system might be made.[32] As a starting point, consideration could be given to a number of features of the CGT system that might merit removal:

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[30] Page 13 of HM Treasury, *Enterprise and the Productivity Challenge*, London, June 2001 (www.hm-treasury.gov.uk/mediastore/otherfiles/26.pdf).

[31] For example, if a proportion of the gain qualifies for indexation relief and the remainder is subject to the CGT taper.

[32] The government has stated that it will 'consider whether, during the lifetime of this Parliament, it is necessary to improve the CGT treatment of those assets that do not qualify for the business assets taper' (page 12 of HM Treasury, *Enterprise and the Productivity Challenge*, London, June 2001 (www.hm-treasury.gov.uk/mediastore/otherfiles/26.pdf)).

- the bias towards longer holding periods for non-business assets;
- the large differential between the tax rates on business and non-business assets;
- the general complexity and potential distortions in the system, which in part are due to a series of reforms being applied in a remarkably short period of time.

Many of these issues could be addressed either by changing the non-business assets taper to a flat rate after two years or by moving quoted shares into the business assets regime. But any significant move is likely to be costly. A compromise would be a single flat CGT rate for all assets, in part funded by increasing the rate on business assets. But in light of the government's announcement last June of further changes to the business assets taper, that option now looks unlikely.

The absence of discussion in the Pre-Budget Report of options for further reform probably means that none of these potential solutions will be taken forward in the Budget. While the issues outlined here will not go away and action will be needed at some point, another quickly implemented reform might only complicate the position further. One sensible option for the government would be a commitment not to change the capital gains tax regime again without some form of consultation.

6.4 Large business taxation

Following a long period of consultation, the government is due to introduce two major reforms to the taxation of assets held by companies. These concern the taxation of substantial shareholdings in other companies and the taxation of intangible assets. Details of these reforms are given in Box 6.2.

The proposed exemption for gains made on disposals of substantial shareholdings is a generally sensible outcome to a long consultation process. Where the investee company is UK resident, this effectively removes a potential double tax charge, as any income and gains generated by the investee company will already be subject to corporation tax. Where the investee company is located overseas, it has been standard practice to own it through a holding company located in a tax regime that itself has an exemption for capital gains. This ensures that any gain is unlikely to result in a UK tax payment even without formal tax exemption. The reform will leave multinationals free to structure their groups for commercial rather than tax reasons, although it is far from clear that the exemption will not create further tax-planning opportunities of its own.[33]

The new unified regime for intangible assets is also a positive move, removing tax-driven distortions between different intangible assets and bringing the tax

[33] There are also other ways in which the tax system affects the structure of multinationals. For example, the double tax relief (DTR) system contains an incentive to hold overseas companies directly from the UK. This issue should hopefully be addressed when the government considers simplifying the DTR system.

treatment closer to that in the accounts. But the combination of a depreciation relief, a rollover relief on gains and a potentially indefinite transition period means that much of the simplifying potential of the original proposals has been lost.

Box 6.2. Corporate tax reforms for Finance Bill 2002

Exemption for capital gains on substantial shareholdings

Capital gains made by companies when they dispose of assets are currently taxed at the marginal rate of corporation tax. For a number of years, the government has been consulting on ways to reduce this tax liability where the asset in question is a substantial stake in another company. Consultation was initially on the basis of a deferral relief designed to replicate for share sales the tax treatment applying to sales of business assets, where any tax charge can be deferred if the proceeds are reinvested into other qualifying business assets. The Pre-Budget Report made it clear that the government now intends to exempt gains on share sales from tax altogether.[a]

There are a number of restrictions on the type of disposals that will fall within the exemption. The key ones are that

- both the investor and investee companies must be trading companies; and
- the investor company must have owned at least 20% of the investee company for at least 12 months (or have met this condition within the last 12 months);

The exemption is expected to come into force for disposals after 1 April 2002.

Taxation of intangible assets

Finance Bill 2002 is also expected to introduce a new tax regime for intangible assets. Previously, different forms of intangible assets have had varying tax treatment, with some assets, such as trademarks and agricultural quotas, not receiving any relief at all.

The new system will encompass all intangible assets within a unified regime based around the accounts treatment. Effectively, depreciation of intangible assets can be allowed against tax at the rate that the asset values are written down in the accounts. On disposal, if the asset is sold for more than the tax written-down value, then the tax relief given for depreciation will be reclaimed by the exchequer. If the asset is sold at a gain compared with cost price, the tax charge on the gain can be deferred if the full proceeds of the sale are used to purchase other intangible assets.

As a transitional mechanism, current assets will only move into the new regime when they are first sold after the implementation date. At this sale, the vendor will receive the historic tax treatment for the asset.

[a] Page 40 of HM Treasury, *Pre-Budget Report*, Cm. 5318, The Stationery Office, London, 2001 (www.hm-treasury.gov.uk/pre_budget_report/prebud_index.cfm).

Future UK reforms

After ongoing tax reforms since 1997, an important question for businesses is whether the reforms have now been concluded or whether to expect further changes in the near future.

In the short term, there are a number of pressures emanating from recent UK reforms to the taxation of outward investment. The regime resulting from these reforms is now, if anything, more generous for returns from overseas subsidiaries, provided they are not caught by the controlled foreign companies (CFCs) regime.[34] But part of this new regime – namely, the double tax relief (DTR) system – is overly complex and in need of simplification. The government appears to accept this.[35] Its judgement that immediate changes are premature seems sensible, as reform is likely to produce more permanent results if made in the light of experience operating the new system and sufficient consultation. But this process should also have a finite timescale, so a firm announcement of the date by which it will be accomplished would be welcome.

The corporate tax regime for CFCs has been significantly tightened, restricting further the ability of UK-based groups to retain profits overseas without paying a full UK tax charge. Despite the fact that this change, which does not apply to non-UK-based groups, makes the UK a less attractive home location for a multinational, concern over possible loss of UK tax revenue seems to have outweighed issues of UK competitiveness on this occasion. It seems unlikely that the government will reverse this judgement in the near future.

Future pressures on corporation tax

This leads to consideration of the longer-term pressures on the UK corporate tax regime. Can the UK reasonably expect to continue to generate revenues from overseas activities while retaining a large number of multinational headquarters? The initial proposals for changes to the DTR system and the surrounding debate following Budget 2000 have highlighted the difficulties the government faces if it proposes changes that raise more revenue in this area. In the immediate future, revenues do not appear to be in danger,[36] but in the medium term this may alter in light of some of the harmonisation issues covered below.

There is also a wider question about whether underlying changes in production, such as the growth in firms operating in multiple tax jurisdictions or the increased importance of intangible products and assets, will force down domestic corporate income taxes. This is an extremely difficult question and

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[34] The CFC regime is designed to prevent profits that would be taxable on repatriation to the UK being held in an offshore company and thus deferring UK tax payments.

[35] See paragraph 3.9 of *Corporation Tax: Responses to the July 2001 Large Business Taxation Consultation*, Inland Revenue Technical Note, November 2001 (www.inlandrevenue.gov.uk/consult_new/subshare.pdf).

[36] It should be noted that this judgement is hindered by the lack of any published figures on the level of tax revenues from overseas activity.

views vary widely. The only clear fact is that to date there has not been a significant erosion of tax-raising capacity.[37]

International initiatives on tax competition

There are currently a number of international initiatives broadly concerned with tax competition. The UK government has stated that it seeks to 'eliminate tax distortions arising from artificial tax incentives that have been available on an international level ... The UK continues to work in international fora, such as the OECD and the EU Code of Conduct Group, to promote fair tax competition'.[38]

Defining 'fair' tax competition is a rather imprecise science. It is therefore helpful to break the issues down into their constituent parts. There are two central issues – the impact on tax revenues and the impact on the location of economic activity.

The protection of tax-raising capacity from tax evasion is at the heart of both the OECD initiative against harmful tax competition and the EU Savings Directive, at least in their current forms. In both cases, the key issues relate to the exchange of information between tax jurisdictions to facilitate the enforcement of domestic tax laws. These initiatives are therefore not aimed at possible tax revenue losses from genuine relocation of economic activity to low-tax regions. Whether or not these initiatives succeed will have an impact on countries' ability to tax corporate income, but will not necessarily affect economic efficiency, provided any revenue shortfall could be made up at no higher welfare cost by increasing other taxes.

The EU's Code of Conduct process has also been concerned with 'niche' tax regimes that affect the location of substantive economic activity.[39] In many cases, the parallels between tax-based subsidies and more traditional government cash subsidies are clear and the economic arguments against such distortions are well rehearsed. This initiative has been supported by the UK government. However, given the government's genuine concern over distortions resulting from niche regimes, it is perhaps surprising that it does not appear to be concerned by the distortion of economic location decisions resulting from differences in general tax rates.

Tax harmonisation

In a recent communication, the European Commission has more generally set out its view on the future of business taxation in a single EU market.[40] The

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[37] Corporate tax revenues in the EU as a whole have risen over the past 20 years, both as a share of GDP and as a share of total tax revenue. For more details, see S. Bond, L. Chennells, M. Devereux, M. Gammie and E. Troup, *Corporate Tax Harmonisation in Europe: A Guide to the Debate*, Institute for Fiscal Studies, 2000.

[38] Page 5 of HM Treasury, *Large Business Taxation: The Government's Strategy and Corporate Tax Reforms*, July 2001 (www.inlandrevenue.gov.uk/consult_new/lbt.pdf).

[39] A number of potentially harmful regimes identified by the Code group are now being investigated under the European Commission's State Aids procedures.

[40] European Commission, *Towards an Internal Market without Tax Obstacles*, Communication from the European Commission to the Council, the European Parliament and the Economic and Social Committee, Brussels, COM(2001) 582 final, 2001.

main proposal is the harmonisation of corporate tax bases (not rates) across the EU, thus allowing companies to calculate consolidated profits on a European basis, which would then be apportioned by a formula across Member States.

The key benefit claimed for base harmonisation is that there would be administrative gains for companies and tax authorities as the need to calculate and monitor transfer prices within the EU would disappear, and as the profit calculations of a firm would follow a single European set of rules, rather than up to 15 different ones. This deals indirectly with some types of tax competition, such as the potential to use transfer pricing to reduce tax liabilities within the EU, but does not address the treatment of non-EU-based activities. Other aspects of tax competition, however, will not be dealt with, and the authors of the study stress that tax rates will remain at the discretion of Member States.

The government has already set itself against the European Commission's proposals for a unified corporate tax base.[41] However, there are considerable forces that are tending to integrate EU corporate tax regimes. These include the realities of a single market, the introduction of the European Company Statute and the actions of the European Court of Justice. While it is not possible to say that a harmonised tax base is in the UK's long-term economic interests, it is equally not possible to say that it is against them. It is also clear that this is a debate that is not going to end soon.

Mike Hawkins, Alexander Klemm, Howard Reed and Helen Simpson

[41] 'The Government's view is that fair tax competition not tax harmonisation is the way forward for Europe' (The Paymaster General, *Hansard*, 1 November 2001, col. 800W).

7. Developments in asset-based welfare policy

At the time of the Pre-Budget Report, the Treasury published a second consultation document discussing two proposed asset-based welfare policies, the Saving Gateway and the Child Trust Fund. These are intended to 'extend the benefits of saving and asset-ownership more widely'.[1] In this chapter, we consider each of these two policies in turn. We discuss what the new document tells us about the policies and then consider what issues remain to be resolved before the policies are implemented.

7.1 The Saving Gateway

The Saving Gateway will be a new form of savings account available to families (or adults in families) with lower incomes. The policy is intended to 'increase rates of saving and asset-ownership'[2] among eligible families. The precise nature of the policy is yet to be finalised. The consultation document envisages accounts with the following features:

- Eligibility will be established using a means test. This will probably involve 'passporting' from or a linkage to an existing working-age benefit or tax credit or to the measure of income used in such a benefit or credit.
- An individual's contributions to his or her account will be matched at some fixed rate by the government. The level of matching 'could be set at £1'[3] for each pound placed in the account.
- There will be limits on the amount of matching payable per month and possibly also over the lifetime of the account. These might be set at £25 and £1,000 respectively.
- The maximum lifetime of accounts might be five years.
- Whilst accounts are still live, savers will be able to access their own savings but not the matching funds.
- The assets will be held in cash deposits.
- When the account matures, it will be possible to transfer the funds held into a stakeholder pension or an Individual Savings Account (ISA) without this counting against the annual contributions limit for that savings vehicle.

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[1] Paragraph 1.1 of HM Treasury, *Delivering Saving and Assets*, The Modernisation of Britain's Tax and Benefit System no. 9, London, 2001.

[2] Abstract in HM Treasury, *Saving and Assets for All*, The Modernisation of Britain's Tax and Benefit System no. 8, London, 2001.

[3] Paragraph 4.10 of HM Treasury, *Delivering Saving and Assets*, The Modernisation of Britain's Tax and Benefit System no. 9, London, 2001.

- Financial education will be provided in conjunction with the accounts.
- There will be a single provider of Saving Gateway accounts.

Some features of these accounts are not precisely determined. Pilot versions of the policy have been promised, and these might clarify some of the uncertainties that remain. The piloting of the policy is welcomed. We will now consider some of the issues that will influence how the Saving Gateway should be designed. In the light of this discussion, we end this section by considering how best the pilots might be set up and evaluated in order to inform the design process.

