

2. The fiscal policy framework

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Summary

- The Chancellor's tax and spending decisions are constrained by the golden rule (which states that the government should only borrow to invest on average over the economic cycle) and the sustainable investment rule (which states that public sector net debt should not rise above 40% of national income).
- The Treasury expects the current budget balance to swing from a deficit of 0.9% of national income in 2005–06 to a surplus of 0.8% over the next five years. Higher tax revenues are to deliver about three-quarters of this turnaround and a cut in public spending as a share of national income the remaining quarter.
- The Treasury believes that the economy is running 1.4% below potential this year and that half the swing from deficit to surplus will occur automatically as growth rebounds. Most independent economists believe that the economy is closer to full capacity, in which case the structural deficit would be deeper than the Treasury thinks.
- Most of the hoped-for increase in revenues is structural, rather than cyclical. Much is expected next year, thanks to higher tax payments from the financial sector, higher North Sea oil revenues and a year of 'fiscal drag' in income tax. Thereafter continued gains from fiscal drag are offset by falling VAT and excise duty revenues.
- The Chancellor has pencilled in growth in current spending of just 1.9% a year after economy-wide inflation over the three years of the 2007 Comprehensive Spending Review. If confirmed, this would reverse the increase over the 2004 Spending Review period and would be the least generous spending review under Labour to date.
- The Treasury has promised to meet the golden rule on average over the economic cycle. In the Pre-Budget Report (PBR), it 're-dated' the economic cycle from the seven years starting in 1999–2000 to the 12 years starting in 1997–98. If the Treasury's forecasts are correct, then this makes the rule easier to meet in this cycle and the next.
- For the fifth year running, the Treasury has had to downgrade its public finance forecasts between the Budget and the PBR. Based on its past forecasting record, the Chancellor has a more than 40% chance of breaking the golden rule and a 37% chance of breaking the sustainable investment rule in this economic cycle.
- Re-dating the cycle at such a convenient time risks undermining the credibility of the fiscal framework. The golden rule should be made more forward-looking and less reliant on a precisely dated economic cycle. If still required, the task of estimating the output gap could be handed to an independent body.

2.1 Introduction

This chapter discusses the policy framework within which the Chancellor takes his tax and spending decisions, and how recent developments and his latest forecasts for the public finances compare with the requirements of that framework. In Chapter 3, we discuss the Treasury's assumptions regarding the outlook for the economy on which these forecasts are based, highlighting the risks to its central expectations. In Chapter 5, we give our own forecasts for the public finances and ask if they are consistent with the policy framework.

This chapter begins by describing the rules the government has set itself to help persuade people that it will manage the public finances in a fair and responsible way (Section 2.2). It then describes the evolution of the public finances under Labour and the Treasury's forecasts (Section 2.3), before asking whether these are consistent with the fiscal rules (Section 2.4). Section 2.5 looks at possible reforms to the fiscal framework and Section 2.6 concludes.

2.2 The government's fiscal rules

In its 1997 general election manifesto, the Labour Party committed itself to two fiscal rules,¹ designed to convince voters and financial market participants that it would:

- share the burden of paying for public spending fairly between present and future taxpayers, with no bias against investment spending if policy had to be tightened;
- keep the public finances on a course expected to be sustainable without the need for significant policy changes.

To achieve these objectives, the new government formally adopted the 'golden rule' and 'sustainable investment rule' in the 1998 Finance Act. The Act also placed these rules in a broader statutory framework – a 'Code for Fiscal Stability' that requires any government to spell out how it intends to run fiscal policy and to publish twice-yearly forecasts illustrating how the setting of policy at any given time is consistent with its approach. But the Code leaves the government to decide whether or not to set itself any operating rules and, if it does, to decide whether those rules have been kept to or not. There is no penalty (other than potential reaction of voters and financial market participants) if they are missed.²

The golden rule

The golden rule states that the government will only borrow to fund investment. This implies that tax revenues should equal or exceed the remaining 'current' (or non-investment) spending. In other words, the so-called 'current budget' should be in balance or in surplus.

The rationale of the golden rule is broadly to ensure that future generations of taxpayers are only asked to repay debt that has financed spending from which they themselves are likely to

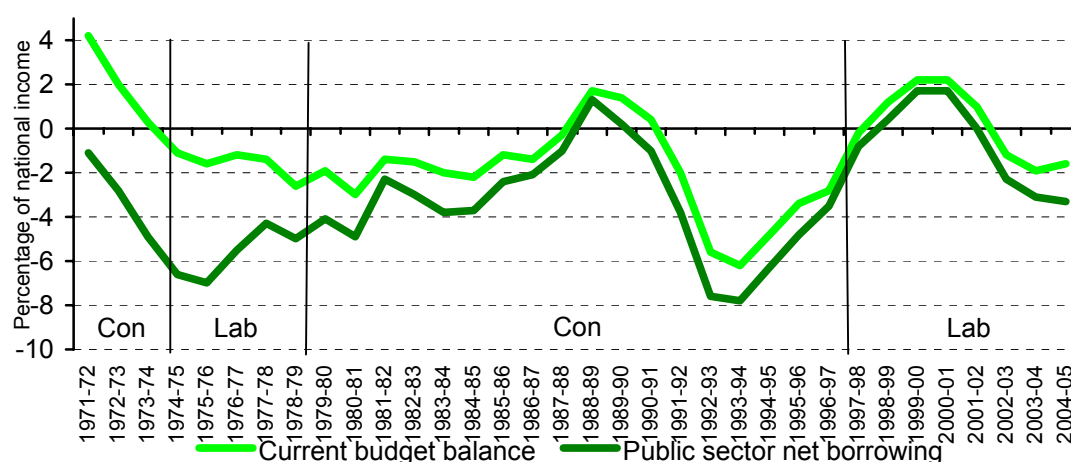
¹ A more detailed discussion of the government's fiscal rules can be found in C. Emmerson, C. Frayne and S. Love, *The Government's Fiscal Rules*, IFS Briefing Note no. 16, updated November 2005, <http://www.ifs.org.uk/bns/bn16.pdf>.

² For a detailed discussion, see C. Emmerson, C. Frayne and S. Love, 'Updating the UK's Code for Fiscal Stability', IFS Working Paper no. W04/29, 2004, http://www.ifs.org.uk/publications.php?publication_id=3163.

benefit. By constraining current rather than overall spending, the rule is also intended to reduce any undue incentive for policymakers to make disproportionate cuts in infrastructure spending if and when spending plans have to be cut. Cutting capital spending might be more tempting than cutting current spending as it normally takes longer for voters to feel the effects in terms of the quality of public services.³ As we discuss in Section 2.5, the golden rule will not necessarily achieve the former objective with any precision and it is therefore of no great direct economic significance if the rule is met or missed by a small margin either way. But in the majority of cases, it may nonetheless be a useful rule of thumb if applied appropriately.

Figure 2.1 shows the current budget balance as a share of national income since 1971–72. It shows that the Conservatives posted the biggest deficit in this period at 6.2% of national income in 1993–94, reflecting the impact of the recession of the early 1990s and rapid spending growth in the run-up to the 1992 election. By the time Labour came to power, the deficit had halved, reflecting stronger economic growth and the tough Budgets implemented during Norman Lamont’s and Kenneth Clarke’s Chancellorships. As we discuss in more detail in Section 2.3, the current budget initially moved into surplus under Labour before moving back into the red in 2002–03.

Figure 2.1. Current budget balance and public sector net borrowing



Source: HM Treasury, *Public Finances Databank*, London, December 2005, http://www.hm-treasury.gov.uk/media/576/54/public_fin_databank_dec_05.xls.

Figure 2.1 also shows public sector net borrowing as a share of national income. This is the broadest measure of the government’s borrowing and includes the amount the government has to borrow to fund investment. Public sector net investment – the gap between the two lines – is much smaller at the end of the period than at the beginning, in large part reflecting the privatisation of capital-intensive utilities and less building of social housing with the switch to subsidising housing costs for the less well-off through housing benefit. The gap has begun to widen slightly again in the last few years as Labour has deliberately sought to invest more. It has taken the government longer than it expected to turn investment around and it

³ For a discussion, see HM Treasury, *Fiscal Policy: Current and Capital Spending*, London, 1998, <http://www.hm-treasury.gov.uk/media/A97/77/530.pdf>.

was only in 2004–05 that it exceeded the average level recorded under the Conservatives since 1979.

When analysing the health of the public finances, it is important to remember that government revenues and spending are influenced directly by the strength of the economy. Economic activity can be thought of as fluctuating around a sustainable level (that typically rises) determined by underlying movements in productivity (output per worker) and the supply of labour. The difference between the sustainable level of economic activity and its actual level is known as the ‘output gap’. When the economy is weak and activity is below the sustainable level consistent with stable inflation, revenue from taxes on incomes, spending, production and transactions will automatically be depressed, while the government is also likely to have to spend more on transfer payments for the low-paid and out-of-work. This will tend to push the current budget into deficit. The opposite is true when the economy is overheating and activity is above its sustainable level – tax revenues will be higher temporarily and spending on transfer payments will be reduced, thus pushing the current budget into surplus.

With taxes and spending both equal to roughly 40% of the economy, if national income were to rise by 1% with no change in the cash value of revenues or spending, they would both fall by about 0.4% of national income when compared with the size of the economy. Treasury estimates suggest that, in addition to this ‘denominator’ effect, over the following two years we would see spending on transfer payments and debt interest payments drop by a combined effect of 0.1% of national income and revenues rise by 0.6% of national income. Adding the two effects together, after a 1% rise in national income relative to its sustainable level, we would see current spending fall by about 0.5% of national income while current receipts rise by about 0.2% of national income over the following two years. The net effect is to increase the current budget surplus by about 0.7% of national income.⁴

The Bank of England is tasked with using interest rates to pursue an inflation target, which implies that over the medium to long term, it will try to keep activity as close as possible to the sustainable level (although it would probably not describe its actions in this way). Therefore, over time, monetary policy should tend to erode any cyclical surplus or deficit (even if shocks and policy errors mean that it is not eliminated *ex post*). This implies that fiscal policy should focus predominantly on dealing with any weakness in the structural budget position – namely, any weakness in the government’s finances that cannot be attributed to temporary phenomena, such as the economic cycle. To achieve this, the Treasury has specified that the golden rule does not have to be met every year, but only on average over the ups and downs of the economic cycle.

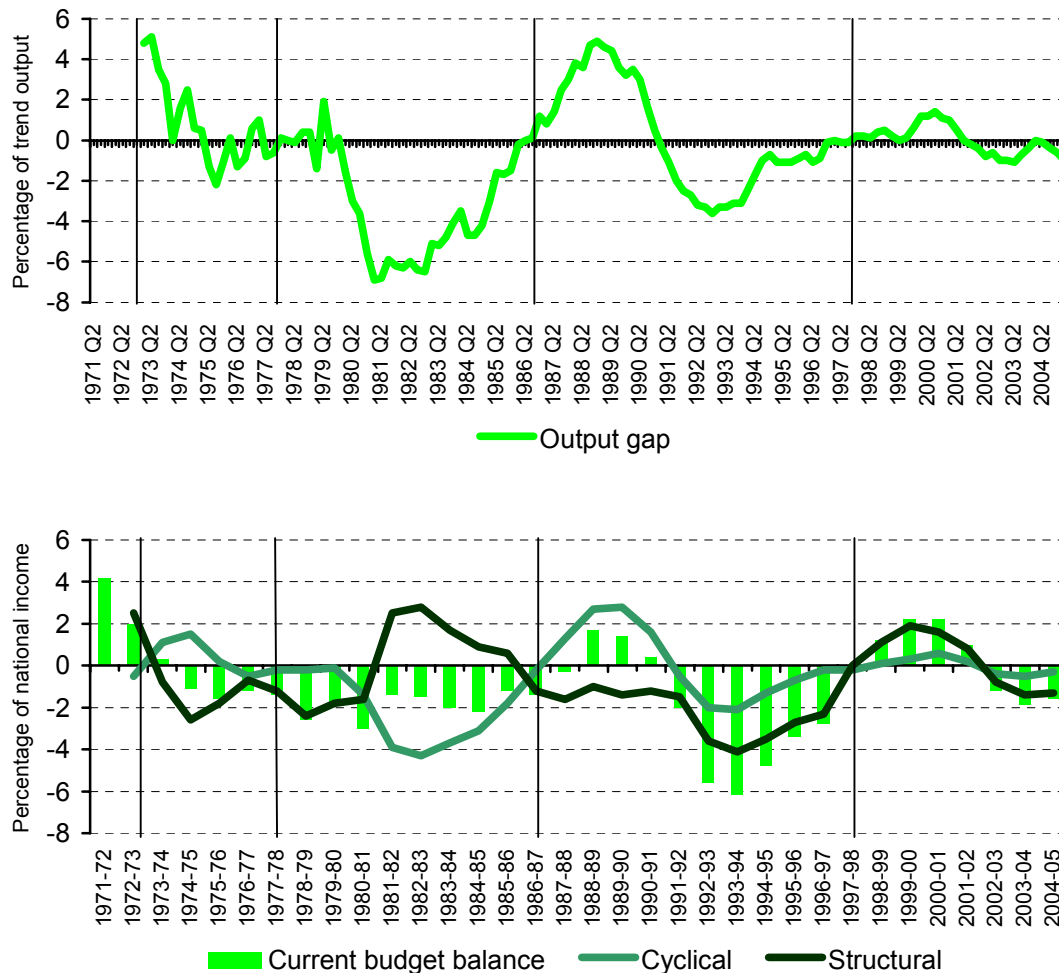
Allowing borrowing to rise and fall through the cycle acts as an ‘automatic stabiliser’. If the government tried to keep the current budget balanced throughout the cycle, it would have to raise taxes and/or cut spending when a negative output gap leads to a cyclical deficit. Conversely, it would have to cut taxes and/or increase spending when a positive output gap leads to a cyclical surplus. This would place a greater burden on monetary policy to stabilise the economy. It would also require temporary changes in tax rates that might well be more

⁴ Source: Appendix A of HM Treasury, *End of Year Fiscal Report*, December 2003, http://www.hm-treasury.gov.uk/media/324/70/end_of_year_352%5B1%5D.pdf.

costly in economic terms than holding tax rates steady and allowing the current budget to fluctuate instead.

It should be noted, however, that the sustainable level of economic activity cannot be observed directly and that the output gap is hard to estimate with any certainty. We discuss the uncertainty surrounding estimates of the output gap in Section 2.4 and Chapter 3.

Figure 2.2. Current budget balance: cyclical and structural



Note: Output gap is actual output less trend output as a percentage of trend output (non-oil basis).
 Sources: Output gap from HM Treasury (consistent with December 2005 PBR). Current budget balances from HM Treasury, *Public Finances Databank*, London, December 2005, http://www.hm-treasury.gov.uk/media/576/54/public_fin_databank_dec_05.xls.

Figure 2.2 shows the Treasury’s 2005 Pre-Budget Report (PBR) estimate of the average output gap in each financial year back to 1971–72 and the corresponding breakdown of the current budget balance into cyclical and structural components. It shows that:

- weak economic activity kept the current budget in deficit during the early and mid-1980s despite the substantial policy tightening announced in the 1981 Budget;
- the boom of the mid- and late 1980s pushed the current budget into surplus even though the underlying structural position remained in deficit;
- cyclical and structural deficits compounded each other in the early to mid-1990s;

- changes in economic conditions have modestly amplified both the move into surplus and the subsequent return to deficit since 1997.