Targeting the Saving Gateway

We know that the Saving Gateway will be targeted towards adults in lower-income households. If income is the only criterion for eligibility, then many of the adults who are eligible either might not need the incentive to save because they already have savings, or might stand to gain little from being given the incentive because they have good reasons for not saving. The latest proposal suggests that eligibility will be linked to that for a working-age benefit or tax credit; the obvious benefit or credit to use would seem to be the working tax credit (WTC) or income support (IS). Linking the Saving Gateway to the WTC alone would mean that eligibility was contingent on an individual or their partner being in work as well as on having low income. We now discuss what other criteria there might be for eligibility, and whether these would result in a policy that is well targeted towards individuals who stand to benefit from being encouraged to save more.

If eligibility for the Saving Gateway is linked to that for a working-age benefit or tax credit, then students and lower-income pensioners will not be eligible. This seems sensible, as both of these groups would be likely to benefit more from supplements to their current income than from being encouraged to save.[4]

Should young adults be eligible?

It might be decided that, as well as making students ineligible, all young adults should be prevented from having Saving Gateway accounts. This would make for simpler administration if eligibility were to be linked to that for the WTC. This credit will not be paid to adults under the age of 25 who do not have children. However, young adults might be a group who stand to gain a lot from the forward-looking activity of saving, because they expect to have a long period of life ahead of them. It might therefore be unwise to exclude them from the Saving Gateway. As we will see below, whether or not young adults are included could have quite a significant effect on the cost of the policy.

[4] The issues of why it might be sensible to exclude pensioners and students from the Saving Gateway, and the more general issues surrounding how the policy should be targeted, are discussed in greater detail in C. Emmerson and M. Wakefield, *The Saving Gateway and the Child Trust Fund: Is Asset-Based Welfare 'Well Fair'?*, Commentary no. 85, Institute for Fiscal Studies, London, 2001 (www.ifs.org.uk/pensions/abw.pdf).

Should workless families be eligible?

If the Saving Gateway is linked to the WTC, then adults from families in which nobody is working will not be eligible. This might be sensible. The benefits that are paid to the unemployed (jobseeker's allowance or income support) provide only a basic standard of living and so it may not be desirable to encourage those receiving these payments to forgo current consumption in order to save in a Saving Gateway. Indeed, those who have become unemployed might find that their income is temporarily insufficient to meet their consumption needs and so prefer to be running down any savings that they have, rather than to be currently saving.

Linking eligibility to the WTC alone would also be administratively simpler than attempting to include the unemployed by using some combination of the means tests for the WTC and IS. The two means-tests differ administratively and the WTC means test would seem a more appropriate method of assessment for the Saving Gateway because it measures income over a long (annual) time period rather than taking a weekly snapshot view. This is important because it would make it harder for people to reduce their income temporarily in order to gain access to government matching.

An alternative way of discouraging such behaviour would be to have reassessment of means so that individuals would have to show regularly that their income was low in order to continue to be eligible for matching contributions. Such reassessment would reduce the amount of matching that the government had to pay out and would prevent payments from going to those whose incomes had risen significantly before they had exhausted their entitlement to matching. On the other hand, reassessment would add considerably to the administrative costs of the policy and to the hassle involved in claiming matching. It would also provide a disincentive to work for families who, by working longer hours or achieving promotions, could increase their income a little above the threshold for Saving Gateway eligibility.

Even without such reassessment, a Saving Gateway linked to the WTC would have an impact on incentives to work. Those who only need to sacrifice a small amount of income in order to become eligible for a potential £1,000 of government matching might choose to do so. For example, some families might choose not to have a second adult work part-time for a low income, if this second income would make the family ineligible. Individuals who were taking a career break, perhaps because they have a young child, might find that it is worthwhile to extend the period for which they remain out of work if doing so means that their family income falls within the Saving Gateway eligible range.

Although it has advantages, excluding IS recipients from the Saving Gateway might be deemed unfair. It might be especially unfair to certain groups, such as those who are prevented from working for health reasons. Those who are assessed to be disabled for the purposes of other benefits could be declared eligible for the Saving Gateway without this requiring that all IS claimants are offered accounts. This should only be done if these people are thought likely to benefit more from being given a financial incentive to save from their

benefit income than from receiving the money as a boost to their current income.

Targeting the Saving Gateway towards the working poor would mean that a larger proportion of the eligible population could already have assets than would be the case if the scheme were aimed at the poorest members of society. Figures from the British Household Panel Survey (BHPS) for 1995 show that amongst the poorest tenth of the population of adults of working age (under 60), approximately one in five lived in a household with more than £1,000 in financial wealth.[5] Amongst the third poorest tenth, slightly more than one-third of adults lived in households with this level of financial wealth. Such adults would be able to transfer their existing resources into a Saving Gateway account to benefit from the government match. This would not be new saving but it would add to the cost of the policy. Although this problem is made worse if the working rather than the workless poor are targeted, it is also possible that workless families would benefit more from supplements to their income than from financial incentives to save. The working poor might benefit more than those in workless households from the incentive to save and could potentially be a better target population for the Saving Gateway.

A gateway open to newly employed only?

As well as indicating that the Saving Gateway might be linked to a tax credit or working-age benefit, the most recent consultation document states that 'the Government will also consider options for targeting the Saving Gateway at people moving into paid employment'.[6] These people might form an appropriate target group because they are likely to receive a boost to their incomes when they move into work.[7] As such, they might have good reason to reconsider their spending and saving decisions. More research would be needed to establish whether they need prompting to undertake this reconsideration. Restricting the policy to new WTC recipients would make it considerably less costly than if all WTC recipients were eligible for matched savings accounts, but it might also create incentives to change employment status in such a way as to become a new WTC claimant. It might also be seen as unfair to give this form of assistance to only some of the WTC eligible population.

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[5] These figures, and other more detailed data, were first published and discussed in C. Emmerson and M. Wakefield, *The Saving Gateway and the Child Trust Fund: Is Asset-Based Welfare 'Well Fair'?*, Commentary no. 85, Institute for Fiscal Studies, London, 2001 (www.ifs.org.uk/pensions/abw.pdf).

[6] Paragraph 4.8 of HM Treasury, *Delivering Saving and Assets*, The Modernisation of Britain's Tax and Benefit System no. 9, London, 2001.

[7] The argument that newly employed people might be an appropriate target group for the Saving Gateway is made on pages 31–2 of C. Emmerson and M. Wakefield, *The Saving Gateway and the Child Trust Fund: Is Asset-Based Welfare 'Well Fair'?*, Commentary no. 85, Institute for Fiscal Studies, London, 2001 (www.ifs.org.uk/pensions/abw.pdf).

Will the Saving Gateway create new savers and saving?

The Saving Gateway is intended to ensure that adults in the target population 'are encouraged to save for themselves'.[8] The strength of the incentive provided by matching should certainly encourage some people who are not currently saving to invest in the accounts. If a lack of knowledge is hindering the saving of some adults from lower-income families, then the financial education provided alongside the Saving Gateway might serve to increase saving. On the other hand, matching might induce some people to reduce the amount that they put aside from their current income because the matching contributions will allow a given stock of wealth to be built up with lower own contributions. Whether overall saving by the target group would go up or down will depend on the relative sizes of these different effects. This will in turn be influenced by who is in the eventual Saving Gateway target group. An evaluation of the proposed pilots of the Saving Gateway might allow an assessment of the scale of these different effects.

A concern is that, since matching provides a strong financial incentive, some of the eligible population might find that it is worthwhile to borrow in order to take advantage of the government match even though they feel that they cannot afford to save from their income. This might not generate much saving because such account holders would have to use much of their final fund to pay off their debt. Such account holders also would not have to learn to constrain their consumption below the level of their income in order to save. For those who cannot borrow from a friend or family member, it would only be worthwhile to borrow to 'save' if the effective rate of return from matching is greater than the rate of interest on commercial loans.

Table 7.1 lists some effective rates of return from pound-for-pound matching over certain different durations of Gateway accounts. The calculations assume that the money paid into the account is paid in equally sized amounts each month for the duration of the account, and that zero real interest is achieved on funds held in the account. The latter assumption means that the figures in the table represent a lower-bound estimate of the interest rate at which it would be worthwhile to borrow to 'save'. The first row of the table gives the maximum annual rate of interest that would still make it worthwhile to borrow a lump sum when the Saving Gateway account is opened. The full value of such a loan would incur interest throughout the period of the account. The second row lists the rate of interest that it would be worthwhile to borrow at if a loan could be set up such that the funds were only received, and only started incurring interest, at the time when they were paid into the Saving Gateway account.

To clarify the difference between the figures in the two rows, it is helpful to consider a numerical example. Suppose that someone puts £10 into a Saving Gateway account each month for 18 months. At the end of the eighteenth month, the account would contain a total of £360. Half of this would be matching contributions and the remaining £180 would be own contributions. If the individual needed to borrow this money, then one method of doing so

[8] Paragraph 5.17 of HM Treasury, *Saving and Assets for All*, The Modernisation of Britain's Tax and Benefit System no. 8, London, 2001.

would be to borrow the entire £180 at the beginning of the 18-month period. This loan would then accumulate interest for 18 months. The value of the repayment required at the end of the eighteenth month would be £360 if the annual percentage rate at which interest was incurred were 59%. That is, it would be worthwhile to borrow in this way to save in the account if one could borrow at an annual interest rate of less than 59%. This is the meaning of the second figure in the first row of Table 7.1.

A shrewder way of borrowing the £180 would be to borrow £10 each month as it was required. This could be done by setting up a contract with a single provider agreeing to pay a series of £10 loans. The first loan would last and incur interest for 18 months. The second loan would be for the 17 months from month 2 until the end of the account. Each subsequent loan would be for one month's less duration, until the eighteenth and last loan, which would be taken out to make the final month's contribution into the Saving Gateway. Borrowing in this way at an annual percentage rate of 123% (the second figure in the bottom row of Table 7.1) would necessitate a repayment of £360 at the end of the eighteenth month. So, it would be worthwhile to borrow in this way to 'save' in the account if an annual percentage rate of less than 123% were available. It is because most of the funds borrowed incur interest for less than 18 months that borrowing by this method is worthwhile at higher interest rates than if the full amount is borrowed when the account is opened.

Table 7.1. Interest rates at which borrowing to save is worthwhile

	Number of months of contributions			
	12	**18**	**40**	**60**
Maximum annual interest rate at which it is worthwhile to borrow upfront	100%	59%	23%	15%
Maximum annual interest rate at which it is worthwhile to borrow month by month	224%	123%	45%	28%

Note: Assumes that: a zero real rate of return is received on the investment; matching is pound for pound; contributions are distributed evenly over the lifetime of the account. Rates of return are rounded to the nearest percent.

The above numerical example is based around an 18-month Saving Gateway account. This is the proposed duration for the pilot versions of the policy. In the table, we also consider a 40-month duration and a 60-month duration. Forty months is the time period required to accumulate the lifetime account limit of £1,000 of matching if £25 were saved each month. Sixty months (or five years) is the proposed maximum duration for accounts. The figure for one year is included to provide a benchmark for comparison. Since the latest proposal is that individuals would be able to access the government's matching contributions when 'the account matures i.e. after five years, once the total matching limit of £1000 has been reached, or *if the account is closed for good*, whichever is earlier',[9] it would seem that individuals might be able to choose to have accounts lasting for a short time period such as a year.

[9] Paragraph 4.19 of HM Treasury, *Delivering Saving and Assets*, The Modernisation of Britain's Tax and Benefit System no. 9, London, 2001 (italics added).

Borrowing to save over such a time period would be profitable even at extremely high interest rates.

The rates of interest at which people would be prepared to borrow to 'save' for the longer time periods are probably lower than would be offered by door-to-door loan sellers or loan sharks. On the other hand, if providers knew that Saving Gateway eligible individuals could profitably invest funds borrowed at an APR exceeding 40%, then this might be sufficient to encourage these lenders to offer loans at such interest rates to individuals who could prove their eligibility. The rates of return achieved over shorter time periods are more attractive and so the policy could provide some of what some commentators have referred to as 'loan shark lolly'.[10] Borrowing to 'save' might be more of a problem if individuals can choose to close their accounts before the 'Gateway period' ends. The fact that the pilot accounts will last for a shorter time than is envisaged for a national policy might make it difficult to assess how severe a problem there could be with borrowing to 'save', at least if the same match rate applies in the pilot scheme as would apply in the full policy. The ability to make this assessment could also be restricted if loan providers were prepared to introduce products to facilitate borrowing to 'save' in response to a large-scale national policy but not in response to the initial pilots.

How much is matching likely to cost?

The previous two subsections have discussed who might be eligible for the Saving Gateway and how they might respond to the incentives provided within the policy. These two factors will determine a major element of the cost of the policy: how much the government will have to pay in matching contributions. In this subsection, we consider this issue in more detail. We assume that the Saving Gateway takes the form described at the beginning of this section, with limits on matching of £25 each month and £1,000 over the lifetime of the account. Since we do not know exactly who will be eligible for the Saving Gateway, nor how they will respond to the policy, we provide a range of different costings reflecting different assumptions about which tax credits or benefits the Saving Gateway will be linked to and how much the eligible population will put into their accounts.

Three different eligible populations are considered. Each includes an estimate of the population of working-age adults that will be eligible for some WTC in 2003.[11] The estimate is that 1.7 million adults will be living in households eligible for this benefit. Our first set of costings assume that only these adults are eligible for Saving Gateway accounts. The second set of costings in Table 7.2 assume that the minimum age of 25 that will apply for the WTC will not apply for the Saving Gateway. It is interesting to consider this population

[10] 'Learning from the ILA disaster', *Financial Times*, editorial, 26 October 2001.

[11] The assumptions underlying this estimate are described in M. Brewer, T. Clark and M. Myck, *Credit Where It's Due? An Assessment of the New Tax Credits*, Commentary no. 86, Institute for Fiscal Studies, London, 2001 (www.ifs.org.uk/taxben/taxcred.shtml). At the time that that document was written, the credit now known as WTC was called the employment tax credit.

since there are reasons (discussed above) why it might be decided that young adults who are not in full-time education should be allowed to save in Saving Gateway accounts. Admitting the under-25s includes an extra 600,000 adults. The third and final eligible population again includes the under-25s and also includes the 2.5 million working-age adults who are in families receiving IS, alongside WTC claimants. Among those on IS, around 1.2 million live in households containing a disabled adult. This third eligible population is by far the largest that we consider and so gives rise to the highest costs for the policy. None of these hypothetical eligible populations includes pensioners. This is because it seems unlikely that pensioners will be able to save in Saving Gateway accounts, since the government has stressed that eligibility for the scheme might be linked to that for an existing 'tax-credit or working age benefit'.[12] As discussed above, pensioners might well be better supported via other policy tools.

Table 7.2. First-year costing for the Saving Gateway when eligibility is linked to receipt of the working tax credit or income support

Who is eligible?	Minimum age for families without children	Number eligible, million	% of maximum that is saved	Cost of policy in the first year, £bn
Adults in families projected to be eligible for some WTC	25	1.7	20%	0.1
			40%	0.2
			60%	0.3
			80%	0.4
Adults in families projected to be eligible for some WTC	None	2.3	20%	0.1
			40%	0.3
			60%	0.4
			80%	0.6
Adults in households projected to be eligible for some WTC plus working-age IS recipients	None	4.8	20%	0.3
			40%	0.6
			60%	0.9
			80%	1.2

Notes: Costs are rounded to the nearest hundred million pounds. Age limits apply on the basis of the age of the oldest person in the couple. Costing for 80% of maximum saving is consistent with individuals saving full amounts and 80% take-up. This take-up rate is high compared with those for other means-tested benefits.
Sources: Estimated eligibility for WTC – M. Brewer, T. Clark and M. Myck, *Credit Where It's Due? An Assessment of the New Tax Credits*, Commentary no. 86, Institute for Fiscal Studies, London, 2001 (www.ifs.org.uk/taxben/taxcred.shtml). Estimated eligibility for IS – Department for Work and Pensions, *Income Support Quarterly Statistical Enquiries May 2001*, London, 2001.

For each eligible group, we offer four costs for matching paid within the policy. These costs correspond to those eligible saving enough to receive 20%, 40%, 60% or 80% of the total available matching contributions. If the policy is enacted, then how much matching is paid out will depend on how strongly eligible adults respond to the incentive to save. It is possible that matching will

[12] Box 4.1 of HM Treasury, *Delivering Saving and Assets*, The Modernisation of Britain's Tax and Benefit System no. 9, London, 2001.

be a strong enough incentive to encourage many among the eligible population to save in Saving Gateway accounts. If the eligible population contains many people who already hold assets that can be transferred into the accounts, or if borrowing to 'save' becomes widespread, then a high proportion of the total potential available matching payments are likely to be claimed. We provide the four different costings rather than making a judgement on how people will respond to the incentive because it is notoriously difficult to predict behavioural responses to financial incentives to save. When personal pensions were introduced in 1988, there were significant financial incentives to encourage take-up and the Department of Social Security underpredicted the number of people who would opt into the schemes by a factor of eight.[13] The difficulty of making predictions is likely to be increased in the case of the Saving Gateway because the eligible population might include many people with limited experience of financial institutions.

The range of costings listed in Table 7.2 is large, spanning from £100 million to £1.2 billion. It should be noted that these are costings for the first year of the policy, during which nobody among the eligible population has exhausted their matching limit. The cost of the policy might rise in its second and subsequent years as new households become eligible for the accounts while existing accounts are still active. This effect will be especially large if the government chooses not to disqualify people from eligibility on the basis of reassessments of means during the lifetime of an account. From the fourth year of the scheme onwards, this effect could be offset if savers begin to exhaust the proposed £1,000 ceiling on matching contributions paid into any single account. Over the longer term, the cost of the policy would decline if individuals were only eligible for one Saving Gateway account, as some individuals in lower-income families would have exhausted their eligibility.

The pilot versions of the policy might allow more accurate costings to be provided if they are evaluated sufficiently thoroughly to allow some assessment of how people respond to the incentive provided by matching. Knowledge of the exact target population would also allow for more precision. If the Saving Gateway were made available only to those who have just moved into employment and who are newly eligible for the WTC, then it would be less costly than any of the options considered in Table 7.2.

Should there be a single provider of Saving Gateway accounts?

The government believes that 'the Saving Gateway would probably be better suited to provision through a single provider than through a competitive market'.[14] This view is based on a perception, gleaned from the initial round of consultation, that the Saving Gateway market would not sustain a group of competing providers. The market will be relatively small and the accounts will have only a limited duration and are likely to contain low balances even though account holders might make large numbers of transactions. Provision

[13] Page 4 of R. Disney and E. Whitehouse, *The Personal Pensions Stampede*, Institute for Fiscal Studies, London, 1992.

[14] Paragraph 4.4 of HM Treasury, *Delivering Saving and Assets*, The Modernisation of Britain's Tax and Benefit System no. 9, London, 2001.

is especially unlikely to be profitable if providers have to bear some of the 'outreach' costs of informing potential account holders about the products, and if they have to meet some or all of the cost of providing information and education in conjunction with the accounts. Having a single provider would simplify State involvement in providing or regulating outreach and information and education services.

If the government wants to involve the private sector in providing the accounts, then there is a problem of how the single provider should be chosen. The government will have to consider the minimum level of financial education that it expects to be provided and the minimum rate of return on the accounts. If a competitive tender were to be run, then all bidders would have to satisfy the criteria chosen. The government could then choose the provider that promised to meet these criteria at the lowest cost, in order to minimise the size of any State subsidy, or it could choose on the basis of a judgement about which provider offered the best package to potential Saving Gateway account holders. It is not clear that the lowest-cost scheme would be the best, but it is also not clear what criteria could be used before the scheme is enacted to determine what the best package would be. Piloting of the policy might help to show what criteria could be applied.

Piloting the Saving Gateway

The government intends to set up three or four pilot versions of the Saving Gateway. These will be run in different locations and will each involve around 500 participants. The pilot accounts will run for 18 months. The aim of the pilot projects is to examine 'the practicalities of designing and delivering'[15] the Saving Gateway. Part of the focus of the pilots will be on how financial education should be delivered in conjunction with the accounts. This might be done by combining the Saving Gateway pilots with pilots of Community Finance and Learning Initiative schemes that are intended to get local organisations involved in tackling financial exclusion.

Piloting the policy is a good idea. The 18-month pilots should be used to assess how people respond to the incentives created by matching: will significant new saving and savers be created or will the transfer of existing assets and borrowing to 'save' be more prevalent? The pilot schemes will not last for long enough to allow an assessment of whether Saving-Gateway-style accounts can have a lasting effect on people's behaviour, which might improve the outcomes they achieve even after their accounts have been closed. It is important that the pilot schemes be fully evaluated, quantitatively and qualitatively, in order to ensure that they provide the best possible information on those issues that they can legitimately be expected to address.

Having four different schemes offers scope for examining how different variations on the design of the policy will affect the outcomes it achieves. However, having too many dimensions of variation would limit the ability to make inferences about design features from observation of these relatively small-scale pilots.

[15] Paragraph 4.29of HM Treasury, *Delivering Saving and Assets*, The Modernisation of Britain's Tax and Benefit System no. 9, London, 2001.

Thoroughly evaluated pilot versions of the Saving Gateway should throw some light on whether or not the policy can achieve the effects that its proponents hope for. If it does not, then, instead of having a nationwide version of the policy, the money that this would involve could be spent on other policies.

7.2 The Child Trust Fund

A Child Trust Fund will be a savings account that will be set up for every child. The accounts will be set up when the government pays an initial contribution to each newborn child. The latest round of consultation proposes that the trust funds have the following features:

- All children will receive an account, but the endowment contributed at birth will be larger for children from lower-income families.
- The government will make further contributions to the accounts, possibly when the child reaches ages five, 11 and 16.
- It will be possible for the child or family and friends of the child to make supplementary contributions to the account. Up to some annual contribution limit, possibly of around £1,000, the growth of these contributions will be exempt from tax in a similar way to the method that applies to the growth of funds held in ISAs.
- Money held in the accounts can be invested in a wide range of vehicles, including equities.
- Neither the child nor the parent(s)/guardian(s) of the child will be able to access assets, including their own contributions, before the fund matures.
- The child will be given access to the funds at age 18.
- No restrictions will be placed on how the matured fund can be used.
- Financial education, including through the National Curriculum, will be integrated with the accounts.

The government wants the current round of consultation to focus particularly on whether the Child Trust Fund should be delivered via open competition or through a limited number of licensed providers. Later, we discuss some of the pros and cons of each of these modes of delivery, but first we consider some other issues that arise, given the proposed design of the Child Trust Fund.

Who will benefit from ISA-style tax relief?

It is proposed that family and friends of children should be able to make supplementary contributions to a Child Trust Fund. Up to some limit, returns on these contributions may be exempted from tax, as will withdrawals from the account. This tax treatment would be similar to that that currently applies to funds held in ISAs. Such tax relief is of no value to an individual whose income is so low that they pay no tax. It is most valuable to higher-rate taxpayers, who would be exempted from 40 pence of tax on each pound of returns accruing to their Child Trust Fund investments. Families who are

choosing to exhaust their ISA limits might particularly welcome being given extra tax relief via a Child Trust Fund account.

As well as giving ISA-style tax relief, the current proposal for the Child Trust Fund suggests that all funds placed in accounts will be locked away until the account matures. This means that funds placed in a Child Trust Fund will be less liquid than funds in an ISA. Families looking for tax-efficient savings vehicles would be well advised to exhaust their ISA contribution limits before using Child Trust Fund contributions. Even if they intend to earmark the saving for their children, saving in an ISA might be preferred to contributing to a Child Trust Fund because the ISA funds can be accessed at a time of unforeseen need. The Child Trust Fund would be preferred by parents who have not exhausted their ISA limits only if they value the forced commitment of this account. Friends and relatives other than the parent(s) of the child who want to give financial gifts for when the child grows up would welcome tax relief which will ensure that the value of any payment made is not eroded by tax. They might also like the fact that the assets in a Child Trust Fund are locked away so that neither the child nor his/her parents can spend the money before the date at which it is intended that it be received.

It is predominantly adults in richer families who will have exhausted their ISA limits. Even if parents who have not exhausted these limits save in Child Trust Fund accounts, it will generally be richer parents, many of whom save already, who will make the largest contributions. Therefore, both because they are saving the most and because the tax exemption is worth the most to them, it will be richer families who will gain the most from ISA-style tax relief on contributions to Child Trust Fund accounts. This might lead some to argue that giving ISA-style tax relief to contributions would continue the trend of having policies to encourage saving and asset holding that give 'help to the wrong people'.[16]

On the other hand, ISA-style tax relief can be seen as removing a distortion that is a disincentive to save, rather than as a tax perk to the already rich. At present, savings in interest-bearing accounts are typically taxed in two ways. The initial deposits are made from income that has usually already been taxed, and any interest accruing to the saved asset is also taxed. This second tax reduces the return received on savings compared with a regime in which taxation only occurs at the first point. Income that is spent immediately is only taxed at this first point. This means that the tax system creates a distortion that encourages spending, rather than saving, from current income. ISA-style exemptions from tax for interest income remove this distortion. Extending the principle of ISA-style exemptions via Child Trust Fund accounts might therefore be seen as a welcome step that further erodes a disincentive to save that is created by the tax system.

It might still be argued that poorer families would need stronger incentives to save in Child Trust Fund accounts. Tax relief will not tackle the disincentive problems faced by these families due to asset income disqualifying them from benefit receipt. Even if it is a good idea to provide stronger incentives to save

[16] G. Kelly and J. Le Grand, 'Special report: assets for the people', *Prospect Magazine*, December 2001, p. 52.

to some poorer households, the Child Trust Fund does not seem the appropriate tool for doing this. Providing positive incentives via the Child Trust Fund would distort choices between saving in this form or in an ISA or a private pension such as a stakeholder pension.

Is the progressive element worth it?

The arguments of the previous subsection imply that it would be the children of richer parents who would tend to have the largest mature Child Trust Fund accounts. The fact that richer families might be the most financially literate and the most willing to bear risk could mean that they invest their Child Trust Funds in assets that realise high returns, which would accentuate this tendency. The proposal that government contributions to the accounts will depend inversely on family income would have an offsetting effect. This might help the policy to achieve the aim of 'widening opportunity'[17] for young adults from poorer households.

The problem with attempting to equalise opportunity by having a means-tested element of the Child Trust Fund is that the targeting achieved might not be very accurate. It seems likely that the largest part of the means-tested element of the government's contribution will be paid at the time when the child is born.[18] Evidence published in a recent IFS Commentary[19] suggests that a means test conducted at this time might not accurately capture how well off a child's family will be throughout the child's upbringing. It is difficult to argue that family income at a child's birth significantly limits opportunities in early adulthood in a way that is better corrected by giving an asset to the child rather than by supplementing family income or by giving the child financial assistance at age 18 that depends on circumstances at that time.

Having the means test at birth determine the size of the largest chunk of the fund would also create certain anomalies. For example, two siblings born a year or two apart could have very differently sized funds simply because the family's circumstances had changed a little. This could seem unfair to the children.

Means testing of contributions to the Child Trust Fund would more accurately capture family income throughout the child's upbringing if means-tested contributions were paid regularly during the early part of the child's life. On the other hand, the extra payments and means testing would add to the administrative costs of the policy. The scheme as currently envisaged does not necessarily offer the best solution to this trade-off between administrative cost and accurate targeting. If it is enacted, then it is possible that the means testing

[17] Paragraph 5.2 of HM Treasury, *Saving and Assets for All*, The Modernisation of Britain's Tax and Benefit System no. 8, London, 2001.