The Treasury estimates for itself when economic cycles begin and end – and thus the period over which it assesses whether the golden rule is being adhered to. (The vertical lines in Figure 2.2 show the Treasury’s dating of recent economic cycles.) As we discuss in Section 2.4, the precise dates chosen for the cycle can make a big difference to the government’s chances of meeting the rule. Since Budget 2005, the Treasury has published revised output gap estimates and re-dated the present cycle in a way that, assuming the Treasury’s public finance forecasts are correct, has made the golden rule easier to meet in both this cycle and the next.

As we discuss in Section 2.5, defining a particular period as ‘a cycle’ and seeking to balance the current budget over this period is not the only way to allow the automatic stabilisers to function. This approach is backward-looking in the sense that the amount you can borrow today and in the near term depends on the impact on borrowing of shocks and policy mistakes earlier in the cycle. A more forward-looking approach would set policy today consistent with meeting the rule in the future, whether or not it was consistent with meeting it in the past.

The sustainable investment rule

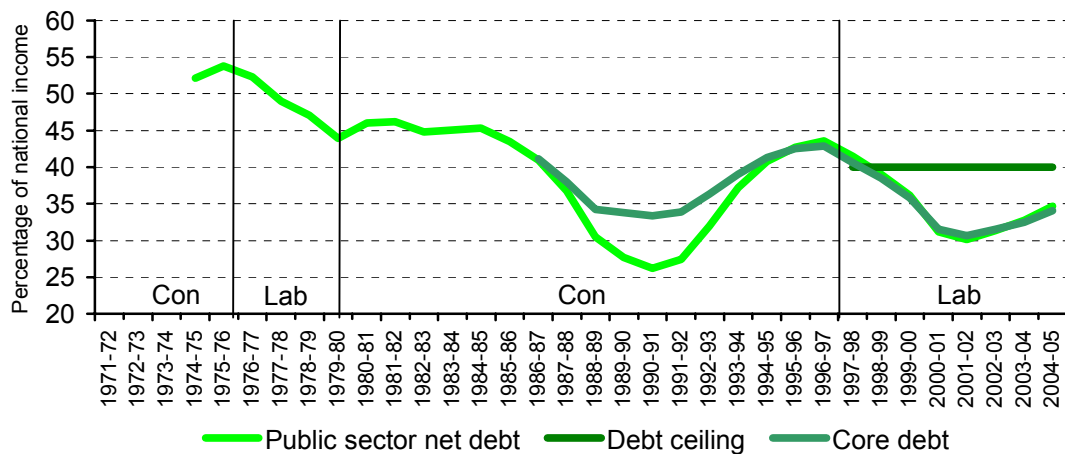
The sustainable investment rule states that the public sector’s debt (net of its financial assets, which mostly comprise foreign exchange reserves) should be kept at a ‘stable and prudent’ level. More precisely: ‘To meet the target with confidence, at the end of every fiscal year of the current economic cycle, public sector net debt must be below 40% of [national income]’.⁵

When a government borrows to finance an investment project, it is in effect imposing a tax increase on future generations to cover the cost of servicing the debt. On purely microeconomic grounds, it could be argued that a government today should undertake any investment project for which the net social benefit is expected to exceed the cost, whatever this implies for the debt ratio. But tomorrow’s taxpayers may see less net social benefit in a particular project than today’s taxpayers do – and any estimate of net social benefit is a matter of judgement. So a ceiling on the debt ratio can be seen as a self-imposed limit on the degree to which governments see fit to decide what capital services tomorrow’s taxpayers should benefit from and what they should pay for them.

This could be justified either on fairness grounds or on the more practical basis that if future taxpayers feel they have been overburdened, they may resort to inflation or default to reduce the debt burden – a possibility that can alarm current holders of government debt and prompt self-fulfilling expectations of a financial crisis. Less dramatically, one might expect a government that increases its debt more quickly to have to pay a higher interest rate to borrow (thus placing an additional burden on future taxpayers). But, as Chapter 6 discusses, in recent years many governments have increased their debt to GDP ratios, only to see borrowing costs fall.

⁵ HM Treasury, *Technical Note for the Treasury PSA 2005–2008*, London, 2004, http://www.hm-treasury.gov.uk/media/EFF/68/julytechnicalnote_300704.pdf.

Figure 2.3. Public sector net debt



Source: HM Treasury, *Public Finances Databank*, London, December 2005, http://www.hm-treasury.gov.uk/media/576/54/public_fin_databank_dec_05.xls.

Figure 2.3 shows that the debt ratio in the UK rose from 26.2% to 43.6% of national income between 1990–91 and 1996–97, reflecting the large budget deficits of the period. The surpluses run by the Labour government in its early years in office and the £22½ billion proceeds of auctioning 3G mobile telephone licences helped reduce public sector net debt to barely 30% of national income by 2001–02. But by 2004–05, it had returned to 34.7% of national income. As with budget deficits, public sector net debt can be decomposed into cyclical and structural (‘core’) components. Core debt is also shown in Figure 2.3, illustrating that the rapid fall in the debt ratio in the late 1980s was exaggerated by the impact of the economic boom.

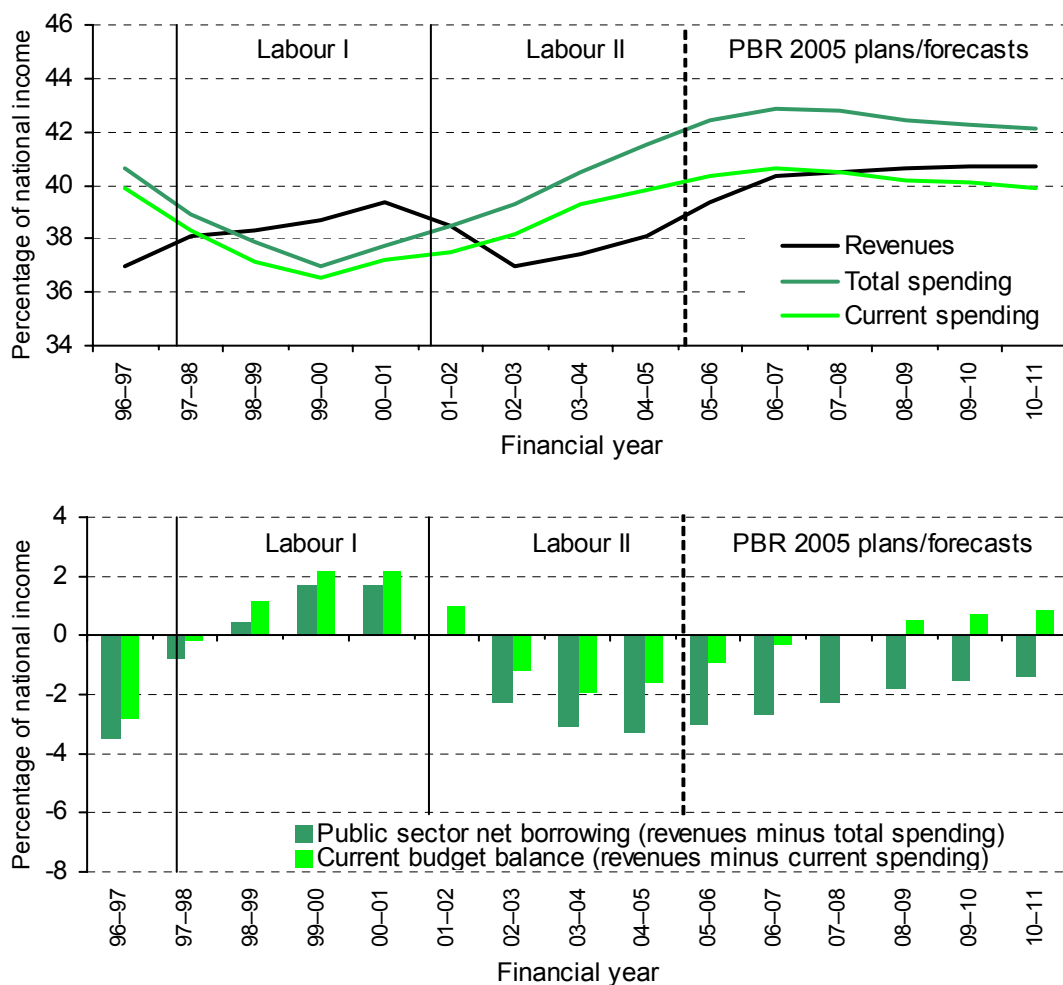
2.3 The evolution of the public finances since 1997

Labour’s first two terms

In 1996–97, the year before Labour took office, the public sector spent 40.6% of national income, while government revenues totalled 37.0% of national income. This left 3.5% of national income (after rounding) to be covered by public sector net borrowing. Only a fifth of this was used to pay for investment, leaving a current budget deficit of 2.8% of national income. The PBR estimates that part of the deficit was explained by weak economic activity, but that there was still a structural current budget deficit of 2.3% of national income. This meant that fiscal policy would have to be tightened over the coming years to meet the golden rule strictly.

In its 1997 manifesto, Labour promised to keep to the tight spending plans it was poised to inherit from the Conservatives for two years (see Chapter 4). Mr Brown more than kept that promise and, despite spending more in the run-up to the 2001 election, public spending ended Labour’s first term 2.9% of national income lower than it started (Figure 2.4). Over this period, public sector net investment fell by 0.1% of national income (rather than rising, as planned), so the remaining 2.7% of national income decline (after rounding) was in current spending.

Figure 2.4. Public sector revenues, spending and budget balances



Source: HM Treasury, *Public Finances Databank*, London, December 2005, http://www.hm-treasury.gov.uk/media/576/54/public_fin_databank_dec_05.xls.

Over the same four years of Labour’s first term, government revenues rose by 2.4% of national income, thanks to ongoing increases in fuel and tobacco taxes (put in place by the Conservatives and then accelerated and maintained until 2000 by Mr Brown), the abolition of repayable dividend tax credits, and above-average economic growth combined with the Chancellor’s decision not to raise income tax thresholds as quickly as earnings (which meant that a progressively larger proportion of people’s incomes was taxed at higher rates).

With revenues rising by 2.4% of national income and current spending falling by 2.7% of national income, by the time of the 2001 election the current budget had moved into a healthy surplus – which was widely expected to persist (as we discuss in Section 2.4).

Mr Brown had described his determination to reduce borrowing in his early years in office as ‘prudence for a purpose’.⁶ The purpose became clear after 1999 – and especially as Labour’s second term unfolded. Public spending reversed its earlier decline, with health, education and

⁶ Gordon Brown’s 1998 Budget Speech: ‘I said that this would be a Budget based on prudence for a purpose and that guides us also in our approach to public spending’ (http://www.hm-treasury.gov.uk/budget/budget_1998/bud98_speech.cfm).

tax credits the main beneficiaries of the Chancellor's largesse. But as spending rose by 3.8% of national income in Labour's second term, tax revenues weakened unexpectedly when the stock market fell, reducing tax payments by financial sector firms and their employees. The tax-raising Budget of 2002 helped begin to reverse the decline, but government revenues ended Labour's second term 1.3% of national income lower than they began it (even though the net impact of policy announcements during the second term was to boost government revenues).

The next five years

Labour begins its third term in government expecting to spend 42.4% of national income this year (comprising 40.3% of national income on current spending and 2.1% of national income on public sector net investment). With revenues forecast at 39.4% of national income, this leaves a current budget deficit of 0.9% of national income (£10.6 billion) and public sector net borrowing of 3.0% of national income (£37 billion).

How does the Treasury expect the public finances to evolve over the next five years?

The current budget is predicted to move steadily from the deficit of 0.9% of national income this year to a surplus of 0.8% of national income in 2010–11. Over this period, revenues are expected to rise by 1.3% of national income while current spending is projected to fall by 0.4% of national income. Public sector net investment is forecast to rise fractionally. Net debt is forecast to rise from 36.5% of national income this year to 38.2% in 2010–11.

If events turn out this way, by 2010–11 current spending as a share of national income would be virtually unchanged from the level Labour inherited (although the government would argue that more was being spent on priority public services and help for the deserving poor, and less on 'the costs of economic and social failure'⁷). Public sector net investment would be 2.3% of national income compared with the 0.8% that Labour inherited. And the amount taken by the government in tax and other revenues would have increased by 3.7% of national income, reflecting the fact that despite the improvement in the health of the public finances under Kenneth Clarke's Chancellorship, the Conservatives were still not raising enough revenue to cover current expenditure in compliance with a strict interpretation of the golden rule.

How does the Treasury expect the improvement in the public finances over the next five years to come about? It believes that economic activity is running 1.4% below its sustainable level this financial year. So almost half the improvement in the current budget balance will come about automatically as the economy enjoys above-average growth in 2007 and 2008 (see Table 2.1). As we discuss in Chapter 3, other economists (including David Miles and colleagues at Morgan Stanley) doubt whether there is this much spare capacity and therefore whether the economy can be allowed to grow as strongly as the Treasury hopes over the next few years. If this is the case, the Treasury would be underestimating the structural component of this year's current budget deficit and overestimating the improvement that can be expected without further policy measures.

⁷ 1997 Labour Party Election Manifesto, *Because Britain Deserves Better*.

Table 2.1. Current budget balance: cyclical and structural

	Economic growth	Output gap (% potential output)	Current budget balance (% national income)		
			Cyclical	Structural	Total
2005–06	1¾%	–1.4	–0.8	–0.1	–0.9
2006–07	2¼%	–1.5	–1.0	0.7	–0.3
2007–08	3%	–0.7	–0.7	0.7	0.0
2008–09	2¾%	–0.1	–0.2	0.7	0.5
2009–10	2¼%	0	0	0.7	0.7
2010–11	2¼%	0	0	0.8	0.8

Source: Tables B1 and B3 of HM Treasury, *Pre-Budget Report 2005*, Cm. 6701, 2005, http://www.hm-treasury.gov.uk/pre_budget_report/prebud_pbr05/report/prebud_pbr05_repindex.cfm.

The improvement in the overall current budget balance is expected to be relatively evenly paced through the next five years. But the same is not true of the cyclical and structural components viewed separately, as we see in Table 2.1. With the output gap forecast to widen again next year, the cyclical deficit is projected to increase to 1% of national income next year and then to narrow progressively as above-trend growth kicks in. But the improvement in the structural balance is expected to take place entirely next year, shrinking the current budget balance by 0.6% of national income even though the economy continues weakening.

Spending

The plans outlined in Mr Brown's three-year Spending Review in July 2004 (SR 2004) imply an increase in current spending (including depreciation) of just 0.7% of national income between 2004–05 and 2007–08, compared with the increase of 2.3% of national income over the previous three years. The increase is front-loaded, with current spending projected to rise to 40.3% of national income this year and then to 40.5% of national income by 2007–08.

For the first time, the December Pre-Budget Report (PBR 2005) now includes a projection for spending during the whole period covered by the forthcoming 2007 Comprehensive Spending Review (2007 CSR), for which preparations are now getting under way. The Treasury has pencilled in real growth in current spending of 1.9% a year for the three years from 2007–08 to 2010–11.⁸ This is lower than the expected growth rate of the economy and would imply a drop in current spending as a share of national income from 40.5% in 2007–08 to 39.9% in 2010–11 – around £7½ billion in 2005–06 terms. (The fall in total managed expenditure, i.e. including public sector net investment, is equivalent to £8½ billion in 2005–06 terms.) This would, in effect, reverse the increase in current spending as a share of national income announced in SR 2004.