[18] Chapter 5 of HM Treasury, *Saving and Assets for All*, The Modernisation of Britain's Tax and Benefit System no. 8, London, 2001.

[19] C. Emmerson and M. Wakefield, *The Saving Gateway and the Child Trust Fund: Is Asset-Based Welfare 'Well Fair?'*, Commentary no. 85, Institute for Fiscal Studies, London, 2001 (www.ifs.org.uk/pensions/abw.pdf), pages 34–8 of which discuss these issues in much more detail.

will add to administrative costs without successfully targeting the policy towards those that the government wants to help the most.

Competition or licensed providers?

The government has requested that the current round of consultation focuses on the issue of how the Child Trust Fund market is organised. The two options under consideration are open market competition or a limited number of licensed providers (probably five to ten) chosen by competitive tender.

If the route of licensed providers is chosen, then issues such as how funds charge and how information and education are integrated with accounts could be specified in the terms of licences.

If competition is preferred, then regulation of charging and the provision of information might be necessary. If it were thought that competitive pressures would be sufficiently strong to keep charges low, then regulation might still be used to ensure that charging operates on a comparable basis in different funds, to aid the transparency of competition. Such regulation could operate in a similar way to that in the stakeholder pension market, where only funds that satisfy certain criteria concerning (amongst other factors) how and how much they charge can be declared as 'stakeholders'. This might be seen to be overly restrictive in the case of Child Trust Funds because an alternative form of provision analogous to non-stakeholder personal pension provision does not exist. Therefore a system of benchmarking, which gave the parent(s) a choice between marked or unmarked products, might be preferred. This could operate in a similar way to the 'CAT marking' of some ISAs. CAT-marked ISAs must meet a voluntary benchmark on *C*harges *A*ccess and *T*erms.[20] Ensuring that Child Trust Funds operate in a way that is similar to the way in which ISAs and stakeholder pensions operate would mean that the information that youngsters learn about financial products by being fundholders would be likely to be useful to them in later life.

Comparing the two possible methods of organisation, the biggest advantage of licensing would be that it might make the eventual Child Trust Fund market simpler to understand if it means that there are fewer providers than would be the case in a competitive market.[21] This would make it easier for new parents to choose which provider to invest their child's account with. Indeed, the choice could almost become a 'tick box' feature of the child benefit application procedure. Such simplicity might be particularly welcomed by those new parents who are not familiar with financial products, and these might be concentrated in low-income families. A simple market might also make it easier to organise default provision for accounts where parents do not make a choice for their child: it might be possible to divide such funds amongst the licensed providers rather than requiring that the State provide an extra default option.

[20] For more details, see Financial Services Authority, *FSA Guide to ISAs*, London, 1999.

[21] Although the Child Trust Fund market will be much smaller than, for example, the market for personal pensions and so might not support (many) more providers than the envisaged number of licensees.

A licensed market would still have some competition for customers between providers. If licensing acted as a restriction on the number of providers, then it is possible that this competition would be less effective in delivering the best accounts to fundholders than would open competition. The effectiveness of competition among licensed providers might also depend on how the competitive tender to enter the market had operated. If the funds promising the lowest charges won the tenders, then it might be that half a dozen or so basic and very similar accounts were provided. These might not be suitable for some individuals in the market. On the other hand, it is not clear that the government or a market regulator could pick the best accounts from a more complex 'beauty contest' organised before the market begins to operate. For this reason, free entry might be preferred.

In sum, it seems that the main advantage of a system of licensing is that it might result in a simple market. Free competition might promote a better range of products to meet the needs of customers in the market.

7.3 Conclusion

The latest round of consultation on asset-based welfare policies focuses on detailed design issues: how pilot versions of the Saving Gateway can be used to test practical elements of the design of a nationwide policy, and on how to organise the market for a nationwide Child Trust Fund.[22] It seems very likely that the policies will be rolled out nationally, and it has been argued that they will form a good complement to existing welfare policies.[23] Increased spending on traditional forms of welfare provision or State-provided services would also complement existing provision. It is not clear that spending on matched savings accounts represents a better way of supporting lower-income families than would using the same funds to increase benefit expenditures or to pay for more financial education. Equally, it is not clear that children from low-income families will be better supported by being provided with an asset that grows through their childhood, rather than by targeted increases in financial support to their families or by targeted education spending. Prior to considering design issues, it would have been useful to have had a stage of the consultation process that invited comments on whether the new policy direction that is asset-based welfare is a good one to take.

Matthew Wakefield

[22] Paragraphs 4.26 and 3.22 of HM Treasury, *Delivering Saving and Assets*, The Modernisation of Britain's Tax and Benefit System no. 9, London, 2001.

[23] Paragraph 1.2 of HM Treasury, *Saving and Assets for All*, The Modernisation of Britain's Tax and Benefit System no. 8, London, 2001; W. Paxton, 'Assets: a third pillar of welfare', in S. Regan, (ed.), *Assets and Progressive Welfare*, IPPR, London, 2001.

8. A graduate tax for the UK?

The funding and future of higher education (HE) in the UK have long been a controversial area of debate. Last year, the Prime Minister said that the government's objective was to see half or more of all those aged under 30 experience HE by 2010,[1] while the Secretary of State for Education and Skills asserted in October that 'our aim is to get more children from less privileged backgrounds into higher education and we hope to better achieve this by changing the combination of family, student and state contributions'.[2] Given these pronouncements, the debate surrounding HE funding is likely to continue and intensify. Recent suggestions have come from both the Treasury and the Department for Education and Skills (DfES) which may lead to the introduction of a graduate tax in the UK – a supplement to income tax which would be paid by all graduates. In this chapter, we consider the prospects for such a tax. We look first at the recent history of HE funding and the notable changes that have occurred since the early 1990s, before considering some of the economic arguments both for and against a graduate tax system. We then look at where graduates lie in the income distribution and how this may inform the design of a graduate tax system. Finally, we consider what the distributional impact of the introduction of a graduate tax might be.

8.1 A recent history of higher education in the UK

Participation in HE in the UK has increased markedly since the mid-1980s. In 1985–86, less than 15% of all British 18- and 19-year-olds entered HE.[3] Over the course of the early 1990s, this figure more than doubled to over 30% by 1994–95. Projections from the DfES suggest that, by 2001–02, the figure will be around 35%. In 1998, expenditure on tertiary education, both public and private, in the UK was just over 1.1% of GDP, compared with around 2.3% in the USA, 1.6% in Australia and a weighted OECD average of 1.6%.[4] The UK figures are, however, comparable to those of France and Germany, where 1998 expenditures were 1.1% and 1.0% of GDP respectively.

Coupled with this increase in participation have been major changes to the way that HE is funded. Higher education funding covers two key elements: the funding of tuition and the funding of living expenses (usually referred to as 'maintenance'). Before 1990, tuition costs for UK students were funded

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[1] Prime Ministerial Speech, 'The government's agenda for the future', 8 February 2001.

[2] Estelle Morris, Secretary of State for Education and Skills, in DfES Press Release, 4 October 2001 (www.dfes.gov.uk/mediamonitor/DisplayRB.cgi?pn_id=0128).

[3] Figures on HE participation from Department for Education and Skills, *Annual Report*, London, various years.

[4] OECD, *Education at a Glance: OECD Indicators*, Paris, 2001.

entirely by the government, and means-tested maintenance grants were available. Between 1990 and 1997, the government gradually reduced the nominal value of maintenance grants and introduced 'top-up' loans at zero real interest rates to make up the shortfall. By 1997, the values of grants and loans were roughly equal. Between 1998 and 2000, a new student support package was phased in. Maintenance grants were entirely abolished and replaced with loans (again at zero real interest rates), repayable once income reached a certain threshold, and part of the cost of tuition was required to be paid by the students or their parents on a means-tested basis. These fees were a flat-rate £1,075 per year in 2001–02 irrespective of the institution attended or the course taken. Scottish and non-UK EU students at Scottish universities do not have to pay tuition fees, although they are expected to contribute up to £2,000 to a graduate endowment fund after graduation. No UK students have to pay fees in their fourth year in Scotland, since there is no fourth year in most undergraduate courses in England and Wales.

8.2 The economic arguments for and against a graduate tax

Before we consider the economic desirability of a graduate tax, it is worth asking why governments feel the need to intervene in the market for higher education at all. There are two broad sets of arguments. First, there are arguments relating to equity considerations – for example, in terms of access to HE for those from low-income backgrounds – which favour means-tested government support. Secondly, there is the argument that the benefits to participation in HE accrue not only to the individual graduate but also to society at large: a better-educated workforce may be able to pass on its skills to less-educated colleagues, for example. However, these 'external benefits' to HE may not be considered by the individual when they are deciding whether or not to go to university; instead, they concern themselves only with their private costs and benefits. Thus, from society's point of view, there will be too little investment in HE. The government should therefore provide some sort of subsidy to HE in order to reduce the costs of entering to students, encouraging them to undertake a socially efficient level of HE.

Let us now turn to the economic case surrounding the graduate tax itself. Higher education can be viewed as a form of investment by students, under which they forgo current earnings in return for higher earnings in the future. These 'returns' are currently taxed as ordinary income; the graduate tax can be seen as an attempt to capture more specifically some of the returns to HE. Evidence from the UK suggests that the returns are substantial: for example, Blundell et al (2000) estimated that the average return to completion of a first degree for a cohort of 33-year-olds in 1991 was around 17% for men and 37% for women compared with people with A levels as their highest qualification.[5] Whilst a graduate tax clearly accords with the idea that the beneficiary from

[5] R. Blundell, L. Dearden, A. Goodman and H. Reed, 'The returns to higher education in Britain: evidence from a British cohort', *Economic Journal*, vol. 110, pp. F82–9, 2000.

HE should pay for it, it is not the only way to meet this principle since, for example, an income-contingent student loan does just the same. If we decide that this 'beneficiary-pays' principle is desirable, the question is then whether the graduate tax is the best way to meet it.

A graduate tax has a number of desirable characteristics. First, it leaves education free at the point of delivery – this has important implications in terms of the access to HE, especially for people from low-income backgrounds and socio-economic groups where participation rates are low. However, this assumes that the tax is used to fund both maintenance and tuition; if most students also have to take out loans at market rates, access problems could still remain. Secondly, a graduate tax is income-contingent: higher earners pay more. If it is the case that high-earning graduates earn more as a result of their degree and we wish to tax these returns, then this income contingency would be seen as desirable. Thirdly, a graduate tax has the potential to generate significant revenue over the long term (as discussed below), which could be used to bring UK expenditure on HE close to the weighted OECD average.

However, there are several potential drawbacks, and the fact that the graduate tax is not a policy that is prevalent in other OECD countries suggests that the problems may be hard to overcome. First, there are short-term transitional problems resulting from several years in which students go through HE but are not yet paying the graduate tax. Secondly, a graduate tax exhibits no relationship between the cost of the course attended and the amount repaid. It therefore introduces no 'market-based' element into the HE sector in terms of students choosing between courses and institutions based on the various prices of attending them (which would be related to the costs of the course and the expected returns to students). Of course, students attending the best universities or studying particular courses will expect to earn more as a result of doing so than the average graduate, and so would pay more graduate tax, but it is not clear that the courses offering the highest returns are necessarily the most expensive (for example, studying within London is more expensive than studying outside London by virtue of the costs of operating within the capital).

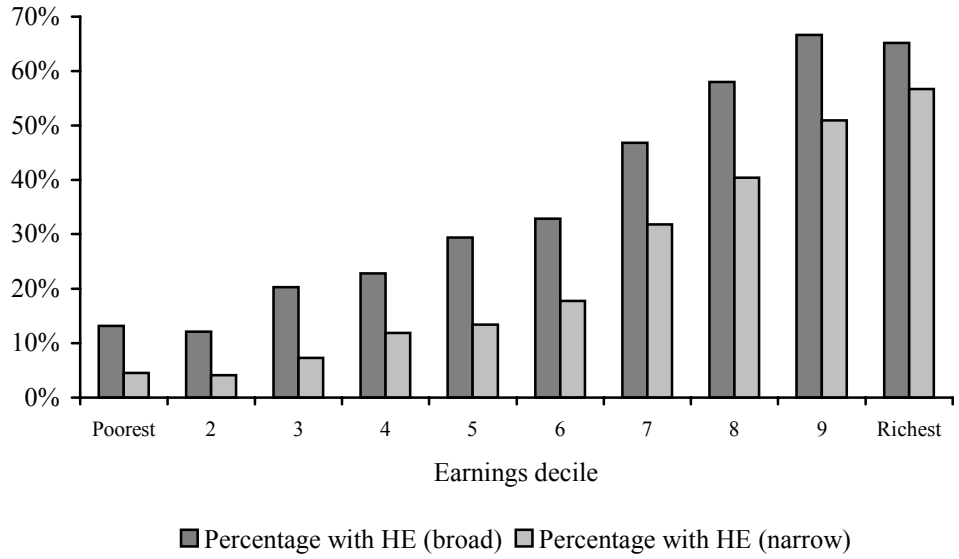
The amount raised would also be highly uncertain since it depends on future graduate earnings (whilst we have figures for average returns to HE, we also know that they are very variable). Universities might therefore be unclear as to how much funding they would receive from the receipts of the graduate tax and this uncertainty could have negative effects on the quality of HE institutions are prepared to offer. For example, an expansion of HE to cover half of young people may, in the long run, depress the earnings premium that graduates receive as they become more prevalent in the workforce. Further, unless the receipts were hypothecated specifically for HE, the revenue would form simply a part of general tax receipts – and there is no tradition of hypothecation in the UK tax system. Indeed, in general, there is no special economic reason for tying HE funding to the receipts from one particular tax. There are also the key issues of how foreign students at UK universities would be treated and how people who move away from the UK after their degree is complete must pay for their course.