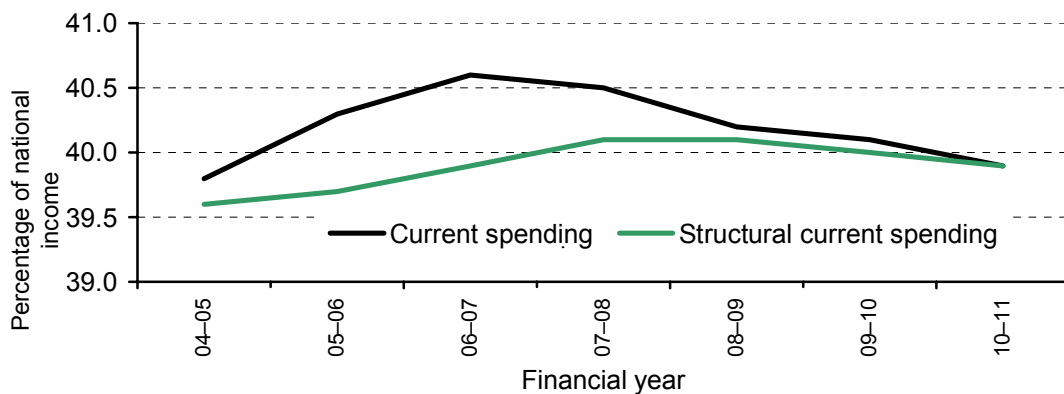
As we discuss in Chapter 4, this would be the least generous spending review since Labour came to office, even though it would span the likely date of the next general election. It remains to be seen whether the Chancellor will be this tough when he confirms the budget envelope for the next spending review. In evidence to the Treasury Select Committee

⁸ The Treasury had previously pencilled in 1.9% real growth in current spending for 2008–09 and 2009–10 on the grounds that, when combined with the bigger increase firmly planned for 2007–08, this would make the average rate for the last three years of the forecasting period equal to the assumed cautious rate of trend growth of the economy of 2¼% a year. There is no similar justification for pencilling in 1.9% real growth again in 2010–11.

following PBR 2005, he left the door open to a different settlement: ‘There are a lot of decisions still to be made on the road to the final decisions about the Spending Review and I would not presume the figures that you are suggesting’.⁹ If he does decide to spend more, other things being equal the public finances will not strengthen by as much over the next five years as the PBR 2005 forecasts suggest.

If the Treasury is right about the outlook for the output gap, the decline in current spending of 0.4% of national income over the next five years is more than accounted for by the rapid growth in the size of the economy. As shown in Figure 2.5, structural current spending is projected to increase by 0.2% of national income. The time profile of the output gap means that, in structural terms, neither the rise in spending during SR 2004 nor the decline in 2007 CSR will be as large as the headline figures suggest. However, as discussed in Section 2.2, the cyclical element of spending as a share of national income is due to a greater extent to the impact of changes to the denominator than to the impact of the economy on actual spending.

Figure 2.5. Current spending: total and structural



Source: HM Treasury, *Public Finances Databank*, London, December 2005, http://www.hm-treasury.gov.uk/media/576/54/public_fin_databank_dec_05.xls. Cyclical adjustment uses estimates from appendix A of HM Treasury, *End of Year Fiscal Report*, December 2003, http://www.hm-treasury.gov.uk/media/324/70/end_of_year_352%5B1%5D.pdf.

Revenues

The increase in revenue over the next five years is expected to come predominantly from taxes on incomes and profits, partially offset by a decline in revenue from taxes on spending. This is shown in Table 2.2.

Of the total increase in current revenues of 1.3% of national income forecast over the next five years, 0.2% of national income is cyclical and the remaining 1.1% is structural.

As usual, the forecast incorporates an ongoing structural increase in revenues arising from ‘fiscal drag’. This reflects the Treasury’s conventional forecasting assumption that tax allowances and thresholds rise in line with retail prices. As earnings typically rise more quickly, this implies a continuous rise in the share of national income taken in income tax as more people find larger proportions of their income being taxed at higher rates. (We would see a similar phenomenon on a smaller scale – relative to national income – for taxes such as

⁹ Source: <http://www.publications.parliament.uk/pa/cm200506/cmselect/cmtreasy/uc739-iii/uc73902.htm>.

inheritance tax, capital gains tax and stamp duty, where the tax base tends to grow more quickly than the rise in thresholds assumed for forecasting purposes.)

The Treasury estimates that fiscal drag increases current receipts by 0.2% of national income a year, which implies an increase of at least 0.75% of national income after five years once rounding is taken into account.¹⁰ This accounts for most of the increase in revenue from income tax and National Insurance contributions (NICs) over the forecast horizon. If the cyclical improvement in revenues over the next five years is 0.2% of national income and the impact of fiscal drag at least 0.75% of national income, this leaves an increase of up to 0.35% of national income from other structural factors.

Table 2.2. Revenue changes projected in PBR 2005 (% of national income)

	2005–06	2010–11	Change
Income tax & NICs	17.6	18.5	+0.9
Corporation tax	2.9	3.3	+0.4
North Sea revenues	0.7	0.8	+0.1
VAT & excise duties	9.4	8.8	–0.6
Other taxes & royalties	6.9	7.2	+0.3
Net taxes & NICs	37.4	38.6	+1.2
Other receipts etc	2.1	2.1	No change
Current receipts	39.4	40.7	+1.3

Source: Table B15 of HM Treasury, *Pre-Budget Report 2005*, Cm. 6701, 2005, http://www.hm-treasury.gov.uk/pre_budget_report/prebud_pbr05/report/prebud_pbr05_repindex.cfm.

But bear in mind the time profile. As Figure 2.6 illustrates, the structural improvement in current receipts is predominantly forecast to take place next year with little change thereafter, even though fiscal drag should be imparting an ongoing improvement. It appears that the structural improvement next year is largely explained by:

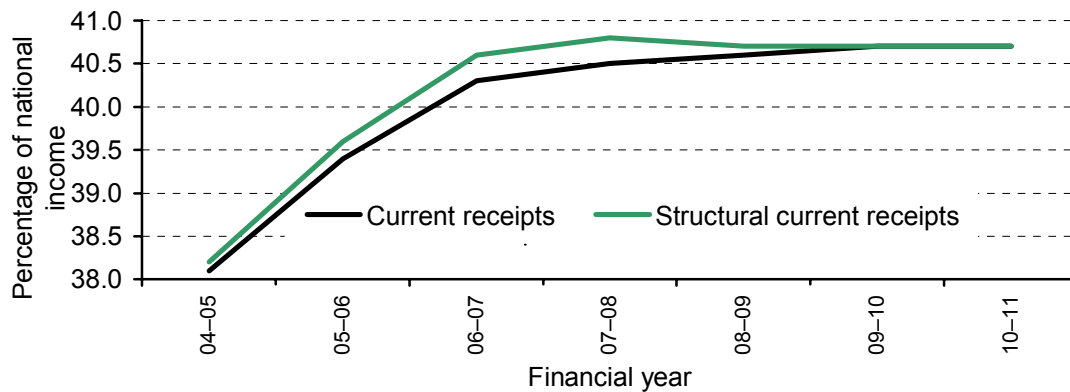
- higher tax payments from the financial sector, as profits rebound despite the weakness of the economy (corporation tax receipts jump from 2.9% of national income this year to 3.2% next year, but are then level at 3.3% thereafter);
- higher North Sea oil revenues resulting from the high oil price and the tax increase announced in PBR 2005 – see Chapter 9 for a discussion (North Sea revenues rise from 0.7% of national income this year to 0.9% next year before peaking at 1.0% in 2007–08 and 2008–09);
- one year’s worth of fiscal drag (helping to increase income tax receipts from 11.1% of national income this year to 11.3% in 2006–07).

Thereafter, there is an ongoing structural increase in revenues from income tax and NICs from fiscal drag (raising income tax revenues from 11.3% of national income in 2006–07 to 11.8% in 2010–11). But this is broadly offset by a structural fall in excise duty and VAT revenues. Over the next five years, excise duty revenues are projected to fall from 3.3% of national income to 2.9% and VAT revenues from 6.1% of national income to 5.9%. The

¹⁰ Paragraph A24 of HM Treasury, *End of Year Fiscal Report*, London, 2003, http://www.hm-treasury.gov.uk/media/324/70/end_of_year_352%5B1%5D.pdf.

Treasury assumes that avoidance and evasion lead to a widening in the gap between the amount of VAT that HM Revenue & Customs believes that it should be paid and the amount that it actually collects.¹¹

Figure 2.6. Current receipts: total and structural



Source: HM Treasury, *Public Finances Databank*, London, December 2005, http://www.hm-treasury.gov.uk/media/576/54/public_fin_databank_dec_05.xls. Cyclical adjustment uses estimates from appendix A of HM Treasury, *End of Year Fiscal Report*, 2003, http://www.hm-treasury.gov.uk/media/324/70/end_of_year_352%5B1%5D.pdf.

The impact of fiscal drag on income tax receipts is shown in the Pre-Budget Report: the Treasury forecasts that gross income tax receipts will increase from 11.5% of national income in 2008–09 to 11.8% of national income in 2010–11, despite economic activity remaining at its sustainable level and there being no discretionary income tax increase in the pipeline. The assumption that fiscal drag proceeds uninterrupted over the Treasury’s forecasting horizon is not a new one. But, as the Treasury acknowledges, assuming that the tax burden continues to increase for the foreseeable future would be unrealistic. It therefore assumes that revenues and their composition remain broadly unchanged as shares of national income over the longer term.¹² This implies ‘a comprehensive form of “real indexation”’,¹³ which presumably means tax allowances and thresholds rising in line with growth in the relevant tax base, i.e. often faster than prices. The Treasury may indeed believe that, over the short to medium term, exploiting fiscal drag is the most sensible way to raise the extra revenues that it requires to meet the golden rule looking forward. But we should be clear that this would be a policy choice and not an economically neutral assumption. There are other ways that the public finances could be strengthened.

2.4 Meeting the fiscal rules

So what do the Treasury’s forecasts imply for the government’s chances of meeting its rules? In the next subsection, we discuss whether the Treasury will meet its rules if its forecasts turn

¹¹ This is assumed to increase by 0.5% of potential receipts a year.

¹² Paragraph 5.20, page 50 of HM Treasury, *Long-Term Public Finance Report: An Analysis of Fiscal Sustainability*, London, 2004, http://www.hm-treasury.gov.uk/media/8F5/85/pbr04long-term_473.pdf.

¹³ Footnote 13, page 51 of HM Treasury, *Long-Term Public Finance Report: An Analysis of Fiscal Sustainability*, London, 2004, http://www.hm-treasury.gov.uk/media/8F5/85/pbr04long-term_473.pdf.

out to be correct, noting the importance of the dating of the economic cycle over which the rules are judged. In the following subsection, we note that the Treasury's past forecasting record suggests that there are significant uncertainties around its projections and that this implies that a probabilistic approach should be taken to judging whether existing policies are consistent with meeting the rules, as we do in the final subsection.

Re-dating the economic cycle

The government has promised to meet the golden rule on average over the present economic cycle and to meet the sustainable investment rule in every year of the present cycle. To judge whether it is on course to do so, it is therefore necessary to identify when the cycle starts and ends.

As we discussed in Section 2.2, it is conventional to regard economic activity as fluctuating around a rising trend consistent with stable domestic inflation. If we estimate the sustainable level of economic activity at any time and compare it with the actual level of economic activity, we can calculate a path for the 'output gap' – the difference between the two.

The Treasury defines a cycle as an 'up-phase' in which the output gap is clearly positive and economic activity is in excess of its sustainable (or 'potential') level, followed by a down-phase in which the output gap is negative and activity is below its sustainable level (although it could equally have chosen to define the cycle as a down-phase followed by an up-phase). The cycle begins and ends at points when economic activity is equal to its sustainable level.¹⁴

The Treasury estimates when economic activity is at its sustainable level by examining a number of survey and other statistical indicators to judge when 'factors of production are at normal levels of utilisation'. These indicators include business surveys of capacity utilisation and recruitment difficulties, labour utilisation indicators (such as unemployment, vacancies and hours worked) and indicators of inflationary pressure (such as average earnings, unit labour costs and the consumer price index).

In Budget 2000, the Treasury estimated that economic activity – measured as 'non-oil Gross Value Added (GVA)' – had moved above trend in the middle of 1997, then fell slightly below trend towards the end of 1998 before moving back above trend again in the middle of 1999. It concluded that 'early indications suggest the economy may have completed a full economic cycle – albeit a short and shallow one by historical standards – since 1997–98. Given the closeness to trend and possible measurement errors, this conclusion can only be provisional at this stage'.¹⁵ It argued that the present economic cycle therefore began in financial year 1999–2000, a view it maintained up to and including Budget 2005.

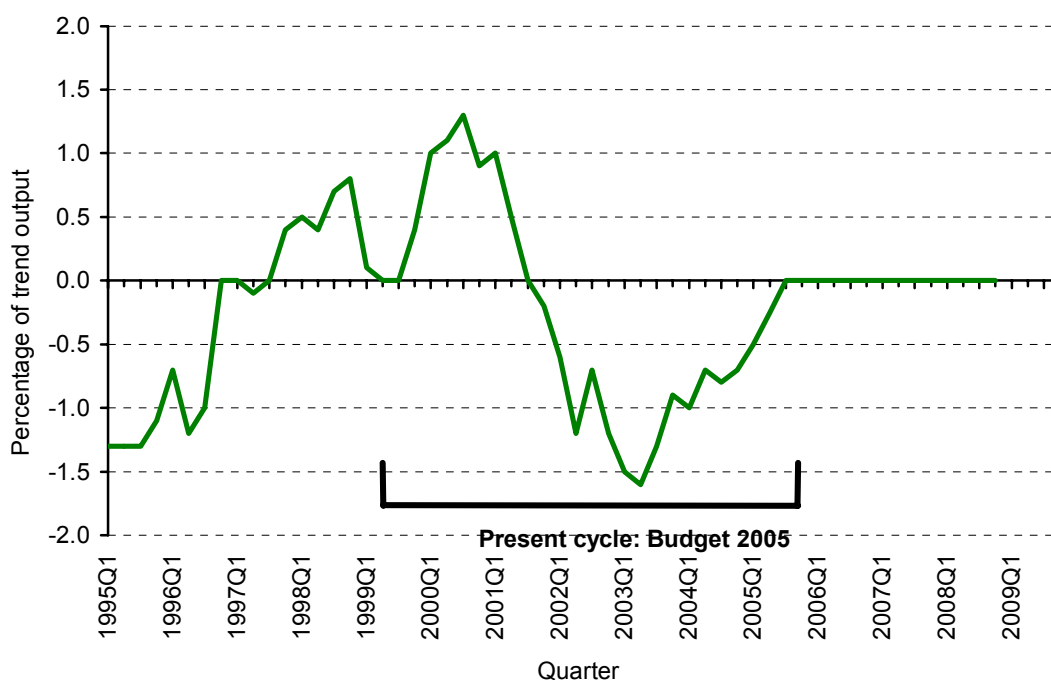
In Budget 2005, the Treasury judged that the up-phase of the present cycle had ended in the third quarter of 2001. It also estimated that the sustainable level of economic activity would thereafter grow by 2¾% a year until the end of 2006 – comprising growth in productivity of 2.35% a year, in employment of 0.2% a year and in the population of working age of 0.5% a

¹⁴ HM Treasury, *Evidence on the UK Economic Cycle*, July 2005, http://www.hm-treasury.gov.uk/media/2E6/A5/economic_cycles190705.pdf.

¹⁵ Paragraph 2.37 of HM Treasury, *2000 Budget*, 2000, http://www.hm-treasury.gov.uk/budget/budget_2000/budget_report/bud_bud00_repindex.cfm.

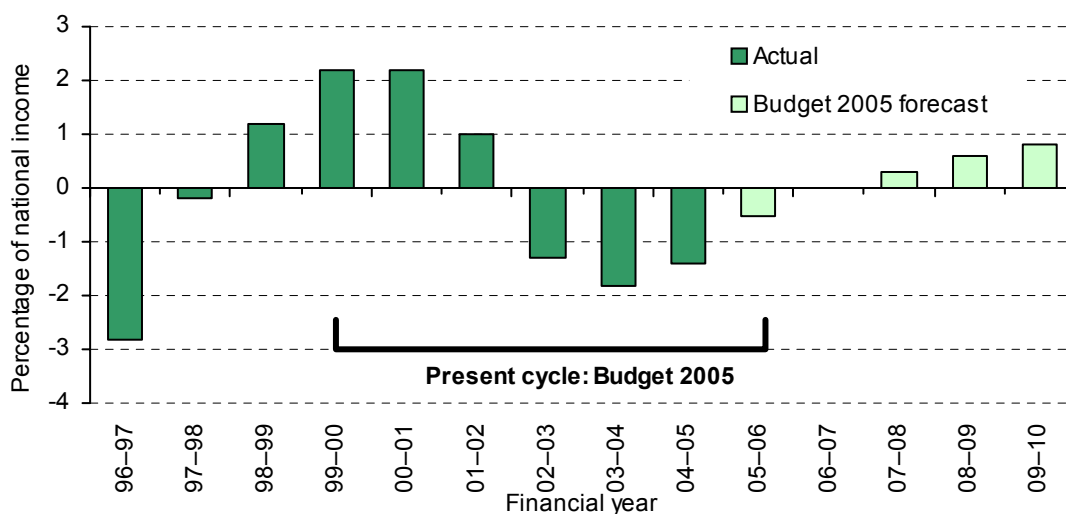
year, offset slightly by a 0.1% a year drop in average hours worked. This implied that by the fourth quarter of 2004, actual economic activity was running 0.7% below its sustainable level. (In other words, there was a negative ‘output gap’ of 0.7% of potential output.) The 2005 Budget predicted ‘renewed growth just above trend rates for the rest of the year’, eliminating the output gap and returning activity to trend ‘around the end of 2005’. This implied a seven-year economic cycle running from 1999–2000 to 2005–06 (Figure 2.7).

Figure 2.7. The output gap in Budget 2005 – a seven-year cycle?



Note: Actual output less trend output as a percentage of trend output (non-oil basis).
 Source: HM Treasury (consistent with March 2005 Budget).

Figure 2.8. Current budget balance in Budget 2005



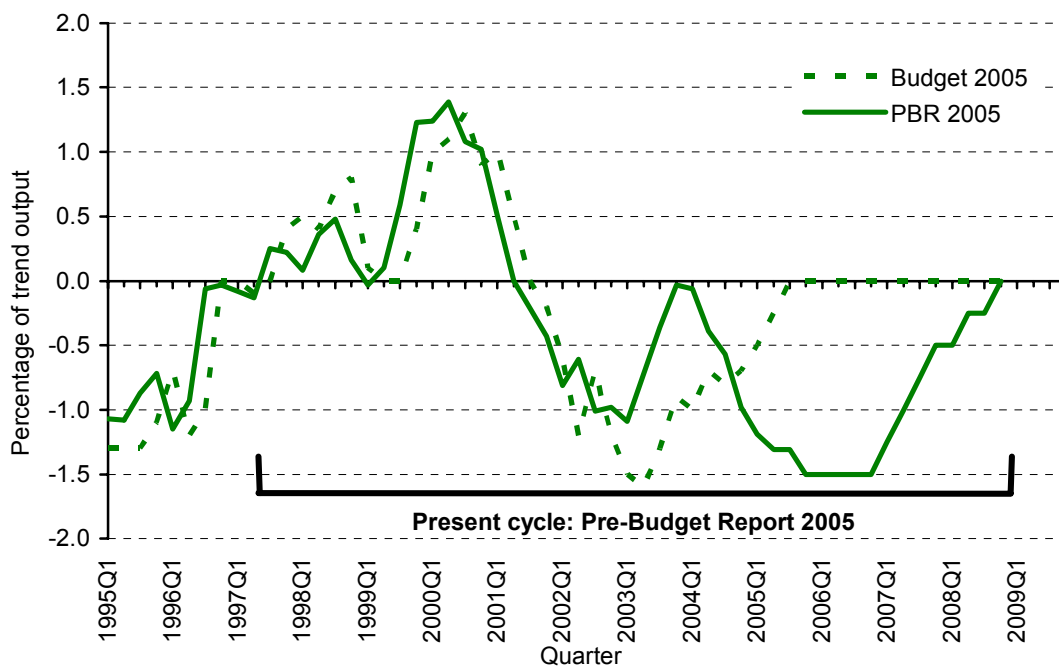
Source: HM Treasury, 2005 Budget, 2005, http://www.hm-treasury.gov.uk/budget/budget_05/bud_bud05_index.cfm.

Over this period, the Treasury estimated in Budget 2005 that it would meet the golden rule with a small margin to spare. As Figure 2.8 illustrates, the cycle began with three years of current budget surpluses followed by three years of current budget deficits. Over this six-year period, the current budget was on average in surplus by 0.1% of national income. With a deficit of 0.5% of national income (£5.7 billion) projected for 2005–06, this still left the average surplus expected over the seven years of the cycle at (an albeit slightly smaller) 0.1% of national income or a cumulative £4.8 billion in today’s terms.

As financial year 2005–06 got under way, it soon became clear that tax revenues were not as strong as the Treasury hoped and the current budget deficit was not shrinking as rapidly as planned. In June, the Treasury published figures showing that the current budget deficit in the first two months of the financial year was only about 10% smaller than in the same period of 2004–05. If this persisted, the current budget deficit for 2005–06 would come in at around £15 billion rather than the £5.7 billion forecast in Budget 2005. The golden rule would be missed.

Then, a month later, the Treasury published a detailed analysis arguing that the period from mid-1997 to mid-1999 should be regarded as part of the up-phase of the current cycle rather than as a complete mini-cycle in its own right.¹⁶ This would add two additional financial years to the beginning of the cycle and extend it from seven years to nine years.

Figure 2.9. The output gap in PBR 2005 – a twelve year cycle?



Note: Actual output less trend output as a percentage of trend output (non-oil basis).
Source: HM Treasury (consistent with December 2005 Pre-Budget Report).

¹⁶ HM Treasury, *Evidence on the UK Economic Cycle*, July 2005, http://www.hm-treasury.gov.uk/media/2E6/A5/economic_cycles190705.pdf.

The Treasury justified this change largely on the grounds that revisions to National Accounts data showed that economic growth in 1999 was stronger than hitherto thought. In Budget 2000, the down-phase of the 1997 to 1999 mini-cycle was estimated to last for two quarters with an average negative output gap of 0.3% of potential output. But, following the revisions, output appears to have fallen below potential only in 1999Q1 and then by less than 0.1% of potential output (Figure 2.9). The Treasury concluded: ‘There is now no evidence of a clear dip below trend in early 1999. So the below trend phase of the previously identified 1997H1 to mid-1999 “cycle” now looks non-existent’. To further justify its decision, the Treasury also pointed out that the output gap for ‘market sector’ GVA had remained positive throughout 1999 (in other words, that the output gap only turned negative because of the squeeze on public spending), and that 1999 was not a trough in the share of national income paid to workers, which is typically the case for the on-trend point at the end of a cyclical down-phase.

At a stroke, adding the two extra years to the cycle put the Treasury back on course to meet the golden rule. The current budget had been in deficit by 0.2% of national income in 1997–98 and in surplus by 1.2% of national income in 1998–99. The net effect was to increase to £22½ billion the size of the current budget deficit the Treasury could run in 2005–06 without breaking the golden rule. But, giving evidence to the Treasury Select Committee on the day the analysis was published, the Chancellor said, ‘We would meet the golden rule irrespective’.¹⁷

The fortuitous timing of the Treasury’s decision inevitably fuelled speculation that it had been motivated simply by the desire to make the golden rule easier to meet. In an attempt to allay such suspicions, the Chancellor asked the National Audit Office to audit the decision at the time of the PBR. The NAO supported the decision, but not without qualification. ‘Though there are many uncertainties, there are reasonable grounds to date the end of the previous economic cycle to 1997’, it argued.¹⁸ But it added that ‘some reduction in uncertainty in the timing of economic cycles could result from the consistent use of more than one method of estimating the output gap’ and it recommended that in future the Treasury present ‘a formal assessment of the views of external organisations in terms of how they have influenced the Treasury’s judgement of the dating of economic cycles’. (David Miles and colleagues estimate a variety of possible cycle dates using output gap estimates derived from ‘statistical filtering’ in Chapter 3, most of which suggest that a new cycle got under way in 1999 rather than 1997.)

We have argued in the past that if one were to accept the Treasury’s methodology and estimates for the output gap, it would be quite plausible to suggest that the cycle began in 1997 rather than 1999.¹⁹ In most recent Budgets and Pre-Budget Reports, casual observation of the output gap chart would suggest that 1997 to 2001 was a single up-phase with a pause in the middle, rather than one-and-a-half cycles. But the case for making this judgement now seems little stronger than at any time in the last five years.

¹⁷ Source: www.publications.parliament.uk/pa/cm200506/cmselect/cmtreasy/399/5071902.htm.

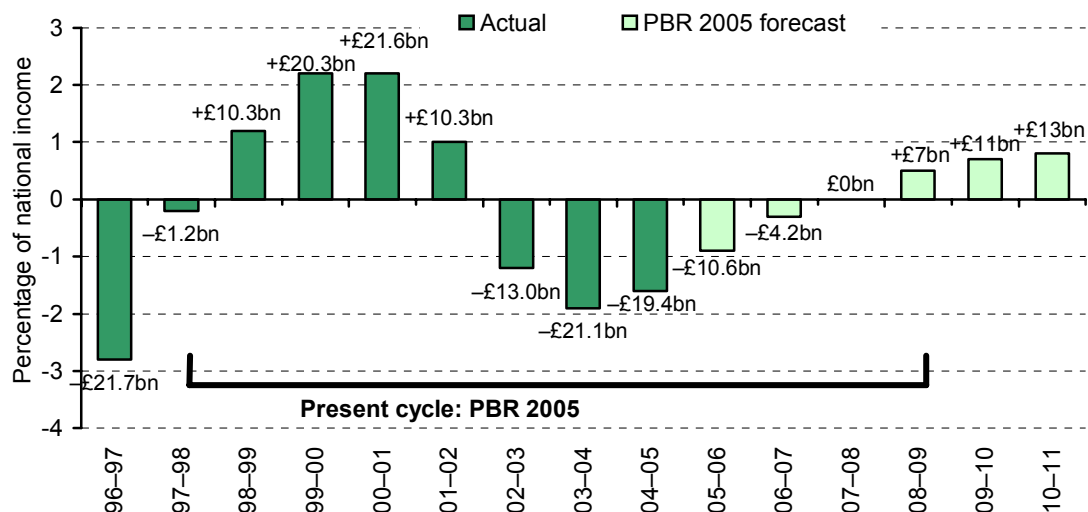
¹⁸ National Audit Office, *Audit of Assumptions for the 2005 Pre-Budget Report*, December 2005, http://www.nao.org.uk/publications/nao_reports/05-06/0506707.pdf.

¹⁹ C. Emmerson, ‘Bending the rules?’, *Public Finance Magazine*, 5 August 2005, http://www.cipfa.org.uk/publicfinance/features_details.cfm?News_id=24755.

In some respects, the case for dating the end of the previous economic cycle to 1997 is actually weaker following revisions to the National Accounts. These revisions may mean that the dip below trend in 1999 looks less pronounced now than in, say, Budget 2000, but so too does the period of above-trend activity in 1997 and 1998. The estimated average positive output gap during the two financial years added to the economic cycle has actually fallen from 0.3% of potential output in Budget 2000 to 0.2% in PBR 2005. Casual inspection of the output gap graph now suggests, as the National Audit Office concluded, that ‘It is as likely as not that the output gap was close to zero for much of the period between 1997 and 1999’. So it is hardly surprising that announcing the decision to extend the cycle at precisely the point at which it meant that the government was suddenly on course to meet the rule rather than to break it should undermine the credibility of the policy framework and create suspicion – rightly or wrongly – that the Chancellor was simply ‘moving the goalposts’ to avoid the embarrassment of missing his target. As we discuss in Section 2.5, this strengthens the case for reform to boost the credibility of the framework.

In addition to confirming the decision to move the beginning of the cycle to two years earlier, the Chancellor also announced in PBR 2005 that he expected the cycle to end in 2008–09 rather than 2005–06. At the time of the Budget, it looked as though the UK was facing a conventional V-shaped economic slowdown. However, it now it looks as though the downturn was not as severe as it first appeared up until the end of 2003, when output had almost recovered to its sustainable level. Since then, growth has been running below trend and we have moved into the second dip of a double-dip slowdown. The Treasury believes that economic activity is running around 1½% below potential, its weakest cyclical position since 1994 – although less than half as deep as the trough of the recession of the early 1990s. The Treasury expects the output gap to remain at a similar level in 2006–07 and only to close in 2008–09 after two years of above-trend growth.

Figure 2.10. Current budget balance



Source: HM Treasury, *Pre-Budget Report 2005*, 2005, http://www.hm-treasury.gov.uk/pre_budget_report/prebud_pbr05/prebud_pbr05_index.cfm.

Table 2.3. Meeting the golden rule: cycle dating matters

	Average surplus over current cycle (% GDP)	Cumulative surplus (£ billion, 2005–06 GDP terms)	Current budget balance in first year of next cycle (% GDP)
Budget 2005 cycle: 7 years 1999–2000 to 2005–06	–0.0%	–£1.9bn	–0.9%
Post-July-2005 cycle: 9 years 1997–98 to 2005–06	+0.1%	+£10.8 bn	–0.9%
PBR 2005 cycle: 12 years 1997–98 to 2008–09	+0.1%	+£12.8 bn	+0.5%

Sources: HM Treasury, *Public Finances Databank*, London, December 2005, http://www.hm-treasury.gov.uk/media/576/54/public_fin_databank_dec_05.xls; authors' calculations.

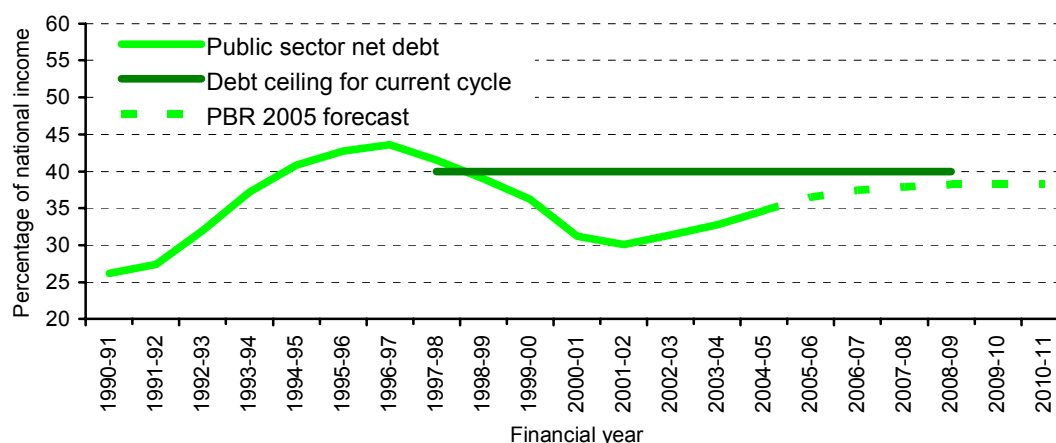
This adds an extra three financial years to the cycle. During this period, the Treasury forecasts that the current budget balance will move from a deficit of 0.3% of national income next year to balance in 2007–08 and to a surplus of 0.5% of national income in 2008–09, as Figure 2.10 shows. If the Treasury's forecasts are correct, the surplus in 2008–09 will narrowly outweigh the deficit in 2006–07, making the golden rule fractionally easier to meet in this cycle. It also means that the next cycle would begin with a surplus of 0.5% of national income in 2008–09 rather than a deficit of 0.9% of national income in 2005–06 (because the last financial year of one cycle is also counted as the first financial year of the next). The golden rule thus becomes easier to meet in the next cycle as well as in this one.