8.3 Graduates in the earnings distribution

One of the arguments used in favour of the graduate tax is that there is a financial return to higher education, i.e. graduates earn more than non-graduates (as discussed in the previous section). However, this tells us little about the distribution of the returns to HE. Are all graduates likely to be high earners or is there a wide distribution of returns?

Figure 8.1 shows recent data from the UK Labour Force Survey (LFS) on the position of recent graduates in the earnings distribution. We confine ourselves to 25- to 34-year-olds – men and women who are old enough to have accumulated wage growth through labour market experience, but young enough to have an earnings profile comparable to that facing today's graduates. Two measures of HE qualification are considered: the 'narrow' definition includes only academic degrees and comparable National Vocational Qualifications, whereas the broad measure includes vocational qualifications of comparable level as well as professional qualifications (for example, nursing). Overall, approximately 37% of respondents from the LFS have HE qualifications under the broad definition, and approximately 24% of them under the narrow definition.

Figure 8.1. Percentage of individuals who are HE graduates in each earnings decile (ages 25–34 only)



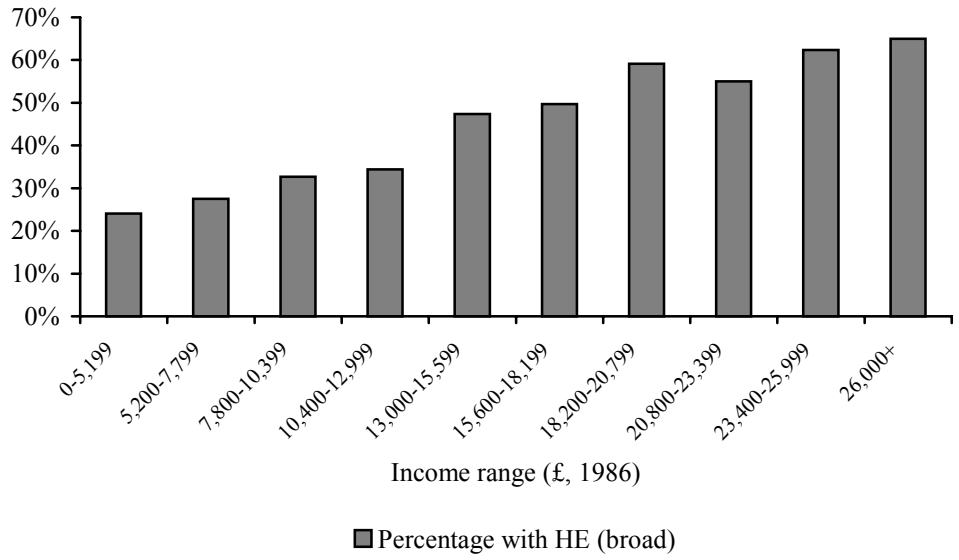
Note: Earnings deciles are derived by dividing the total population of employees in the UK aged 25–34 into 10 equally sized groups according to hourly earnings. Decile 1 contains the lowest-earning tenth of the population, decile 2 the second lowest and so on, up to the top decile (decile 10), which contains the highest-earning tenth.
Source: Labour Force Survey, Winter 2000.

Figure 8.1 shows that the upper deciles of the earnings distribution for 25 to 34 year olds contain very high proportions of graduates – about 55% in the top decile for the narrow HE definition and about 65% on the broad definition. In contrast, less than 5% of people in the poorest two deciles are graduates,

narrowly defined. This shows that graduates are largely concentrated towards the top of the earnings distribution.

What about the argument that the current loans system deters entry by lower-income pupils? Figure 8.2 analyses the family background of a representative sample of graduates from the late 1980s – before the loans system had even been introduced – using data from the British Cohort Study (BCS), a survey of everyone in the UK born in one week during 1970. The graph tabulates the proportion of HE graduates (defined on the broad measure by the year 2000, when the cohort were 30 years old), against the combined income of each cohort member's parents back in 1986 – a time when the cohort members were presumably making the decision about whether to take A levels.

Figure 8.2. Percentage of HE graduates among 30-year-olds by parents' income when the person was aged 16



Source: British Cohort Study, 16-year-old and 30-year-old sweeps.

Figure 8.2 shows that whilst over 60% of men and women in the BCS whose combined parental income totalled more than £26,000 in 1986 ended up getting degrees, the proportion in households where income was less than £5,200 was less than 25%. This indicates that the likelihood of getting a degree is certainly correlated with parental income, although by itself this does not tell us anything about the *causal impact* of low parental income in childhood on the likelihood of entering HE. For example, it could be that the likelihood of entering HE is affected by some measure of ability that is genetic and transmitted down through generations. However, the data do show that, even before student loans were introduced, access to university was greater for children from higher-income backgrounds.

8.4 The design of a graduate tax

As already stated, a graduate tax is simply an income tax supplement payable by all graduates. However, there are a number of issues that need to be considered in the design of a graduate tax system:

- At what rate should the graduate tax be set?
- Should it be payable on total income or just earnings?
- At what threshold of income should the graduate tax be payable – should it be the same as the income tax thresholds or not? Should the tax rate vary with income above this threshold?
- Should the graduate tax be payable for life or for only a set period? Should repayments cease once the cost of tuition has been met? Should the rates differ for people with postgraduate qualifications?
- Should it apply retrospectively to current graduates?

If we wanted to finance higher education (or at least the costs of tuition) entirely from a graduate tax, it would clearly have to be set at a rate such that the funds it generates can pay for not only the existing system of HE but also an expanded HE sector in accordance with the government's target. However, the higher the rate at which the graduate tax is set, the greater the disincentive effect to participate in HE will be, and so these considerations will need to be weighed up against one another.

Administratively, it would be simplest if the graduate tax were aligned with the existing tax system: then the payment could be triggered by a different tax code for graduates and non-graduates. This would be facilitated further if the graduate tax applied to earned income only. Alternatively, one might argue that the graduate tax should not become effective until the graduate starts to earn income above the national average, and therefore sees some 'return' on their HE investment. If the government believes that people who do very well from HE ought to pay more, then the rate could be progressive: that is, the supplement paid by graduates could increase as their earnings rise above certain threshold levels. This again would generate a trade-off between revenue-raising and incentives that is common to all income taxation.

There is also the question of whether repayments should be 'open-ended' or capped. A graduate tax payable for life or for a set period would effectively mean that there was no link between the cost of the HE course undertaken and the amount repaid. However, a system where payment stops once the cost of the course is repaid is effectively an income-contingent loan system rather than a true graduate tax. Such a system is in place in Australia.

Finally, the question of whether the tax should apply retrospectively is a difficult one. If a switch to a graduate tax were implemented immediately, then, as we argued above, there would be a period of several years where there was no revenue for the HE system to replace the lost fees, creating transitional problems that could be overcome by imposing it on current graduates. However, this would be very difficult both politically and in terms of

identifying current graduates in the tax system. It may be that some other transitional rules would need to be applied instead.

What proposals have there been?

Unfortunately, few concrete details have emerged from the government about the possible design of a graduate tax for the UK. Indeed, in the light of recent press comment, it is unclear whether the proposal is likely in the near future. Such emergent details as there are suggest that two alternative proposals have been mooted, one from the Treasury and the other from the DfES. Common to each is the restoration of maintenance grants, coupled with the replacement of 'soft' student loans at zero real interest rates with 'hard' loans at commercial rates. No administrative details have been forthcoming, and at present we have no figures for the size of the graduate tax or the value of the maintenance grant that would be reintroduced. If the government is seriously considering the possibility of introducing a graduate tax for the UK, then the issue should be addressed as soon as possible in a consultation document. Without more details, it is difficult to answer questions about the administrative burden that the graduate tax would impose – for example, 'Would it be left to employers to determine who was liable to pay it?' and 'How would the PAYE system need to be reformed?'. However, given that the graduate tax would not *replace* any part of the current system of HE funding, it is likely that its introduction would create some new administrative cost.

8.5 The distributional impact of introducing a graduate tax

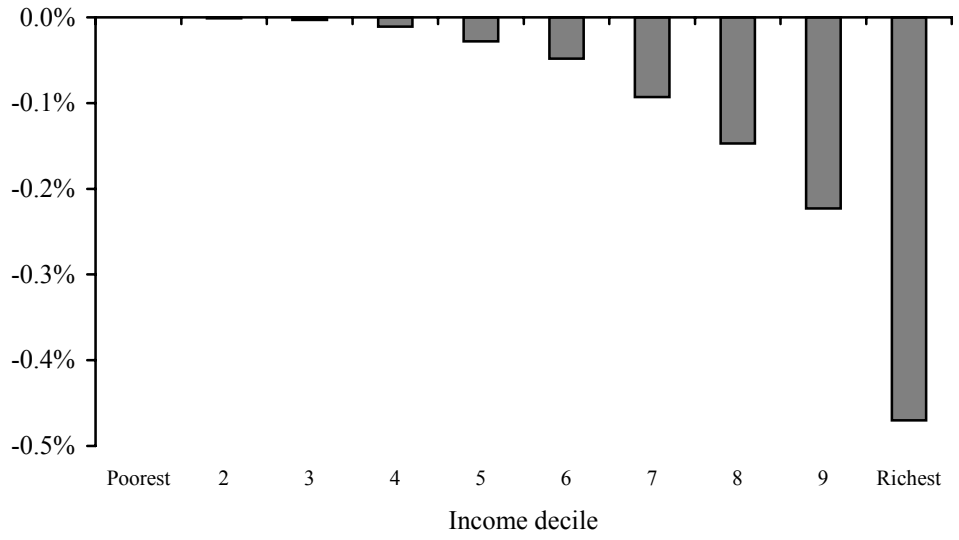
Having established that graduates are more likely to be in the upper echelons of the earnings distribution and come from relatively high-income families, we now turn to evaluate what the impact of a graduate tax scheme might be on the distribution of income in Great Britain. Of course, since it is unlikely that the tax would be imposed retrospectively on people who have already graduated, ideally we would wish to model the impact of the tax on *future* graduates, given some assumption about their future earnings and employment profiles and the future structure of the tax system. However, this exercise is tricky and would require a host of possibly arbitrary assumptions. Instead, we have modelled the imposition of a graduate tax on the current stock of graduates, treating the scheme as if it had been in operation for several decades and had attained some kind of 'steady state'. Thus we do not try to model any changes in the behaviour of prospective graduates arising from the decision to impose the graduate tax, only a suggestion of what the distributional effects might be if it had no effect on behaviour.

To keep matters simple, we model the graduate tax as an extra 1p in every pound of income taxed at the basic rate and above. So, whereas the basic and higher rates of tax for earned income in the tax system are currently 22% and 40%, in our graduate tax system they rise to 23% and 41% for people with higher-education qualifications. We assume that this payment applies to graduates in England, Wales and Scotland (the Family Resources Survey does

not contain data for Northern Ireland). Furthermore, we assume that graduates carry on paying income tax at these higher rates for life, rather than over a fixed repayment period or until some fixed amount of graduate tax has been paid. This is for simplicity of exposition rather than because we think that any actual implementation of a graduate tax would necessarily involve a payment for life.

The simulation was carried out using IFS's tax and benefit micro-simulation model, TAXBEN, run on recent data from the UK Family Resources Survey. Figure 8.3 divides families in the British population into deciles by income, taking account of family size, and shows the distributional impact of this simple graduate tax.

Figure 8.3. Average change in weekly income from a 1p-in-the-pound 'graduate tax'



Note: Income deciles are derived by dividing the total population into 10 equally sized groups according to household income adjusted for family size. Decile 1 contains the poorest tenth of the population, decile 2 the second poorest and so on, up to the top decile (decile 10), which contains the richest tenth.
Source: IFS tax and benefit model, TAXBEN, run using data from the 1998–99 Family Resources Survey.

As one might expect, given the earlier findings over the position of graduates within the earnings distribution, the graduate tax is strongly progressive. This is reinforced by the fact that most people in the poorest deciles of the income distribution do not have high enough incomes to pay any income tax at the basic rate. The richest 10% of families pay far more, on average, than any other decile, followed by the next-richest decile.

How much could a graduate tax raise?

TAXBEN estimates that the overall yield to the exchequer from a 1p graduate tax would be in the region of £1 billion per year. Considering maintenance payments first of all, figures from the Student Loans Company show that

around £2.2 billion was spent on loan payments to students in the 2000–01 academic year.[6] However, current students comprise about one-third of their age group, whereas in the working-age population as a whole, the proportion of graduates is only one-fifth. If we correct for this discrepancy by assuming a constant proportion of graduates all the way up the age distribution (as one might expect in a 'steady state'), then a graduate tax of around 1.3 pence at basic and higher rates would fund the costs of student maintenance fully. As for tuition costs, there are around 1.1 million 'full-time equivalent' publicly funded higher-education students currently studying.[7] Assuming a 25% contribution towards fees for each of them at the current level of £1,075 per year, the cost would be around £300 million per year.[8] This suggests that a graduate tax of around 1.6 pence on basic and higher rates would be required to replace the current portion of student maintenance and tuition costs that is met by fees and loans with funding from a graduate tax. To fund the entire costs of tuition through a graduate tax would require a total graduate tax of around 2.5 pence on basic and higher rates.

8.6 Conclusion

The recent interest in the graduate tax as a potential means of funding higher education is just the latest instalment of a debate on student finance that has been running for over a decade in the UK. As yet, it is unclear whether a formal consultation will be undertaken on the issue or whether any concrete policy proposals will be issued by the government, let alone whether a scheme will be adopted. This chapter has merely sought to shed some light on what the potential impact of a graduate tax scheme might be. Analysis of recent data shows that graduates are relatively well off, on average, compared with the rest of the population, and that they tend to come from families with above-average incomes. Further, a graduate tax scheme operating through increases in the basic and higher rates of income tax would have strongly progressive effects. Of course, there remains some debate as to how much of the HE budget we would wish to fund through a graduate tax and how much through loans or fees; in terms of the efficiency of the system, this depends on the size of the externalities to HE compared with the private benefits, although distributional concerns may entail higher rates of subsidy. However, there remain a number of important issues regarding the optimal design of a graduate tax, and the administration of payments, that the government has not yet addressed.

Alissa Goodman, Andrew Leicester and Howard Reed

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[6] Source: Student Loans Company, *Annual Report 2000–01* (www.slc.co.uk).

[7] Source: Department for Education and Skills, *Annual Report*, 2001. The 'full-time equivalent' figure counts a part-time student as 0.35 of a full-time student.

[8] Ibid.

Appendix A. Forecasting public finances

This appendix describes the techniques used for our public finance forecasts. It starts by comparing the forecasts made for borrowing in 2000–01 in last year's Green Budget and the November 2000 Pre-Budget Report with the eventual out-turn. It then goes on to explain in more detail our forecasts for the macroeconomy and for possible tax changes.

A.1 The accuracy of our previous forecasts

In 2000–01, the government ran a surplus on PSNB of £20.1 billion. This was higher than both the £10.1 billion surplus expected by the Treasury in the November 2000 PBR and the £15.9 billion forecast in the January 2001 IFS / Goldman Sachs Green Budget. Table A.1 shows both forecasts alongside the estimated out-turn for 2000–01 from the November 2001 PBR. The higher repayment of debt was due to a combination of higher receipts and lower spending than expected by either the Treasury or the IFS / Goldman Sachs forecast. Both the Treasury and IFS / Goldman Sachs forecasts were within 1% of the final out-turn in their prediction of current receipts. The IFS / Goldman Sachs forecast for current spending was also within 1% of the out-turn, while the Treasury prediction was within 2.5% as no allowance for underspending had been incorporated into the Treasury's estimate.

Table A.1. A comparison of last year's IFS / Goldman Sachs Green Budget forecast and the Treasury's November 2000 Pre-Budget Report forecast with the estimated out-turn for 2000–01 from the November 2001 Pre-Budget Report (£ billion)

	HM Treasury Pre-Budget Report forecast, November 2000	IFS / Goldman Sachs Green Budget forecast, January 2001	Estimate, Pre-Budget Report, November 2001
Current receipts	380.3	381.3	382.2
Total managed expenditure	371.6	367.1	363.5
Of which:			
Departmental expenditure limits	195.2	193.2	190.9
Annually managed expenditure	176.4	173.9	172.6
PSNB[a]	–10.1	–15.9	–20.1

[a] PSNB excludes spending financed by the windfall tax.

Table A.2 shows the breakdown of both the Treasury's and the IFS / Goldman Sachs main errors in forecasting tax receipts for 2000–01. Although the overall effect was an underestimate in receipts, both sets of predictions overestimated both VAT and fuel duty receipts. The largest underestimates were in income tax and social security contributions. The November 2000 PBR underestimated their yield by £1.8 billion and £0.8 billion respectively,

while the IFS / Goldman Sachs forecasts were £0.7 billion and £0.8 billion too low respectively.

Table A.2. IFS / Goldman Sachs Green Budget and Treasury main errors in forecasting tax receipts, 2000–01 (£ billion)

	Pre-Budget Report forecast, November 2000	IFS / Goldman Sachs Green Budget forecast, January 2001
Income tax[a]	–1.8	–0.7
Corporation tax	–0.2	–0.2
Value added tax	0.7	0.7
Fuel duties	0.6	0.9
Social security contributions	–0.8	–0.8
Council tax	–0.3	–0.3
Other	–0.1	–0.5
Total	*–1.9*	*–0.9*

[a] Net of tax credits.
Source: Out-turn figures for 2000–01 from HM Treasury, *Pre-Budget Report*, Cm. 5318, London, November 2001.

A.2 Techniques used in our forecasts

For the current financial year, three different sources of information are examined before coming to a judgement for each element of government revenue. In addition to the latest Treasury forecast from the November 2001 PBR, we use information from the revenues implied by a current receipts method, and the IFS modelled approach.[1]

1. **Information from current receipts.** The current receipts method uses the information on the receipts received in the current financial year compared with that received up to the same point in the last financial year. An estimate for the current year's receipts is then provided using the following formula:

$$\textit{2001–02 forecast} = \frac{\textit{Receipts received so far this year}}{\textit{Receipts received to the same point last year}} \times \textit{2000–01 receipts}.$$

   While this is useful when forecasting revenues in the current financial year, it cannot provide projections for receipts in future years. Caution should also be used when revenues are cyclical or changes have been made that may affect the timing of payments – for example, the effect of changing the date at which tobacco duties are increased on the incentives for forestalling.

2. **The IFS modelled receipts approach.** This estimates growth in each of the taxes using forecasts for the growth in the tax base relevant to each tax, combined with an estimate of the elasticity of revenue with respect to the growth in the tax base. Information on the revenue effects of pre-

[1] For a more detailed explanation of both these techniques, see C. Giles and J. Hall, 'Forecasting the PSBR outside government: the IFS perspective', *Fiscal Studies*, vol. 19, no. 1, pp. 83–100, 1998.

announced tax changes from previous Budgets is then added in order to reach a forecast. Hence modelled receipts can be summarised by the following formula:

2001–02 forecast = (2000–01 receipts × Tax-base change × Elasticity) + Tax changes.

This technique enables forecasts to be made for future years, given the expected structure of the tax system. It should be noted that these forecasts become considerably less accurate for later years, since forecasts for changes in tax bases, estimates of elasticities and the impact of tax changes all become less accurate.

The elasticities are largely estimated from TAXBEN, the IFS tax and benefit model. The estimates for income tax elasticities are supplemented by a model of the responsiveness of income tax revenues to changes in employment and wages. For fuel, an elasticity calculated from previous IFS research is used.[2] Elasticities for beer, spirits, wine and tobacco duties are taken from the median elasticity found in a range of UK studies.[3]

A.3 Forecasts for 2001–02

The Green Budget forecast is a judgement based on the Treasury's latest forecast contained in the November 2001 PBR, the current receipts and the IFS modelled approach. Each of these is presented in Table A.3. Overall, we expect marginally higher receipts than the Treasury. The similarity in the forecasts is due to there being very little additional information available since the forecast in the PBR was made.

Inland Revenue receipts

For **income tax**, we forecast £103.5 billion, which is higher than the £102.1 billion (net of tax credits) forecast by the Treasury. Our estimate takes into account the fact that the current receipts estimate is for £105.0 billion (assuming capital gains tax of £2.9 billion), but corrects for an expected reduction in the strength of income tax receipts towards the end of the financial year. Our forecast for **corporation tax** is £33.3 billion, in line with the Treasury's prediction. The changes to the corporation tax payment structure announced in the March 1998 Budget mean that very little information is contained in either the current receipts or the modelled receipts forecasts. Our prediction for **social security contributions** is £63.5 billion, lower than the PBR's £64.3 billion. This reflects the lower prediction of £61.6 billion that emerges from the IFS forecasting model.

[2] L. Blow and I. Crawford, *The Distributional Effects of Taxes on Private Motoring*, Commentary no. 65, Institute for Fiscal Studies, London, 1997.

[3] M. Chambers, 'Consumers' demand and excise duty receipts equations for alcohol, tobacco, petrol and derv', Government Economic Service, Working Paper no. 138, August 1999.

Table A.3. Forecasts for government borrowing in 2001–02 (£ billion)

	Pre-Budget Report Nov. 2001	*Current receipts*	*IFS forecasting model*	*IFS forecast judgement*
Inland Revenue				
Income tax[a]	102.1	107.9[j]	104.5	103.5
Corporation tax[b]	33.3	34.2	32.8	33.3
Petroleum revenue tax	1.4	1.5	1.5	1.4
Capital gains tax	2.9	n/a	3.3	2.9
Inheritance tax	2.4	2.4	2.2	2.4
Stamp duties	7.4	7.2	8.6	7.4
Social security contributions	64.3	64.8	61.6	63.5
Total Inland Revenue (net of tax credits)	**213.8**	**218.1**	**214.5**	**214.4**
Customs and Excise				
Value added tax (VAT)	61.3	60.9	61.9	61.3
Fuel duties	22.2	21.7	22.1	22.1
Tobacco duties	7.8	7.4	8.2	7.8
Spirit duties	1.9	1.9	1.9	1.9
Wine duties	2.0	2.0	1.9	2.0
Beer and cider duties	3.0	3.0	3.1	3.0
Betting and gaming duties	1.4	1.5	1.6	1.4
Air passenger duty	0.8	0.9	1.0	0.8
Insurance premium tax	1.8	1.9	1.8	1.8
Landfill tax	0.5	0.6	0.5	0.5
Climate change levy	0.6	0.6	0.6	0.6
Customs duties and levies	2.1	2.1	2.2	2.1
Total Customs and Excise	**105.4**	**104.3**	**106.8**	**105.3**
Vehicle excise duties	4.5	4.1	4.1	4.1
Oil royalties	0.5	0.6	0.5	0.5
Business rates[c]	18.1	17.5	18.1	18.1
Council tax	14.8	14.7	14.8	14.8
Other taxes and royalties[d]	9.6	9.5	9.2	9.6
Total taxes and social security contribns[e]	**366.7**	**368.8**	**367.5**	**366.9**
Accruals adjustments on taxes	0.3	0.3	0.3	0.3
less Own resources contribution to EU	–5.8	–5.8	–5.8	–5.8
less PC corporation tax payments	–0.1	–0.1	–0.1	–0.1
Tax credits[f]	6.1	6.1	6.1	6.1
Interest and dividends	4.3	4.3	4.3	4.3
Other receipts	19.7	19.7	19.7	19.7
Current receipts	**391.1**	**394.5**	**391.8**	**391.4**
Current spending[g]	**380.8**	**378.2**	**378.2**	**378.2**
Windfall tax and associated current sp.[h]	n/a	0.9	0.9	0.9
Current balance[i]	**11.1**	**17.2**	**14.5**	**14.0**
Net investment	12.9	12.9	12.9	12.9
Windfall tax and associated capital sp.[h]	N/a	–1.3	–1.3	–1.3
Public sector net borrowing[i]	**1.4**	**– 1.7**	**– 2.0**	**–1.6**

[a] Net of working families' tax credit and children's tax credit. [b] Includes advance corporation tax (net of repayments); also includes North Sea corporation tax after ACT set-off, and corporation tax on gains. Gross of R&D tax credit. [c] Includes district council rates in Northern Ireland. [d] Includes money paid into the National Lottery Distribution Fund. [e] Includes VAT and 'traditional own resources' contributions to EU budget. Net of tax credits, cash basis. [f] Excludes children's tax credit, which scores as a tax repayment in the National Accounts. [g] In line with the National Accounts, depreciation has been included as current expenditure. [h] Removes spending financed by the windfall tax. [i] Excludes spending financed by the windfall tax. [j] Includes capital gains tax.

Sources: Treasury forecasts from HM Treasury, *Pre-Budget Report*, Cm. 5318, November 2001; this table is similar to Table B11 (p. 180). Authors' calculations.

Customs and Excise taxes

We forecast **VAT** receipts equal to the Treasury's £61.3 billion, which reflects a marginally higher weight given to the current receipts methodology than to the IFS forecasting model. We forecast that **fuel duties** will yield £22.1 billion. This is the amount predicted by the IFS forecasting model and is higher than the current receipts outcome, but slightly lower than the Treasury's expected £22.2 billion forecast.

Other government receipts

For most other receipts, we take the Treasury's forecast. This not the case, though, for **vehicle excise duty**, where we expect receipts to be £0.4 billion lower than the Treasury predicted, at £4.1 billion. This estimate corresponds to the prediction from the IFS forecasting model and is consistent with the current receipts model.

Government expenditure

We forecast current spending to equal £378.2 billion, which is £2½ billion lower than the Treasury's forecast. We assume that there will be an underspend on current DELs of some £2½ billion. We expect AME spending to be in line with the Treasury's forecast and we also expect to see net investment of £12.9 billion, as anticipated by the Treasury.

Government borrowing

As a result of lower government spending and slightly higher revenues, we forecast a **surplus on current budget** of £14.0 billion for 2001–02. This is some £2.9 billion higher than the £11.1 billion forecast by the Treasury. We forecast that **public sector net borrowing** will be a repayment of £1.6 billion, while the Treasury expects to be borrowing a total of £1.4 billion, according to the PBR.

A.4 Medium-term forecasts

Any assessment of the fiscal stance, and whether the Chancellor is going to be successful in meeting his two fiscal rules, should be judged over the economic cycle. Table A.4 presents the macroeconomic forecasts underlying the baseline IFS forecast for government borrowing. We use the Treasury's forecast for GDP growth of 2% in 2001–02 and 2¼% in 2002–03. Beyond 2002–03, we expect growth at 2½% for 2003–04 before falling to the cautious long-term growth rate of 2¼% until 2006–07. Again, these are the same as the Treasury's expectations.