Taking into account the historical revisions and future forecasts for the public finances published in PBR 2005, as we do in Table 2.3, the Treasury's projections imply that:

- the Chancellor should expect to miss the golden rule narrowly over the period defined as the cycle in Budget 2005, contrary to his prediction to the Treasury Select Committee in July;
- moving the start-date of the cycle two years earlier means that he would now expect to meet the golden rule with modest comfort in a cycle ending this year;
- moving the end-date of the cycle three years further into the future means that he would now expect to meet the golden rule with slightly greater comfort over the current cycle and that, if his forecasts are correct, the rule would also be easier to meet in the following cycle.

If the Treasury's forecasts are correct, the sustainable investment rule would be met over the remaining years of the cycle, whether it were to end in 2005–06 or 2008–09 (and indeed if it were to continue until 2010–11). As Figure 2.11 shows, the Treasury expects public sector net debt to rise from 36.5% of national income this year to 38.2% in 2008–09 and thereafter remain at the same level until the end of the forecast horizon – still below the 40% ceiling.

Figure 2.11. Public sector net debt



Sources: HM Treasury, *Public Finances Databank*, London, December 2005, http://www.hm-treasury.gov.uk/media/576/54/public_fin_databank_dec_05.xls; HM Treasury, *Pre-Budget Report 2005*, 2005, http://www.hm-treasury.gov.uk/pre_budget_report/prebud_pbr05/prebud_pbr05_index.cfm.

Forecasting uncertainty and the fiscal rules

The previous subsection shows that the Treasury will meet both its fiscal rules over its newly elongated economic cycle, if its forecasts for the public finances turn out to be correct. Unfortunately, the public finances are hard for anyone – even the Treasury, with privileged access to data on government spending and revenues – to predict with a high degree of accuracy. In part, this simply reflects the fact that borrowing is typically a small difference between two relatively big numbers. Small forecast errors for either revenues or spending can translate into proportionately much larger forecast errors for measures of the budget balance.

When designing and talking about the fiscal framework, it is important for the Chancellor not to stake his credibility on predictions or promises that rely on an unrealistic degree of forecasting accuracy. The Chancellor should try to avoid getting himself into the position where typically-sized forecasting errors might require him to make sudden, damagingly large policy changes to meet his rules. He should therefore decide, when taking policy decisions, how important it is to him that the rules be met and, in light of that, how much room for manoeuvre he should allow himself in meeting them, in case the public finances evolve differently from his central expectation. Similarly, outside commentators need to take the vagaries of public finance forecasting into account when discussing whether the rules will be met and recommending what (if anything) should be done if they expect them to be missed.

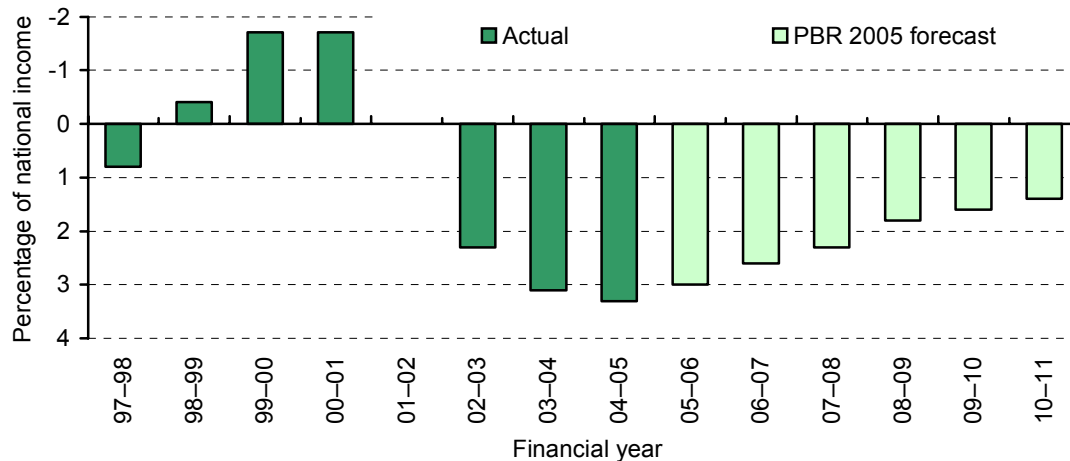
The Chancellor has repeatedly argued that his forecasts are cautious and that the rules will be kept to without the need to change his tax and spending plans. But, unlike the Bank of England in its pursuit of the inflation target, he shies away from explicit discussion of the confidence that can be attached to his forecasts and the implications that has for his decisions.

Lessons from past experience

The Treasury's past forecasting errors are a good place to start in assessing the confidence we should have in its current predictions. If we have no reason to believe that forecasting performance in the future will differ from that in the past, we can calculate the probability that

the outcome will differ by a given amount in one direction or the other from the central forecast. We can then determine what policy will deliver a given probability of meeting the rules. The desired probability will depend on the Chancellor's assessment of the economic and political costs of breaking the rule and of the scope for countervailing policy adjustments to avoid it.

Figure 2.12. Public sector net borrowing



Source: HM Treasury, *Pre-Budget Report 2005*, 2005, http://www.hm-treasury.gov.uk/pre_budget_report/prebud_pbr05/prebud_pbr05_index.cfm.

Table 2.4. Treasury errors in forecasting public sector net borrowing

Time period	Average absolute error (% of national income)	Average absolute error (£ billion)
One year ahead	1.0	12
Two years ahead	1.6	19
Three years ahead	2.1	26
Four years ahead	2.7	33

Notes: Figures in £ billion are calculated assuming HM Treasury forecast for national income in 2005–06 of £1,225 billion. Average error corresponds to the average absolute error over the period 1977–78 to 2004–05 for one year ahead, 1981–82 to 2004–05 for two years ahead, 1982–83 to 2004–05 (excluding 1996–97 to 1999–2000) for three years ahead, and 1983–84 to 2004–05 (excluding 1984–85 to 1986–87 and 1997–98 to 2000–01) for four years ahead.

Sources: Table 2.3 of HM Treasury, *End of Year Fiscal Report*, 2005, http://www.hm-treasury.gov.uk/media/F59/99/pbr05_endofyear_296.pdf; authors' calculations.

Figure 2.12 shows the Treasury's PBR 2005 forecasts for public sector net borrowing. It shows that there has been a sharp swing from surplus to deficit since the start of this century, but that from this year onwards, the deficit is expected to shrink gradually, as an improvement in the current budget balance outweighs a modest planned rise in public sector net investment.

But how confident can we be that this improvement will take place? The Treasury's average absolute error in forecasting public sector net borrowing one, two, three and four years ahead

for the period from 1977–78 to 2004–05 is shown in Table 2.4. This shows that even one year ahead, the average absolute error is £12 billion in today’s prices.²⁰

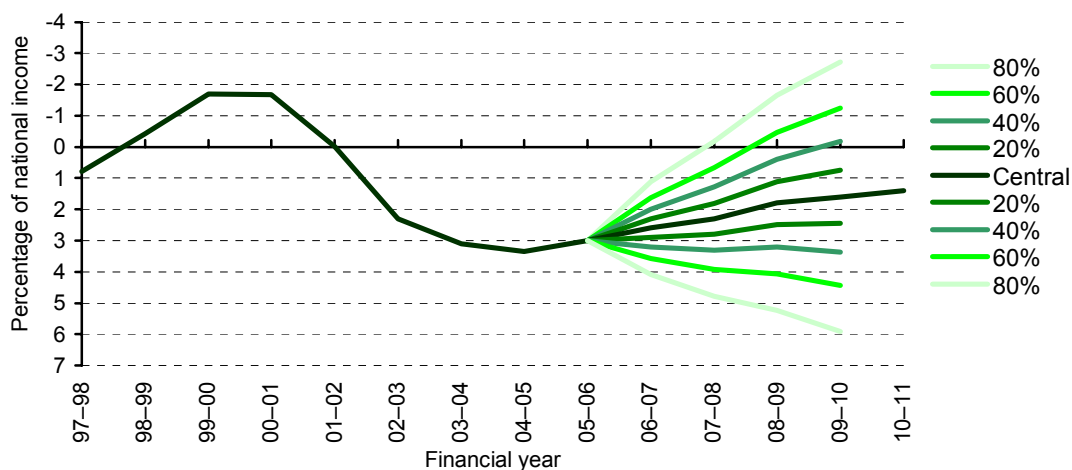
Errors in forecasting public sector net borrowing can arise either from errors in forecasting the strength and composition of economic growth (and therefore the impact of the automatic stabilisers) or from errors in predicting tax revenues and spending for any given level and composition of national income. Errors in forecasting economic growth have been relatively unimportant in explaining the Treasury’s errors in forecasting the budget balance over a horizon of at least up to four years.²¹

Reflecting uncertainty in published forecasts

If we assume that the Treasury’s latest forecasts will be as accurate as its past ones and that errors are normally distributed, we can put confidence intervals around the projections.

Figure 2.13 shows the probabilities of different outcomes for public sector net borrowing, based purely on the Treasury’s latest forecasts and its past forecasting performance. We assume that the Treasury’s projection for 2005–06 is correct, but that there is uncertainty thereafter. The presentation is analogous to the Bank of England’s inflation and growth forecasts in its quarterly *Inflation Report*.²² The ‘central’ estimate is the forecast shown in Figure 2.12. Figure 2.13 shows that there is a 20% probability that the outcome will lie within the darkest bands either side of the central forecast, a 40% probability that it will lie between

Figure 2.13. Probabilities of public sector net borrowing outcomes



Sources: Central projections are taken from HM Treasury, *Pre-Budget Report 2005*, 2005, http://www.hm-treasury.gov.uk/pre_budget_report/prebud_pbr05/prebud_pbr05_index.cfm and assume that the forecast for 2005–06 is correct; methodology for computing fan charts taken from C. Emmerson, C. Frayne and S. Love, ‘Updating the UK’s Code for Fiscal Stability’, IFS Working Paper no. W04/29, 2004, http://www.ifs.org.uk/publications.php?publication_id=3163.

²⁰ IFS forecasts show errors of similar magnitude. See C. Giles and J. Hall, ‘Forecasting the PSBR outside government: the IFS perspective’, *Fiscal Studies*, vol. 19, pp. 83–100, 1998, http://www.ifs.org.uk/publications.php?publication_id=2250.

²¹ See table B13 of HM Treasury, *Pre-Budget Report 1998*, 1998, <http://archive.treasury.gov.uk/pub/html/prebudgetNov98/index.html>.

²² <http://www.bankofengland.co.uk/publications/inflationreport/index.htm>.

the next darkest bands, and so on. It shows, for example, that in 2009–10, there is a one-in-three chance that the deficit will have been eliminated.

The estimates of previous Treasury forecasting errors used in this analysis are likely to be underestimates of the true forecasting error. This is because the forecasts for borrowing have not been adjusted for subsequent tax and spending decisions. In practice during periods where (underlying) borrowing was exceeding expectations, Chancellors would have been more likely to engage in a fiscal tightening than a fiscal loosening. For example, the two Budgets of 1993 contained significant tax-raising measures aimed at bringing revenues closer to previous expectations. This suggests that, if anything, the probability bands shown in Figure 2.13 should be wider. It would be very useful if the Treasury published information on previous forecasting errors that have been adjusted for subsequent policy announcements.

The other key assumption implicit in the estimates contained in the fan chart is that the Treasury's forecasts are as likely to be too optimistic as too pessimistic. Looking at the Treasury's one-year- and two-year-ahead forecasts back to 1970, the predictions were slightly more likely to be pessimistic than optimistic, but the average error is very small at 0.1% of national income. But in the period since the current government introduced its fiscal rules, the Treasury claims that its forecasts have been deliberately cautious. This is consistent with the fact that forecasts for public sector net borrowing one year ahead have been on average 0.3% of national income too pessimistic. But forecasts two years ahead are as likely to have been over-optimistic as unduly pessimistic.²³

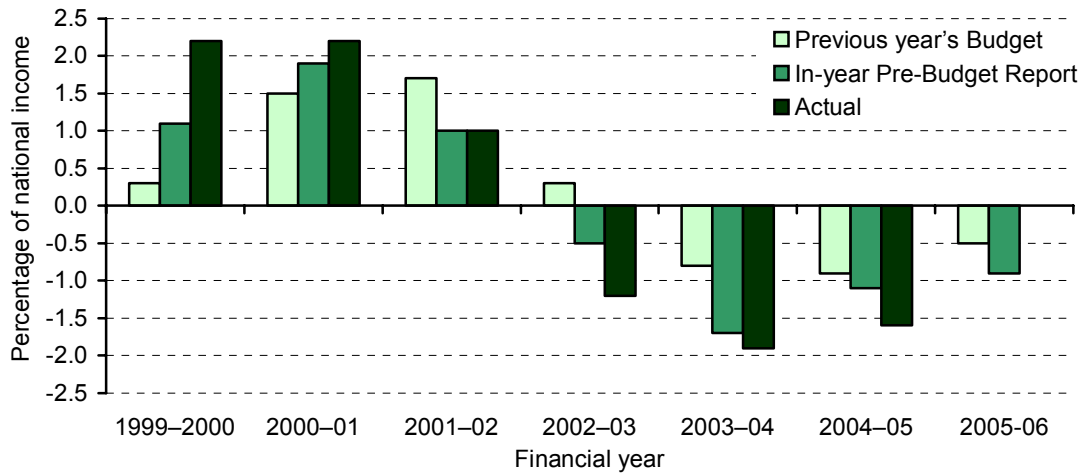
The main source of caution in the public finance forecasts is the assumption that the trend growth rate of the economy is a quarter of a percentage point lower than the Treasury's central view. This means that the level of national income assumed for 2010–11 is 1.4% lower than the Treasury's true expectation. If the Treasury's central view of trend growth is correct, this would lead us to expect its borrowing forecasts to become increasingly pessimistic over time relative to the true outcome – reaching an expected difference of around 1% of national income by 2010–11. It would be more transparent if the Treasury dealt with the need for caution explicitly when explaining its policy decisions rather than trying to incorporate deliberate bias in its forecasts. As we have yet to see whether the supposedly cautious growth assumption will produce unduly pessimistic forecasts on average over a long period, we assume for the time being, in calculating the probability distribution of future outcomes, that future Treasury forecasts will be unbiased.