Table A.4. Main macroeconomic assumptions used in the baseline forecast

% growth in variable	**2001-02**	**2002-03**	**2003-04**	**2004-05**	**2005-06**	**2006-07**
Gross domestic product (GDP)	2	2¼	2½	2¼	2¼	2¼
Real consumers' expenditure	3¾	2¾	2¼	2¼	2¼	2¼
Corporate profits (lagged 1 year)	6¼	4	2	6¼	6	4¾
Employment (lagged 1 year)	¼	½	0	0	0	0
Real wage growth	2½	2	2½	2	2	2
GDP deflator	2½	2½	2½	2½	2½	2½

Sources: GDP forecasts from Table B3 of HM Treasury, *Pre-Budget Report*, Cm. 5318, London, 2001. Consumers' expenditure based on Table A9 of HM Treasury, *Pre-Budget Report*, Cm. 5318, London, 2001 until 2003–04 and following GDP growth thereafter. Corporate profits and employment figures – IFS estimates consistent with HM Treasury predictions. Real wage growth from independent forecasts for 2001–02; estimates thereafter based on GDP growth. GDP deflator from Table B3 of HM Treasury, *Pre-Budget Report*, Cm. 5318, London, 2001.

Appendix B: Budgets since 1979

This appendix summarises the main tax measures introduced in each Budget since 1979. Statutory indexation of thresholds and limits is not included.

1979 Budget, Geoffrey Howe

Income tax	Basic rate cut from 33% to 30%.
	Top rate cut from 83% to 60% on earned income and from 98% to 75% on unearned income.
VAT	Two-tier rates of 8% and 12.5% replaced by single 15% rate.
Excise duties	Alcohol and tobacco duties reduced; petrol duty increased.
Company taxes	Petroleum revenue tax rate increased from 45% to 60%.

1980 Budget, Geoffrey Howe

Income tax	Reduced rate of 25% abolished.
National Insurance	Employee rate increased from 6.5% to 6.75% (contracted in).
	Employer rate increased from 10% to 10.2% (contracted in).
Capital taxes	Stamp duty threshold on property increased from £15,000 to £20,000.
	Capital transfer tax threshold doubled from £25,000 to £50,000.
Company taxes	Petroleum revenue tax rate increased from 60% to 70%.

1981 Budget, Geoffrey Howe

Income tax	Personal allowances frozen in cash terms, implying a cut in real terms.
National Insurance	Employee rate increased from 6.75% to 7.75% (contracted in).
Excise duties	Sharp increases (beer and petrol up 24%, cigarettes up 16%).

1982 Budget, Geoffrey Howe

Income tax	Personal allowances increased in real terms.
National Insurance	Employee rate increased from 7.75% to 8.75% (contracted in).
	Employer National Insurance surcharge reduced from 3.5% to 2%, and to 1.5% from April 1983.
Capital taxes	Indexation provisions introduced for capital gains tax.
	Stamp duty threshold on property increased from £20,000 to £25,000.
Company taxes	Petroleum revenue tax rate increased from 70% to 75%.

1983 Budget, Geoffrey Howe

Income tax	Personal allowances increased in real terms.
	Mortgage interest relief ceiling raised from £25,000 to £30,000.
National Insurance	Employee rate increased from 8.75% to 9% (contracted in).
	Employer National Insurance surcharge cut from 1.5% to 1%.
Company taxes	Licence royalties abolished for all new oilfields.

1984 Budget, Nigel Lawson

Income tax	Personal allowances increased in real terms.
	Investment income surcharge abolished.
	Relief on life assurance premiums abolished for new policies.
National Insurance	Employer National Insurance surcharge abolished.
Excise duties	Duty on wine cut sharply; increases on beer and cigarettes.
Capital taxes	Stamp duty threshold on property increased from £25,000 to £30,000.
	Highest rate of stamp duty reduced from 2% to 1%.
	Top rate of capital transfer tax cut from 75% to 60%.
Company taxes	Corporation tax rate to be reduced from 52% in 1982–83 to 50% in 1983–84, 45% in 1984–85, 40% in 1985–86 and 35% in 1986–87.
	Stock relief abolished.
	First-year allowances to be phased out and replaced by 25% writing-down allowances.

1985 Budget, Nigel Lawson

Income tax	Personal allowances increased in real terms.
National Insurance	Employee and employer contributions restructured, with reduced rates for lower earners.
	Upper ceiling on employer contributions abolished.
Company taxes	Development land tax abolished.

1986 Budget, Nigel Lawson

Income tax	Basic rate reduced from 30% to 29%.
	Announcement of the introduction of tax relief for profit-related pay (PRP) schemes in 1987.
	Tax relief for Personal Equity Plans (PEPs) introduced.
Capital taxes	Capital transfer tax replaced with inheritance tax.
	Stamp duty for shares reduced from 1% to 0.5%.

1987 Budget, Nigel Lawson

Income tax	Basic rate reduced from 29% to 27%.
Excise duties	Duties held constant in cash terms, implying a real cut.
Capital taxes	Inheritance tax threshold increased from £71,000 to £90,000.
	Number of inheritance tax rates cut from seven to four.
	New arrangements to encourage personal pensions.

1988 Budget, Nigel Lawson

Income tax	Personal allowances increased in real terms.
	Basic rate reduced from 27% to 25%.
	All rates above 40% abolished.
	Announcement of separate taxation of husband and wife from 1990.
	Company car scale charges doubled.
Capital taxes	Capital gains accruing before 1982 written off for capital gains tax purposes.
	Capital gains tax rates changed to equal marginal income tax rates.
	Inheritance tax threshold increased from £90,000 to £110,000.
	Inheritance tax rates reduced to a single rate of 40%.

1989 Budget, Nigel Lawson

Income tax	Limit for higher age relief reduced to 75.
	Age allowance taper reduced to 50%.
	Pensioner 'earnings rule' abolished.
	PEPs extended.
National Insurance	Employee 5% and 7% bands abolished.
	Lower 2% rate for employees introduced on earnings below lower earnings limit.
Excise duties	Petrol duties adjusted to favour unleaded fuel.

1990 Budget, John Major

Income tax	Basic-rate limit frozen.
	Employer-provided work-place nurseries exempted from tax.
	Introduction of Tax-Exempt Special Savings Accounts (TESSAs).
	Abolition of composite rate of tax announced.
Capital taxes	Plans for abolition of stamp duty on shares announced.
Company taxes	Corporation tax rate cut from 35% to 34%.

1991 Budget, Norman Lamont

Income tax	Married couple's allowance frozen.
	Mortgage interest relief restricted to the basic rate of tax.
	PEPs extended.
	Company car scale charges raised by 20%.
National Insurance	Employer contributions to be charged on company cars and free fuel from 1992–93.
VAT	Standard rate of VAT raised from 15% to 17.5%.
Company taxes	Corporation tax rate cut from 34% to 33%.

Local taxes	Community charge bills subsidised by £140 per adult.

1992 Budget, Norman Lamont

Income tax	Reduced rate of 20% introduced on first £2,000 of taxable income. Married couple's allowance frozen. Basic-rate limit frozen. PEPs limit on investment and unit trusts raised from £3,000 to the overall limit, £6,000.
Excise duties	Further widening in leaded–unleaded petrol duty differential. Car tax halved from 10% to 5% and abolished from November 1992.

1993 Spring Budget, Norman Lamont

Income tax	20% band widened to £3,000 by April 1994. Personal allowances and basic-rate limit frozen. Married couple's allowance and mortgage interest relief restricted to 20% from April 1994.
National Insurance	Contribution rates for employees and self-employed up 1 percentage point from April 1994.
VAT	Extended to domestic fuel at 8% from April 1994 and at 17.5% from April 1995.
Excise duties	Duties increased above inflation, except spirits (frozen). Announced commitment to increase duties on road fuel by at least 3% p.a. in real terms.
Capital taxes	Stamp duty threshold doubled to £60,000.
Company taxes	Advance corporation tax (ACT) rate reduced to 22.5% from April 1993 and to 20% from April 1994. Dividend 'tax credit' down to 20%. Basic rate of tax on dividends reduced to 20%.
Local taxes	Community charge abolished, council tax introduced.

1993 Autumn Budget, Kenneth Clarke

Income tax	Personal allowances and basic-rate limit frozen. Married couple's allowance and mortgage interest relief restricted to 15% from April 1995.
National Insurance	Main rate for employer contributions reduced by 0.2 of a percentage point to 10.2%. Lower rates of employer contributions reduced by 1 percentage point.
Excise duties	No increase on spirits and beer. Most other duties increased above indexation. Commitment to raise tobacco duties by at least 3% p.a. in real terms. Commitment to raise road fuel duties by at least 3% p.a. in real terms increased to 5% p.a. in real terms. Insurance premium tax and air passenger duty introduced.

1994 Budget, Kenneth Clarke

Income tax	All age-related personal allowances increased above inflation.
VAT	Abandonment of second stage of VAT on domestic fuel – rate to stay at 8%.
Excise duties	Alcohol duties raised by an average of 4%. Tobacco duties increased by more than inflation. Duties on road fuel increased above inflation; diesel duties brought in line with duties on unleaded petrol.
Other	Landfill tax planned for 1996 and businesses to be compensated through lower employer National Insurance contributions.

1995 Budget, Kenneth Clarke

Income tax	Basic rate of income tax reduced from 25% to 24%. Personal allowances increased above inflation. Lower-rate band and basic-rate limit increased by more than indexation. Tax on savings income cut from 25% to 20% for basic-rate taxpayers.

National Insurance	Tax relief on Class 4 National Insurance contributions withdrawn.
	Main rate for employers cut from 10.2% to 10% from April 1997.
	Rate of Class 4 contributions reduced from 7.3% to 6%.
Excise duties	Beer, wine and most cider duties frozen; spirits cut by 4%.
	Most tobacco duties up by 3% in real terms.
	Petrol and diesel tax (duty and VAT) raised by 3.5p per litre, or 5% real increase.
Capital taxes	Inheritance tax threshold raised to £200,000, £40,000 more than indexation.
Company taxes	Small companies' rate cut from 25% to 24%.
Other taxes	Landfill tax introduced at two rates, of £2 and £7 per tonne.

1996 Budget, Kenneth Clarke

Income tax	Personal allowances increased by more than inflation.
	Basic-rate limit and married couple's allowance indexed.
	Basic rate cut to 23%.
	Tax relief for profit-related pay phased out from 1998–99.
Excise duties	Beer, wine and cider duties frozen; duty on spirits cut by 4%.
	Air passenger duty doubled, insurance premium tax up to 4%.
	Tobacco up by 5% in real terms, hand-rolling tobacco indexed.
	Petrol and diesel up by 5% in real terms.
Company taxes	Small companies' rate cut to 23%.
	Capital allowances cut for long-lived assets.
Local taxes	Transitional relief for small companies extended.

1997 Summer Budget, Gordon Brown

Income tax	Mortgage interest relief cut to 10% from April 1998.
VAT	Rate on domestic fuel cut from 8% to 5%.
Excise duties	Road fuel duties commitment raised from 5% p.a. to 6% p.a. real increase.
	Tobacco duty commitment raised from 3% p.a. to 5% p.a. real increase.
Capital taxes	Graduated stamp duty introduced: 1% for properties between £60,000 and £250,000; 1.5% between £250,000 and £500,000; 2% over £500,000.
Company taxes	Windfall tax on privatised utilities.
	Main corporation tax rate cut from 33% to 31% from April 1997.
	Small companies' rate cut from 23% to 21% from April 1997.
	Dividend tax credits for pension funds and other companies abolished immediately, for all others from April 1999.

1998 Spring Budget, Gordon Brown

Income tax	Working families' tax credit from October 1999.
	Married couple's allowance restricted to 10% from April 1999.
	Individual Savings Accounts (ISAs) from April 1999.
	Tax on company cars increased.
National Insurance	'Entry fee' abolished for employees from April 1999.
Excise duties	Differential widened between diesel and unleaded petrol.
Capital taxes	Personal capital gains tax reformed: indexation abolished and taper introduced.
	Stamp duty raised to 2% on properties between £250,000 and £500,000, 3% on properties over £500,000.
Company taxes	ACT abolished from April 1999 and quarterly payments system introduced.
	Main rate cut to 30%, small companies' rate to 20% from April 1999.

1999 Budget, Gordon Brown

Income tax	Basic rate cut from 23% to 22% from April 2000.
	New 10% starting rate from April 1999; 20% rate abolished.
	Married couple's allowance abolished from 2000 for under-65s.
	Children's tax credit announced from April 2001.
	Real increase in child benefit of 3% in April 2000.
	Mortgage interest relief abolished from April 2000.
	High mileage discounts for company cars reduced.

National Insurance	Starting point for payment of employee National Insurance contributions aligned with income tax by April 2001. Upper earnings limit raised above inflation for next three years. Self-employed structure reformed from April 2000. Employer contributions on all benefits in kind. Employer rate cut by 0.5 of a percentage point from April 2001.
Capital taxes	Stamp duty raised to 2.5% on properties between £250,000 and £500,000, 3.5% on properties over £500,000.
Company taxes	Climate change levy from 2001–02.

2000 Budget, Gordon Brown

Income tax	Working families' tax credit, child premiums in income support and children's tax credit increased.
National Insurance	Employer rate to be cut by 0.3 of a percentage point from April 2001, instead of 0.5 of a percentage point, to reflect reduction in climate change levy. Further cut in employer rate by 0.1 of a percentage point from April 2002, to balance introduction of aggregates levy.
Excise duties	Road fuel duty frozen in real terms. Cigarettes increased by 5% in real terms.
Capital taxes	Stamp duty raised to 3% on properties between £250,000 and £500,000, 4% on properties over £500,000.
Company taxes	Climate change levy cut by £0.7 billion from introduction in April 2001. Aggregates levy introduced from April 2002.