It is also important to note that the direction of forecasting errors tends to be correlated from one year to the next: in other words, an over-optimistic forecast tends to be followed by another over-optimistic one and a pessimistic forecast by another pessimistic one. We can see this in Figure 2.14. In the Budget of March 1999, the Treasury forecast a current budget surplus in 1999–2000 of 0.3% of national income. The eventual out-turn was 2.2% of national income. Hence the Treasury's year-ahead Budget forecast for the current budget balance was almost 2% of national income too pessimistic in 1999–2000. In subsequent years, it was about ¾% of national income too pessimistic in 2000–01, ¾% too optimistic in 2001–02, 1½% too optimistic in 2002–03, 1% too optimistic in 2003–04 and ¾% too optimistic in 2004–05. If

²³ Table 2.2 of HM Treasury, *End of Year Fiscal Report*, 2005, http://www.hm-treasury.gov.uk/media/F59/99/pbr05_endofyear_296.pdf.

the December 2005 Pre-Budget Report prediction turns out to be accurate, the equivalent forecast for 2005–06 will have been less than ½% of national income too optimistic. This would be in line with trends in receipts and spending seen so far this financial year.

Figure 2.14. Treasury current budget balance forecasts



Sources: HM Treasury, various Budgets and Pre-Budget Reports.

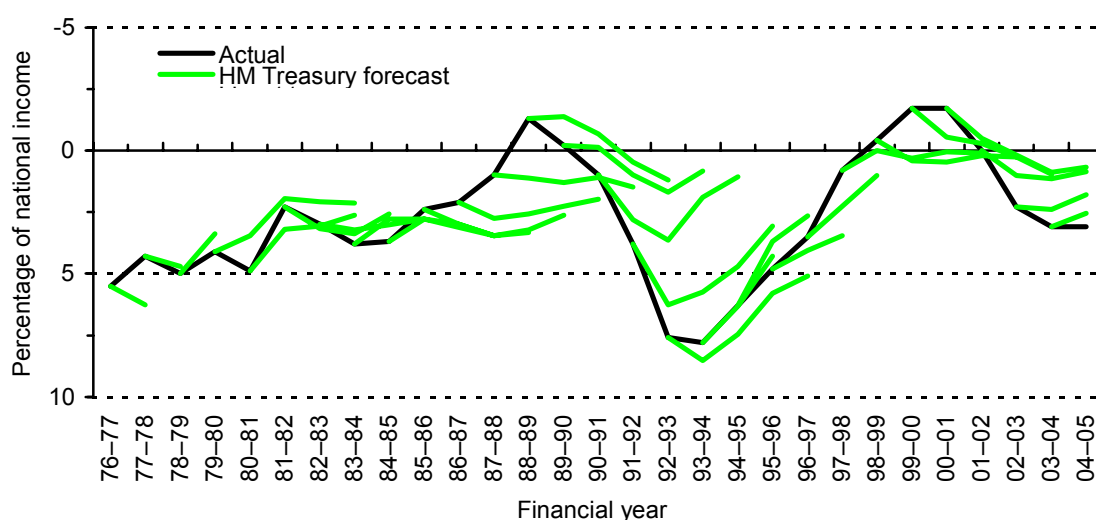
Asked to explain the serial over-optimism of the Treasury’s public finance forecasts in recent years, Jon Cunliffe, Second Permanent Secretary at the Treasury responsible for macroeconomic policy and international finance, told the Treasury Select Committee in December that ‘There is a tendency for forecast errors to be correlated with the economic cycle, so when you have a positive output gap there is a tendency for forecast errors to be one way and when you have a negative output gap there is a tendency for forecast errors to be the other way’.²⁴ This is consistent with the switch from undue pessimism to over-optimism in 2001–02. But, as the Treasury now predicts that the output gap will remain negative for the next three years, it also suggests that this pattern may well persist for some time yet. Furthermore, if there is a predictable relationship between errors in the Treasury’s public finance forecasts and its contemporaneous estimates of the output gap, it should be possible to improve the forecasts by taking this into account.

Cyclically correlated forecast errors pose particular problems when the government is trying to achieve an asymmetric borrowing target over a cycle that is defined to begin with an up-phase and end with a down-phase. It will tend to receive pleasant surprises early in the cycle and allocate them believing that this is consistent with meeting the rule, only to receive nasty surprises later in the cycle when there are fewer years left over which to spread the pain of countervailing policy measures.

It is also the case that if a forecast made for one year ahead turns out to be too optimistic or pessimistic, then forecasts made further ahead tend to have errors in the same direction. This is demonstrated by the fact that the forecast lines tend not to cross the actual borrowing line in Figure 2.15, which shows the longer run of Treasury forecasts.

²⁴ <http://www.publications.parliament.uk/pa/cm200506/cmselect/cmtreasy/uc739-ii/uc73902.htm>.

Figure 2.15. Treasury public sector net borrowing forecasts



Source: Authors' calculations using data from table 2.3 of HM Treasury, *End of Year Fiscal Report*, 2005, http://www.hm-treasury.gov.uk/media/F59/99/pbr05_endofyear_296.pdf.

Table 2.5. Correlations of forecasting errors for public sector net borrowing

Years ahead:	1	2	3	4
1	1.00			
2	0.75	1.00		
3	0.53	0.88	1.00	
4	0.35	0.69	0.90	1.00

Note: Statistics on the one-year-ahead errors are constructed using all years' out-turns from 1977-78 to 2004-05; statistics on the two-year-ahead errors use out-turns from 1981-82 to 2004-05; statistics on the three-year-ahead errors use out-turns from 1982-83 to 2004-05 except the years 1996-97 to 1999-2000; and statistics on the four-year-ahead errors use out-turns from 1983-84 to 2004-05 except the years 1984-85 to 1986-87 and 1997-98 to 2000-01.

Source: Methodology following C. Emmerson, C. Frayne and S. Love, 'Updating the UK's Code for Fiscal Stability', IFS Working Paper no. W04/29, 2004, http://www.ifs.org.uk/publications.php?publication_id=3163.

Table 2.5 shows the correlations between the errors in successive Treasury forecasts over time horizons of up to four years as far back as the late 1970s. They confirm that even successive forecasts looking four years ahead tend to err in the same direction from one forecast to the next.

We argued in last year's Green Budget that the Treasury should seriously consider presenting its forecasts in a fan chart or a similar form that incorporates confidence intervals (a view also taken by the National Institute of Economic and Social Research and by staff missions of the International Monetary Fund). This would make it clear that no reasonable safety margin could ever guarantee that a fiscal rule will be met with 100% certainty. The best one can do is decide how large a probability of breaking the rule is tolerable and plan accordingly. Rather than focusing on whether the Chancellor is likely to 'hit' or 'miss' a rule, it would be more productive to analyse where the Chancellor chooses to aim within the probability distribution and to reach a judgement on whether he is pursuing the target with appropriate caution. So, for example, the Chancellor could publish a forecast based on central rather than cautious assumptions and then show the extent to which he was being cautious by demonstrating that there was a reasonable probability that borrowing would exceed a given amount.

The Treasury has repeatedly rejected this idea. In evidence to the Treasury Select Committee after the 2005 Budget, Mr Cunliffe cited a number of barriers to this approach, for example: the sensitivity of the sample period of past forecasting experience used to estimate future performance, dealing with policy changes and adjusting for the economic cycle.²⁵

These might be genuine difficulties, but we remain of the view that the approach would be a useful addition to the policy framework. Mr Cunliffe told the committee: ‘How you would fit a probabilistic system like this onto fiscal policy decisions in the way we take them, I am not very clear. We accept that there is uncertainty. We use cautious assumptions. We set out clearly what we do and we say, for credibility reasons, “This is the rule and we will meet it”’. But it is never credible to claim that ‘we will meet it’ with 100% confidence in an uncertain forecasting environment. Indeed, to do so may well erode credibility. If the Chancellor had taken a less dogmatic or a more probabilistic approach to meeting his golden rule, observers may have been less inclined to jump to the conclusion that he has re-dated the cycle in recent months simply to avoid the embarrassment of missing the rule.

Meeting the golden rule

Having assessed the confidence that we should place in the Treasury’s forecasts for borrowing, we now ask what this implies for assessing the chances of meeting the fiscal rules over the economic cycle that the Treasury now expects to last until 2008–09.

Over the first eight years of the cycle, the current budget has averaged a surplus of 0.2% of national income. As we saw in Figure 2.10, in PBR 2005 the Treasury predicted deficits of 0.9% of national income this year and 0.3% in 2006–07, then balance in 2007–08 and a surplus of 0.5% of national income in 2008–09. This would reduce but not eliminate the surplus, leaving the rule to be met by an average of under 0.1% of national income or a cumulative £12.8 billion. This is barely larger than the average error in forecasting the budget balance one year ahead (Table 2.4). The Treasury argues that its true room for manoeuvre is slightly larger because its non-investment spending plans include an as-yet unallocated £1.9 billion contingency reserve for unexpected needs.²⁶

The Chancellor has steadily downgraded his forecasts for the current budget balance in recent years (Figure 2.16), primarily because tax revenues have persistently undershot his forecasts since the stock market decline in 2001, but also because he has chosen to increase spending in areas such as health, education and tax credits. As we have seen, this would by now have exhausted his room for manoeuvre in meeting the rule over his original seven-year cycle.

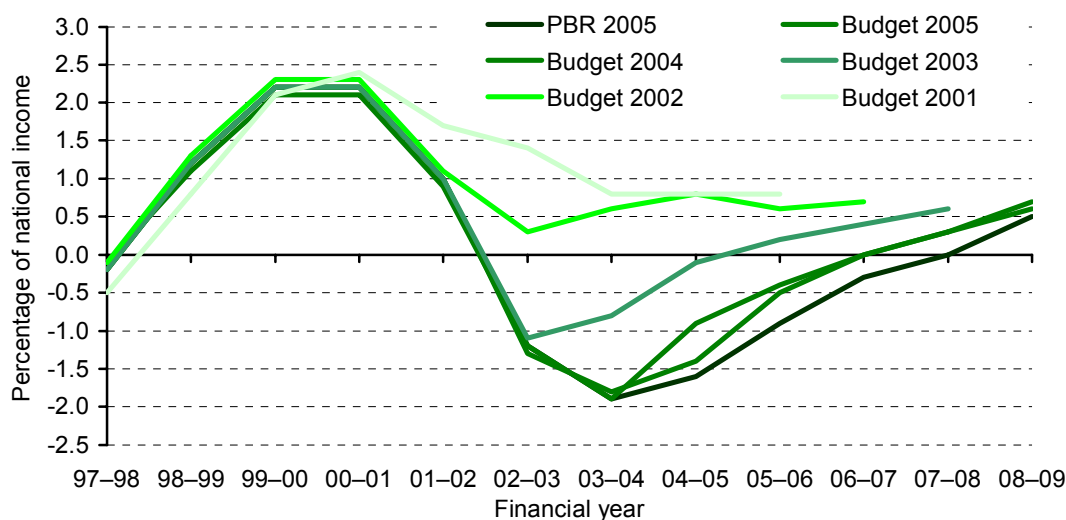
But how much room for manoeuvre does the Chancellor have within the newly elongated cycle?

To answer this question, we need to translate the expected average surplus over the cycle into a probability that the rule will be met, given the likely forecasting errors over the remainder of the cycle. We can do this by using the data in Table 2.4 and assuming that Treasury forecasts for the current budget are as accurate as those for public sector net borrowing.

²⁵ <http://www.publications.parliament.uk/pa/cm200506/cmselect/cmtreasy/uc739-ii/uc73902.htm>.

²⁶ The current part of the annually managed expenditure (AME) margin contains £0.5 billion in 2006–07 and £1.4 billion in 2007–08 (tables B.17 and B.20 of the December 2005 Pre-Budget Report).

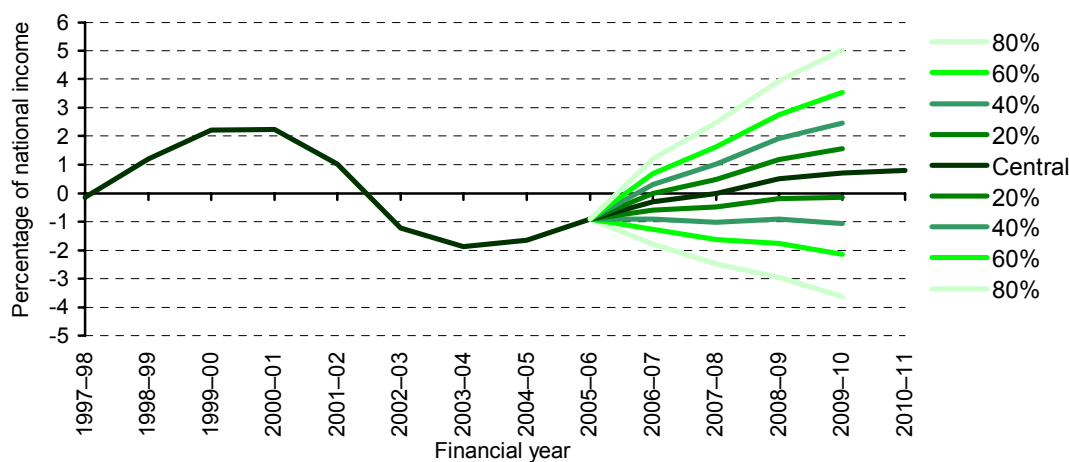
Figure 2.16. Treasury current budget forecasts over present cycle



Sources: Successive Budgets and Pre-Budget Reports.

Figure 2.17 shows the probabilities of different outcomes for the current budget balance, based purely on the Treasury’s latest PBR forecasts and on its past forecasting performance. It is in the same format as Figure 2.13, which shows the probabilities for public sector net borrowing. We assume that the Treasury’s projection for 2005–06 is correct, but that there is uncertainty thereafter. The ‘central’ estimate is the forecast shown in Figure 2.10. Figure 2.17 shows that there is a 20% probability that the outcome will lie within the darkest bands either side of the central forecast, a 40% probability that it will lie between the next darkest bands, and so on. It suggests, for example, that there is just over a 40% chance that the current budget will still be in deficit in 2009–10 rather than in surplus as the Treasury hopes.

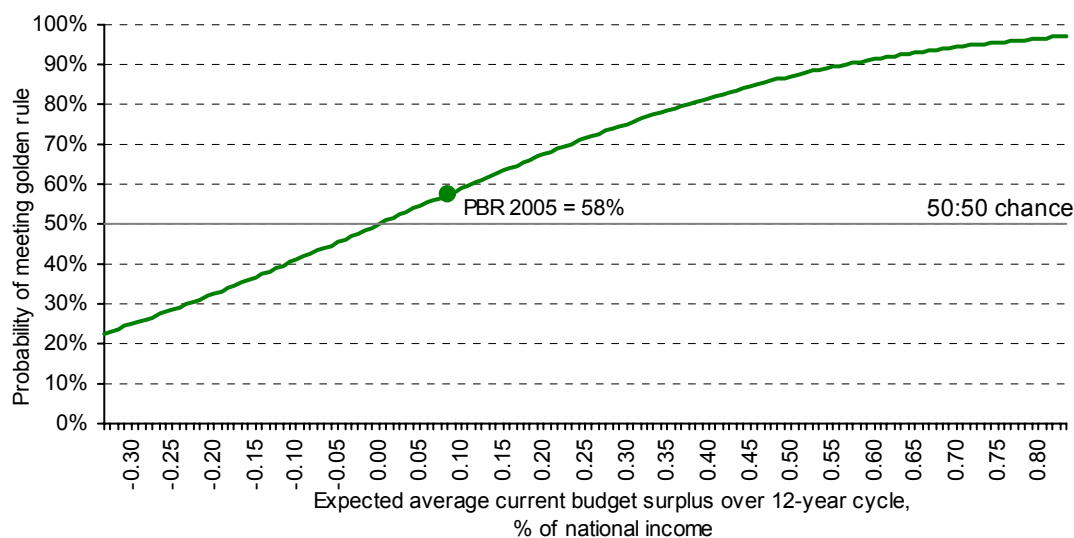
Figure 2.17. Probabilities of current budget balance outcomes



Sources: Central projections are taken from HM Treasury, *Pre-Budget Report 2005*, 2005, http://www.hm-treasury.gov.uk/pre_budget_report/prebud_pbr05/prebud_pbr05_index.cfm and assume that the forecast for 2005–06 is correct; methodology for computing fan charts taken from C. Emmerson, C. Frayne and S. Love, ‘Updating the UK’s Code for Fiscal Stability’, IFS Working Paper no. W04/29, 2004, http://www.ifs.org.uk/publications.php?publication_id=3163.

Figure 2.18 shows the probability of meeting the golden rule implied by different forecasts for the average current budget balance over the cycle made with three years of the cycle still to run. As we are now looking at the cumulative current budget surplus over a number of years, this also takes into account the correlations between errors in borrowing forecasts over time presented in Table 2.5. Because we again assume that the forecast errors are not biased in either direction and that the distribution of errors is symmetrical, a forecast cumulative surplus of exactly zero means a probability of meeting the golden rule of exactly 50%: underachievement is as likely as overachievement. We also exclude the possibility that the Chancellor will choose to implement new measures to increase the cumulative surplus in the event of disappointing out-turns, so the probabilities show the likelihood of meeting the rule without policy changes. The PBR prediction of an average surplus of under 0.1% of national income implies a 58% probability of meeting the rule, given the Treasury’s past forecasting performance over a three-year time horizon (and assuming that the PBR forecast for 2005–06 is correct). While the cumulative current budget surplus is expected by the Treasury to be larger over the period from 1997–98 to 2008–09 than over the period from 1997–98 to 2005–06, the likelihood of the golden rule being missed is in fact larger over the former period due to the fact that there is much greater uncertainty over the longer time period.

Figure 2.18. Probabilities of meeting the golden rule with three years of the cycle remaining



Sources: HM Treasury, *Pre-Budget Report 2005*, 2005, http://www.hm-treasury.gov.uk/pre_budget_report/prebud_pbr05/prebud_pbr05_index.cfm; methodology for computing probabilities taken from C. Emmerson, C. Frayne and S. Love, 'Updating the UK's Code for Fiscal Stability', IFS Working Paper no. W04/29, 2004, http://www.ifs.org.uk/publications.php?publication_id=3163.

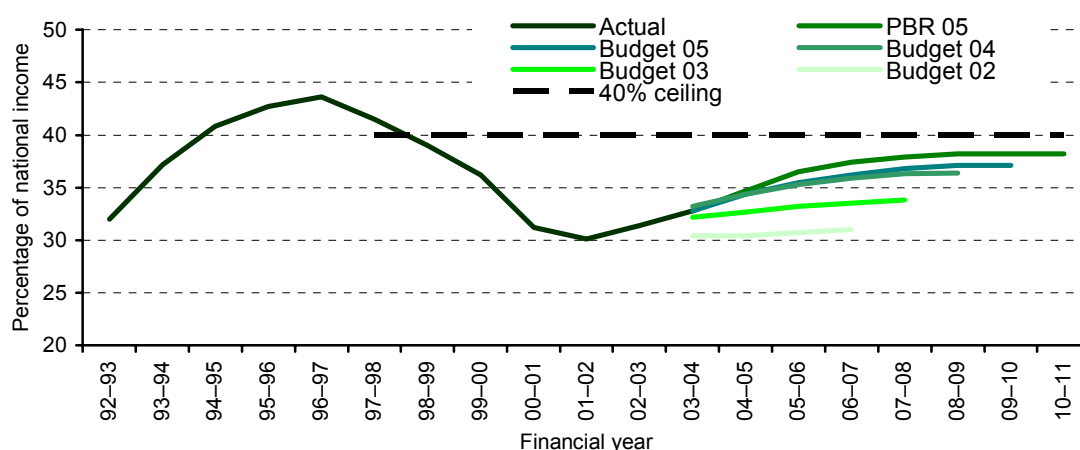
Meeting the sustainable investment rule

In recent Budgets and Pre-Budget Reports, the Treasury has gradually revised up its forecasts for public sector net debt, as shown in Figure 2.19. In Budget 2002, the Treasury was predicting a debt ratio around 31% of national income at the end of the then forecasting period in 2006–07. In the 2005 Pre-Budget Report, it predicted that the debt ratio would stabilise at a little over 38% of national income at the end of the current forecasting period in

2010–11. If this forecast is accurate, the government will continue to meet the sustainable investment rule, as the ratio will remain below the permitted ceiling of 40% of national income. But the Chancellor’s room for manoeuvre has clearly been eroding in recent years and the target has become more vulnerable if Treasury officials are correct in arguing that their borrowing forecasts tend to be consistently over-optimistic while activity is below trend.

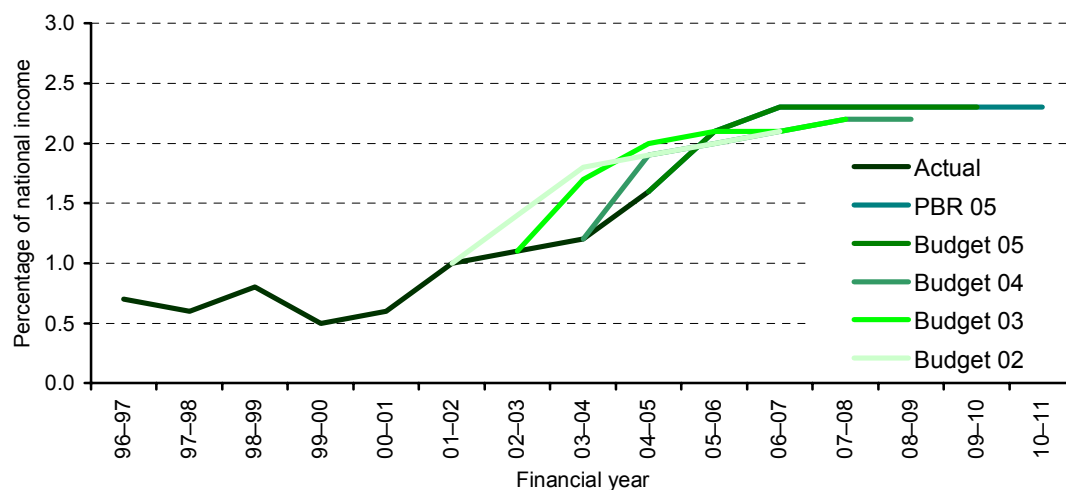
The rise in the Treasury’s debt forecasts reflects unexpectedly large current budget deficits rather than more ambitious plans for public sector net investment. As Figure 2.20 shows, the government has repeatedly failed to increase investment as quickly as it would like.

Figure 2.19. Treasury public sector net debt forecasts



Sources: Various Budgets and Pre-Budget Reports.

Figure 2.20. Treasury public sector net investment forecasts

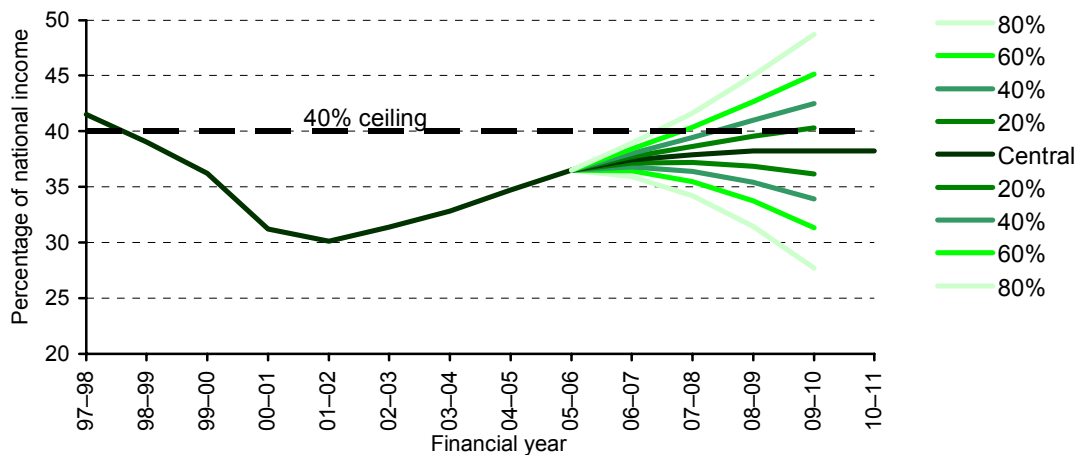


Sources: Various Budgets and Pre-Budget Reports.

If the Treasury’s latest forecasts for public sector net debt are correct, the government could make an additional one-off public sector net investment of just under 2% of national income before breaching the sustainable investment rule. But, as we noted earlier, there is no guarantee that the forecasts will be correct, based on past experience.

We can translate the probability distribution for public sector net borrowing in Figure 2.13, and the correlation coefficients in Table 2.5, into a probability distribution for public sector net debt (Figure 2.21). Again, this assumes that the Pre-Budget Report forecast for 2005–06 is the best available and unbiased. The chances of breaching the 40% ceiling are extremely low in 2006–07, but then increase quickly as the forecasting horizon extends (Table 2.6). This is due to the relatively strong historical correlations between errors in successive forecasts, and the fact that any differences in borrowing have a cumulative impact on net debt.

Figure 2.21. Probabilities of public sector net debt outcomes



Note: Assumes that any cumulative variation in public sector net borrowing from that forecast by the Treasury directly adds to public sector net debt. The second-order impact of changes in debt interest is ignored.

Source: Central projections are taken from HM Treasury, *Pre-Budget Report 2005*, 2005, http://www.hm-treasury.gov.uk/pre_budget_report/prebud_pbr05/prebud_pbr05_index.cfm; methodology for computing fan charts taken from C. Emmerson, C. Frayne and S. Love, 'Updating the UK's Code for Fiscal Stability', IFS Working Paper no. W04/29, 2004, http://www.ifs.org.uk/publications.php?publication_id=3163.

Table 2.6. Meeting the sustainable investment rule?

Financial year	Probability net debt exceeds 40% in year
2006–07	1%
2007–08	24%
2008–09	37%
2009–10	41%

Source: As for Figure 2.21.

To reiterate, these probabilities of meeting/missing the fiscal rules are based entirely on the uncertainty that the Treasury might place around its own forecasts if it were to assume that its forecasting performance will be the same in the future as in the past. The probabilities would be different if a different view were taken from the Treasury's about the evolution of the economy or about the likely size of revenues and spending for any given state of the economy. We discuss the outlook for the economy in Chapter 3 and generate our own forecasts for the public finances in Chapter 5.

To sum up, if we take the Treasury's PBR forecasts as the best on offer, its chances of meeting the golden rule over the current cycle are a little worse than 60:40. If the Chancellor

wanted to be 90% confident of meeting the rule, at this stage he would need to be forecasting a current budget balance averaging 0.6% of national income. The chance of breaking the sustainable investment rule in 2008–09 is 37%. Looking forwards to the next cycle then, if the Treasury's forecasts are correct and the fiscal rules continue to be applied in the same way, the sustainable investment rule would be more constraining than the golden rule.

2.5 Reforming the fiscal framework

The past year has not been a good one for the credibility of the fiscal framework. Having been consistently over-optimistic about the outlook of the public finances for the past four years, by last summer the Chancellor was on course to break his golden rule if existing trends in tax revenues and spending continued. Since then, he has extended the period over which he believes performance against the rule should be judged from seven to 12 years, making the rule easier to meet in both this cycle and the next on the basis of his most recent forecasts.

This has raised suspicions in some quarters that the Chancellor has deliberately 'moved the goalposts' in order to ensure the rule is met. Even though the public finances remain in pretty good shape by international and historic standards, these suspicions threaten to undermine the value of the framework as a means of persuading voters and financial market participants that the government will manage the public finances in a fair and sustainable way.

An important part of the problem is that the Chancellor has placed a rhetorical weight on strictly meeting his definition of the rules that neither their theoretical nor statistical foundations can reasonably be expected to bear. His absolute conviction that the rules will be met without further policy measures remains hard to square with the past accuracy of his – or anyone else's – fiscal forecasts.

In this section, we discuss possible reforms to the design and application of the rules.

The golden rule

The rationale of the golden rule is broadly to ensure that future generations of taxpayers are only asked to repay debt that has financed spending from which they themselves are likely to benefit. It is also intended to reduce any incentive for policymakers to make disproportionate cuts in infrastructure spending, if and when total spending plans have to be cut. Cutting capital spending may well be more tempting than cutting current spending, as it normally takes longer for voters to feel the effects in terms of the quality of public services.²⁷

The current/capital distinction

Balancing the current budget as formally defined will not necessarily achieve the goal of intergenerational fairness. The golden rule is based on the distinction between capital and current spending in the National Accounts, which in turn is based on international accounting standards as interpreted by the Office for National Statistics. But capital and current spending do not necessarily coincide with spending that does and does not benefit future taxpayers. For

²⁷ For a discussion, see HM Treasury, *Fiscal Policy: Current and Capital Spending*, London, 1998, <http://www.hm-treasury.gov.uk/media/A97/77/530.pdf>.

example, £1 of ‘current’ spending on teacher training might be of greater benefit to future taxpayers than £1 of ‘capital’ spending on, say, an Olympic venue of uncertain long-term use.

But if the Chancellor were to distinguish spending that may and may not be covered by borrowing in a more sophisticated way, observers might well suspect that this definition could be tweaked and spending reclassified if and when a breach of the rule looked likely.

Even if the golden rule did distinguish perfectly between spending that does and does not benefit future taxpayers, it would not necessarily distribute the burden of paying it in a ‘fair’ way. For example, there is no guarantee that the time profile of debt repayments will match the time profile of the benefits flowing from the investment project that the additional debt has funded. Neither would different members of a particular generation necessarily pay in proportion to the benefits they receive. (Indeed, that might well not be thought desirable, as one of the purposes of public spending and taxation is to redistribute resources between individuals on equity grounds.) Equity considerations might also lead us to argue that future generations should pay for some of today’s current spending, as productivity growth should make future generations, on average, better off and therefore give them greater ability to pay.

Symmetry versus asymmetry

It is also not obvious why the golden rule should be asymmetric. If we are seeking intergenerational fairness, we should presumably care as much if today’s taxpayers pay too much for current spending as if they pay too little. In other words, this would imply that we should aim for a current budget balance rather than a current budget surplus.

Under the current formulation, the Chancellor has gambled his credibility on avoiding even a tiny current budget deficit over a multi-year period. To be confident of doing so, he would need to build in a very big margin for error that would most likely mean that the rule ended up being overachieved substantially for no good reason. As it is, his margin for error on the original cycle dating appeared to be eliminated last year and he has only managed to restore it by re-dating the cycle in a way that risked undermining the credibility of the framework.

The rule could be made symmetric and the Chancellor could approach it in much the same way that the Bank of England approaches the inflation target. He would aim for a current budget balance, with everyone aware that the chances of meeting it exactly are negligible. Instead, credibility would rest on his ability to convince voters and investors that policy was being set with the genuine aim of getting as close to the target as possible, and – to that end – on his willingness to explain why the current budget may be deviating from target and what he intends to do about it over a sensible time horizon. Unfortunately, making such a change is likely to be more difficult when the credibility of the framework is already being questioned.