2001 Budget, Gordon Brown

Income tax	Working families' tax credit, child premiums in income support and children's tax credit increased. Overindexation of starting-rate band. ISA limit extended to £7,000 p.a. until April 2006.
Excise duties	Duties for ultra-low sulphur petrol cut by 2p and for ultra-low sulphur diesel cut by 3p. Tobacco duties increased with inflation; alcohol duties frozen.
Company taxes	Abolition of withholding tax on intra-UK corporate interest.

Appendix C: Government tax policy initiatives

This appendix lists the taxation policies where the government is either committed to, or has stated that it is considering, reforms.

Government committed to overall policy; details yet to be decided

Child tax credit

Working tax credit

See Chapter 5.

Capital gains relief for substantial shareholdings

Intangible assets relief

R&D tax credit for large firms

See Chapter 6.

Foreign exchange (FOREX)

The aim is to create a new, simpler regime for taxing foreign exchange gains and losses. This will be based closely on accounting treatment and will be aligned with the taxation of loan relationships and derivative contracts.

The regime should be finalised for Budget 2002 and will come into force for accounting periods starting on or after 1 October 2002.

Corporation tax: 10% band

The government is committed to extend the 10% rate of corporation tax in Budget 2002.

The government will announce the amount by which the band will be extended in Budget 2002.

Stamp duty exemption for disadvantaged areas

Budget 2001 legislated a stamp duty exemption for all properties in disadvantaged areas. As EU approval under State Aids rules had not been granted, the November 2001 Pre-Budget Report subsequently limited the relief to properties worth less than £150,000. The government intends to raise significantly, or abolish, this limit for non-residential property but will keep it for residential property.

The government is in negotiations with the EU about State Aids approval and is consulting on creating a statutory definition of residential property.

Community investment tax credit

The credit will provide tax relief for individuals and companies that invest in Community Development Finance Institutions. The credit will be worth 25% of the investment and can be offset against the investor's tax liabilities, spread evenly over five years. The aim is to attract greater flows of private investment into enterprises in disadvantaged communities.

Final decisions will be made on the structure of the credit in time for Budget 2002.

Enhanced capital allowances for energy-saving technologies

Enhanced capital allowances for investments in approved energy-efficient technologies were introduced in April 2001 as part of the climate change levy package of measures. Applications for new technologies, including ideas submitted through the Green Technology Challenge, are currently being considered and further additions to the scheme will be made in 2002–03.

Under formal consultation; no firm commitment to implement

Training tax credit

See Chapter 6.

Small business tax review

The aim is to simplify the way in which small businesses are required to calculate the tax due on their profits by aligning their profits for tax purposes much more closely with those reported in their accounts.

Following an initial consultation that produced a wide variety of responses, the government is consulting further on specific areas, such as eliminating the schedular system, rather than a general alignment. It is not committed to any timescale for this consultation.

Annuities

The government is concerned about whether people are getting value for money when they purchase an annuity from a defined contribution pension.

The government is expected to publish a consultation document in the near future on how to promote competition in the annuity market.

Employer-subsidised bus travel

The government is considering allowing employers to pay a subsidy to a local bus company to allow employees to be carried free or to pay reduced fares without this subsidy being taxable as a benefit in kind.

The government is not committed to any timescale for completing this consultation.

Enhanced capital allowances for cleaner road fuels and vehicles

The government is consulting on using enhanced capital allowances to develop cleaner road fuels and vehicles.

Proposals are being considered in the context of the government's consultation on 'Powering Future Vehicles'.

Haulage industry taxation

The government is consulting on the introduction of a new system of lorry road-user charging. The government has committed to ensuring that costs will not increase for the UK haulage industry when this system is introduced. This will be achieved through reductions in taxes levied on lorry ownership or use.

Tax reductions will be introduced when a new road charging system comes into operation.

Sport clubs charity tax relief

Budget 2001 launched a consultation about the best way for tax relief to help community amateur sports clubs that make a positive contribution to their local communities.

The government indicated in the Pre-Budget Report that it did not feel that it was necessary to introduce any special tax reliefs for community sports clubs. A final decision has been left until Budget 2002.

Vaccines tax credit

The government is consulting with the UK pharmaceuticals industry on a new tax credit to reward research and development into drugs and vaccines to treat diseases threatening lives in the least-developed countries. For companies undertaking research into specified diseases, it could provide an extra 50% relief on qualifying expenditure.

The government wants the pharmaceuticals industry to give a commitment to increase R&D into HIV/AIDS, tuberculosis and malaria.

Vehicle excise duty for motorcycles

The government is consulting on reforms to the VED treatment of motorcycles to reflect the environmental benefits of small motorcycles over cars.

Policies stated as under consideration

Capital gains tax non-business assets taper

See Chapter 6.

Corporation tax relief on share schemes

The government is examining whether a corporation tax deduction should be made available and how access to it could be streamlined for employee share awards and share options.

The government is not committed to any timescale for this measure, though progress is expected in Budget 2002.

Capital gains tax simplification

The government has committed to considering value-for-money options to simplify capital gains tax within the existing policy framework.

The government is considering unspecified options. It has not set a date for completion of this exercise.

Cross-border royalties: withholding tax

The government is considering an optional scheme for companies to pay cross-border royalties without deducting tax at source.

The government is not committed to any timescale for introducing this scheme.

Double tax relief simplification

The government has recognised concerns that the current double tax relief regime for taxing foreign dividends is in need of simplification. But it considers that the new system, introduced in Finance Acts 2000 and 2001, should be allowed to settle in before changes to it are contemplated.

The government is not committed to any timescale for this simplification.

Small breweries excise duty

To support small brewers, the government is considering the introduction of reduced rates of duty on the beer produced by smaller breweries.

A decision on whether to go ahead with this scheme is expected in Budget 2002.

Vehicle excise duty for vans

The government is considering reforms to the VED treatment of vans to promote the development and use of new technologies with environmental benefits.

The government is involved in discussions with the industry and others. Further announcements are expected in Budget 2002.

Appendix D: Headline tax rates and thresholds

	Current system 2001–02 level	Indexed 2002–03 level[a]
Income tax		
Personal allowance: under age 65	£4,535 p.a.	£4,615 p.a.
aged 65–74	£5,990 p.a.	£6,100 p.a.
aged 75 and over	£6,260 p.a.	£6,370 p.a.
Married couple's allowance restricted to 10%:		
aged 65–74 on 6 April 2000	£5,365 p.a.	£5,465 p.a.
aged 75 and over on 6 April 2000	£5,435 p.a.	£5,535 p.a.
Lower rate	10%	10%
Basic rate	22%	22%
Higher rate	40%	40%
Lower-rate limit	£1,880 p.a.	£1,920 p.a.
Basic-rate limit	£29,400 p.a.	£29,900 p.a.
Pension earnings cap	£95,400 p.a.	£97,200 p.a.
Tax rates on interest income	10%, 20%, 40%	10%, 20%, 40%
Tax rates on dividend income	10%, 32.5%	10%, 32.5%
Children's tax credit[b]	£5,200 p.a.	£5,290 p.a.
National Insurance		
Lower earnings limit	£72 p.w.	£75 p.w.
Upper earnings limit (UEL)	£575 p.w.	£585 p.w.
Earnings threshold (employee and employer)	£87 p.w.	£89 p.w.
Class 1 contracted-in rate: employee	10%	10%
employer	11.9%	11.8%
Class 1 contracted-out rate: employee	8.4%	8.4%
employer – below UEL	8.9%	8.8%
employer – above UEL	11.9%	11.8%
Corporation tax		
Rates: lower rate	10%	10%
small companies' rate	20%	20%
standard rate	30%	30%
Capital gains tax		
Annual exemption limit: individuals	£7,500 p.a.	£7,700 p.a.
trusts	£3,750 p.a.	£3,850 p.a.
Non-business assets: top-rate taxpayers	24%–40%	24%–40%
basic-rate taxpayers	12%–20%	12%–20%
Business assets: top-rate taxpayers	10%–40%	10%–40%
basic-rate taxpayers	5%–20%	5%–20%
Inheritance tax		
Threshold	£242,000	£247,000
Rate for transfer at or near death	40%	40%
Value added tax		
Standard rate	17.5%	17.5%
Reduced rate	5%	5%

Continues

Continued

	Current system 2001–02 level	Indexed 2002–03 level[a]
Excise duties		
Beer (pint)	28p	29p
Wine (75cl bottle)	116p	118p
Spirits (70cl bottle)	548p	560p
20 cigarettes: specific duty	185p	189p
ad valorem (22% of retail price)	96p	98p
Unleaded petrol (litre)	49p	50p
Ultra-low sulphur petrol (litre)	46p	47p
Ultra-low sulphur diesel (litre)	46p	47p
Air passenger duty		
Destinations within the EU: economy	£5	£5
club/first class	£10	£10
Destinations outside the EU: economy	£20	£20
club/first class	£40	£40
Betting and gaming duty		
Until 31 December 2001		
General betting duty	6.75%	n.a.
Pool betting duty	17.5%	n.a.
From 1 January 2002		
Gross profits tax	15%	15%
Spread betting rate: financial bets	3%	3%
other bets	10%	10%
Insurance premium tax		
Standard rate	5%	5%
Higher rate (for insurance sold accompanying certain goods and services)	17.5%	17.5%
Stamp duty		
Land and buildings: threshold	£60,000 p.a.	£60,000 p.a.
rate: up to £60,000	0%	0%
£60,000–£250,000	1%	1%
£250,000–£500,000	3%	3%
above £500,000	4%	4%
Stocks and shares: rate	0.5%	0.5%
Vehicle excise duty		
Graduated system for new cars from 1 March 2001	£90–£160	
Standard rate	£160 p.a.	
Small-car rate (engines up to 1,549cc)	£105 p.a.	
Heavy goods vehicles (varies according to vehicle type and weight)	£165–£1,850 p.a.	
Landfill levy		
Standard rate	£12 per tonne	£13 per tonne
Low rate (inactive waste only)	£2 per tonne	£2 per tonne
Local taxes		
Average rate band D council tax: England	£901	

[a] 2002–03 figures assume no discretionary changes apart from indexation and pre-announced measures.
[b] Allowance is available at a flat rate of 10% and is tapered away from families that include a higher-rate taxpayer.
Sources: Various HM Treasury, Inland Revenue and HM Customs and Excise Press Releases, March 2001; HM Treasury, Tax Ready Reckoner and Tax Reliefs, London, November 2001 (www.hm-treasury.gov.uk/mediastore/otherfiles/TRR01Draft6 - final.pdf); www.inlandrevenue.gov.uk/rates/; www.local.dtlr.gov.uk/finance/ctax/ctax012.htm.

Appendix E: Tax revenues ready reckoner

Table E.1. Direct effects of illustrative changes in taxation to take effect April 2002

	Cost/yield (non-indexed base) 2002–03 (£m)
Income tax	
Rates	
Change starting rate by 1p	490
Change basic rate by 1p[a]	2,750
Change higher rate by 1p[b]	945
Change basic rate in Scotland by 1p[a]	220
Allowances	
Change personal allowance by £100	550
Starting-rate limit	
Change starting-rate limit by £100	290
Basic-rate limit	
Change basic-rate limit by 1%	150
Change basic-rate limit by 10%:	
increase (cost)	1,350
decrease (yield)	1,700
Allowances and limits	
Change all main allowances, starting- and basic-rate limits:	
increase/decrease by 1%	520
increase by 10% (cost)	5,000
decrease by 10% (yield)	5,600
National Insurance	
Rates	
Change Class 1 employee rate by 1 percentage point	3,000
Change Class 1 employee rate by 1 percentage point	3,750
Change Class 2 (self-employed) rate by £1 a week	140
Change Class 4 (self-employed) rate by 1 percentage point	270
Allowances	
Change employee entry threshold by £2 per week	220
Change employer entry threshold by £2 per week	270
Change upper earnings limit by £10 per week	110

[a] Excludes savings income liable for tax at the reduced 20% basic rate.
[b] Includes dividend income taxable at the higher rate.

Continues

Continued

	Cost/yield (non-indexed base) 2002–03 (£m)
Corporation tax	
Change main rate by 1 percentage point	1,090
Change small companies' rate by 1 percentage point	230
Capital gains tax	
Increase annual exempt amount by £500 for individuals and £250 for trustees	10
Inheritance tax	
Change rate by 1 percentage point	60
Increase threshold by £5,000	35
Excise duties[c]	
Beer up 0.3p a pint	30
Wine up 1.4p a bottle (75cl)	15
Spirits up 6.4p a bottle (70cl)	5
Cigarettes up 3.6p a packet (20 king-size)	65
Petrol up 0.5p a litre	120
Diesel (ultra low sulphur) up 0.5p a litre	105
Change insurance premium tax (both standard and higher rates) by 1 percentage point	295
VAT	
Change both standard and reduced rates by 1 percentage point	3,690
VAT coverage	**2001–02**
Extend VAT to:	
food	8,700
construction of new homes	3,250
domestic and international (UK portion) passenger transport	1,950
books, newspapers and magazines	1,600
water and sewerage services	950
children's clothing	950
drugs and supplies on prescription	750

[c] Figures are calculated given the price and tax charged on a typical item. All changes are assumed to be implemented in April 2002, except the change to the insurance premium tax (July 2002).

Note: The revenue effect is computed for changes to the 2002–03 tax system and relates to the full-year effect.

Source: HM Treasury, *Tax Ready Reckoner and Tax Reliefs*, London, 2001 (www.hm-treasury.gov.uk/mediastore/otherfiles/TRR01Draft6%20-%20final.pdf).