If the Chancellor wants to retain an asymmetric target for the current budget, then it might be sensible for him to explain what he regards as an acceptable probability of breaking the rule, given the inevitable uncertainties around even the most short-term forecast for government borrowing. He could, for example, promise always to set policy so as to give him a 70% chance of meeting the rule, given past forecast uncertainty and the length of time remaining before the expected end of the current economic cycle. But this is clearly more complicated than the current formulation and might appear to be a weaker commitment.

The cycle

The attraction of demanding that the golden rule only has to be met on average over an economic cycle – not every year – is that it allows the automatic stabilisers to operate. But the choice of exactly which cycle to judge the rule over is arbitrary.

We have argued in our last two Green Budgets that judging adherence to the rule over a fixed, dated cycle is not ideal, and that a more forward-looking interpretation would be preferable. Mervyn King, the Governor of the Bank of England, made very similar arguments last year when responding to the Treasury's initial re-dating of the cycle in the press conference to launch the Bank of England's August *Inflation Report*.²⁸

One disadvantage of picking any fixed period is that the amount the government can borrow towards the end is determined by what it has borrowed earlier on. Policy becomes backward-looking as the Chancellor is constrained to compensate for the policy and forecasting errors of the past rather than setting what is necessarily the most sensible policy looking forward. Or, as in the past year, the Chancellor can give himself more room for manoeuvre by reassessing the past state of the economy. As Mr King pointed out, 'If you change your view of what happened seven or eight years ago, it does not change the underlying fiscal position'.

One alternative – which still relies on estimating an output gap – would be to set a rolling forward-looking target for the cyclically adjusted budget balance at the end of a suitable time horizon. This would allow the automatic stabilisers to operate and would parallel the operation of the inflation target: the Bank does not have to achieve an average inflation rate of 2% over a particular period, but rather sets interest rates to achieve it two or so years ahead.

In a similar vein, Mr King argued: 'If you look forward from today, [from] a particular point in the business cycle – whatever that is – to the corresponding point in the next cycle, will the current budget be in balance or surplus as opposed to being in deficit, which would mean that the fiscal rules were not being met. That's the sort of judgement that needs to be made'.

But any rule that relies on an assessment of the economy's place in the business cycle runs into the risk that the Treasury might be suspected of manipulating its estimates of the output gap – or some approximation to it – to make the rule easier to meet. An obvious solution would be to constrain the Treasury to present forecasts based on output gap estimates produced by an independent body or bodies, such as the soon-to-be-independent Office for National Statistics, perhaps advised by an external panel.

But, more fundamentally, does it make sense to base policy on the existence of a clearly defined economic cycle at all? In a stable economic environment in which monetary policy is well run and credible, we would expect deviations in economic activity from its sustainable level to be relatively small. Economic activity might show high-frequency noise around its trend rather than protracted periods with significantly positive or negative output gaps. To quote Mr King again:

I am not even sure if the output gap is terribly well defined. To put precise numbers on it is pushing beyond the bounds of the plausible. The Bank and the Treasury have a very different view of how to think about the cycle. We don't like this sort of fixed dating and we have a different way of thinking about the productive potential of the

²⁸ See webcast of August press conference at <http://www.bankofengland.co.uk/publications/inflationreport/2005.htm>.

economy and how it evolves. I am not even sure it makes sense to think about a cycle as if it is a well-defined phenomenon.

An alternative might be for the Treasury to set a target for the current budget in the medium term and constrain itself to present forecasts of revenues and spending based on some average of independent forecasts for growth and other macroeconomic variables – alternatively, it could use the forecasts used by the Bank of England, which would mean that the same projections would be used for both fiscal and monetary policy. More dramatic still, more of the fiscal policy process could be delegated to an independent body, following the precedent of the Bank of England’s Monetary Policy Committee. For example, an independent body could be asked to provide official tax revenue forecasts, helped by access to information from HM Revenue & Customs. The Treasury has traditionally argued that it is impossible to separate responsibility for public finance forecasts or the economic inputs into them from the responsibility for making policy.²⁹

The sustainable investment rule

A self-imposed ceiling on the ratio of debt to national income has intuitive appeal. It would be unfair on future generations and dangerous in terms of the likely financial market response for public sector debt to be put on an explosive and economically unsustainable upward path that would at some point require a disruptive policy correction. But it is less clear precisely how high the debt ceiling should be set and what liabilities it should encompass.

The height of the debt ceiling

It is hard to argue from theory or experience why a 40% ceiling is any more desirable than, say, 30% or 50%. Attempts have been made to infer an optimal debt ratio from comparisons with the debt/equity ratios prevailing in the private sector and from theoretical and empirical analyses of the relationship between interest rates and economic growth rates. None has given a particularly precise or robust result.³⁰ The 40% ratio appears to have been chosen in effect as a commitment not to allow debt to rise again to the levels inherited from the Conservatives.

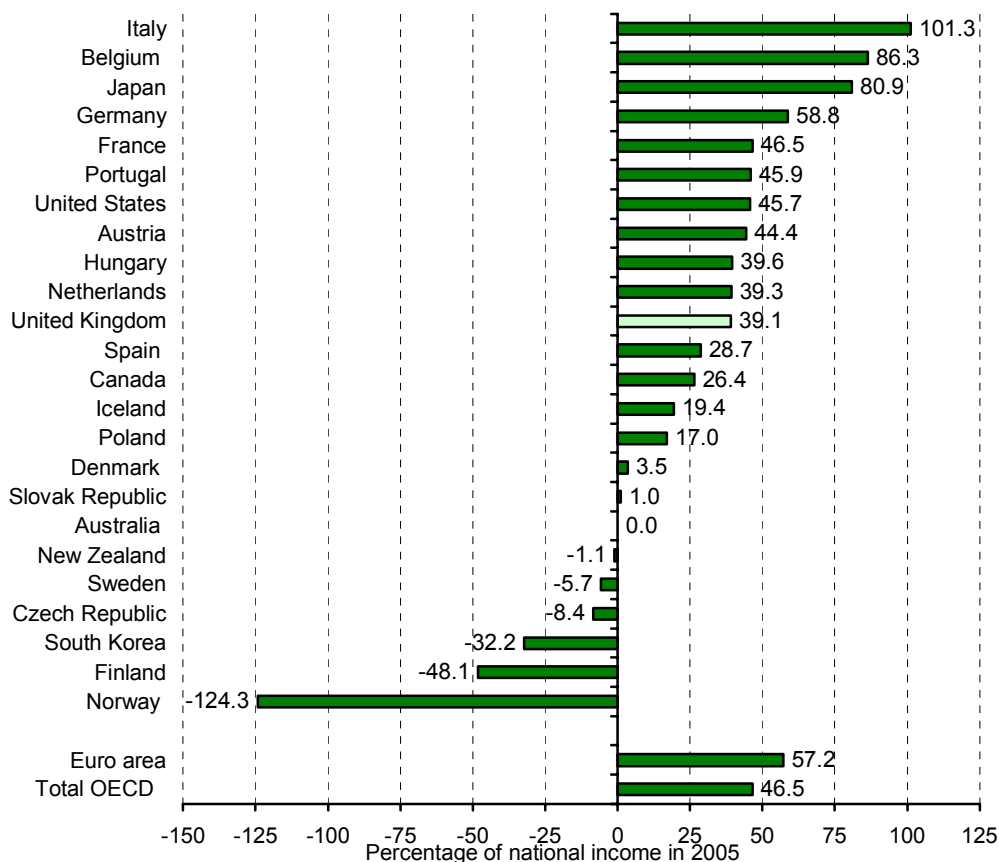
As Figure 2.22 shows, even if it reached the 40% ceiling, the UK’s public sector debt would still be low relative to that of most other G7 countries.³¹ But there are other industrial countries with much stronger net debt positions, including Australia, New Zealand and the Scandinavian countries. Some OECD countries have more financial assets than debt – for example, Norway (which is aiming to smooth the consumption of its oil revenues) and South Korea (which has built up enormous foreign exchange reserves to limit the rise in its exchange rate).

²⁹ We discussed options for the delegation of elements of fiscal policymaking in chapter 2 of R. Chote, C. Emmerson, D. Miles and Z. Oldfield (eds), *The IFS Green Budget: January 2005*, IFS Commentary no. 98, <http://www.ifs.org.uk/budgets/gb2005/index.php>.

³⁰ Pages 174–5 of E. Balls and G. O’Donnell (eds), *Reforming Britain’s Economic and Financial Policy: Towards Greater Economic Stability*, Palgrave, Houndmills, 2001.

³¹ General government debt is a slightly narrower definition than the public sector debt measure used in the sustainable investment rule, but it facilitates international comparison.

Figure 2.22. General government debt ratios in OECD countries in 2005



Note: Data for the United States include outlays net of operating surpluses of public enterprises.

Source: Annex table 33, OECD Economic Outlook 78 database, December 2005,

http://www.oecd.org/document/61/0,2340,en_2825_32066506_2483901_1_1_1_1,00.html.

So why might the UK wish to aim for a debt ratio higher or lower than 40%?

First, the desired debt ratio will depend on the desired level of public sector net investment over the long term. The amount the government can invest while adhering to a particular debt ceiling will depend on: (a) the current level of debt; (b) the degree to which the golden rule is over- or under-achieved (which in turn partly depends on how much the government has to spend servicing its existing debt); and (c) the growth of the cash value of the economy.

If we assume that the golden rule is met exactly, that whole-economy inflation is 2.5% a year and that the economy grows in real terms by 2.5% a year, then the government could sustain public sector net investment of 2% of national income a year while keeping public sector net debt at 40% of national income.³² (If the debt ratio starts below 40%, the government can invest more temporarily until it gets there, which is its current intention.) If we believe that public sector net investment should be higher than 2% of national income in the long term, this argues for raising the debt ceiling above 40% unless the golden rule is consistently overachieved. Conversely, if we wish to invest less than 2% of national income, the debt ceiling could be lowered.

³² Higher nominal growth in the economy, even if the result of higher inflation, would allow a higher level of real net investment.

Second, you might move the debt ceiling if you believe that the underlying level of current spending is likely to rise (or fall) from its present level at some point in the future and you want to limit economically costly variation in tax rates. This could be done without altering the level of investment by deliberately over- (or under-)achieving the golden rule for a while and temporarily reducing (or increasing) the debt ceiling.

For example, some Scandinavian economies are deliberately pursuing low or negative net debt positions now because they believe that the ageing of their populations will require more public spending on the elderly in future decades. By running tight fiscal policies today, and giving themselves greater scope to borrow more in the future, they can limit future increases in tax rates and the associated disincentives to work and saving.

As we discuss in Chapter 4, the Long-Term Public Finance Report published alongside PBR 2005 suggests that, on existing policies, public spending in the UK is projected to rise from 41.1% of national income last year to 45.3% in 2054–55 – an increase of 4.2% of national income or more than £50 billion in today's terms.³³ Individuals are likely to wish to smooth their consumption in the face of an expected rise in tax rates to pay for these increases in spending, but some will be more aware of the necessary adjustments and better placed to make them at low cost than others. On these grounds, it may be thought preferable for the state to help make the adjustment by increasing tax rates now (aiming for a lower debt-to-GDP target) to reduce the increase required in the future (when the debt ratio would be allowed to rise again).

Off-balance-sheet liabilities

The Treasury judges progress against the sustainable investment rule using its own definition of public sector net debt, which is simply cash borrowing to date less any financial assets. But the opposition Conservative Party, among others, has argued that this understates the government's future financial obligations and, perhaps more importantly, that it understates the *increase* in public sector indebtedness since Labour came to power because the sustainable investment rule has created greater incentive for off-balance-sheet financing.³⁴ There are three main areas of contention: public sector pensions, the Private Finance Initiative and contingent liabilities.

Public sector pensions

The future liabilities of unfunded public sector workers' pension schemes are not included on the government's balance sheet. Estimating the value of these liabilities is extremely difficult as it will depend on individuals' pension tenure, their final salaries, how their pension benefits are indexed and the longevity of public sector workers. Nonetheless, these liabilities appear to be substantial: the Pensions Commission's Second Report estimates that at the end of 2003, these liabilities were worth £500 billion³⁵ – this is larger than public sector net debt, which

³³ Source: HM Treasury, *Long-Term Public Finance Report: An Analysis of Fiscal Sustainability*, 2005, http://www.hm-treasury.gov.uk/pre_budget_report/prebud_pbr05/assoc_docs/prebud_pbr05_adlongterm.cfm.

³⁴ http://www.conservatives.com/tile.do?def=news.story.page&obj_id=126705.

³⁵ See figure 5.11 of Pensions Commission, *A New Pension Settlement for the Twenty-First Century: The Second Report of the Pensions Commission*, The Stationery Office, London, 2005, <http://www.pensionscommission.org.uk/publications/2005/annrep/main-report.pdf>.

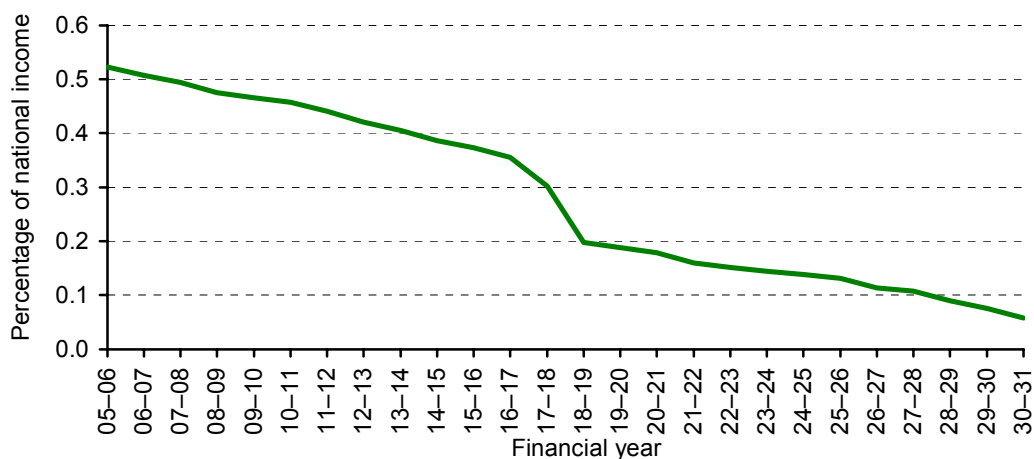
was £376.9 billion in December 2004.³⁶ These liabilities are different from actual public sector net debt, since governments are able to reduce the generosity of the future accrual of public sector workers' pension rights, though this could have implications for other components of the remuneration package required to attract and retain public sector workers of the desired quality and motivation.

Private Finance Initiative

Governments of both parties have made increasing use of partnerships with the private sector to help deliver investments the government deems desirable. Private firms undertake some capital spending on behalf of the public sector by means of the Private Finance Initiative (PFI). Under the PFI, the public sector pays private firms a rental price for use of a capital asset that the private sector delivers. Over the next 26 years, the Treasury's estimates suggest that an average of 0.3% of national income a year will, under contracts signed up to December 2005, be paid to PFI providers. Figure 2.23 shows that, in the unlikely event of no further deals being signed, the payments would decline from just over 0.5% of national income in 2005–06 to under 0.06% of national income in 2030–31.

In 2003, the Treasury stated that around 57% of the investment carried out through the PFI was 'on balance sheet'.³⁷ Despite this, none of the capital spending that has been done by private contractors under the auspices of the PFI is included in the Treasury's estimates of

Figure 2.23. Estimated future payments under PFI contracts signed up to December 2005



Note: Figures up to 2017–18 include estimated payments for the LUL (London Underground Ltd) Public Private Partnership contracts. These contracts contain periodic reviews each 7½ years and therefore the service payments are not fixed after 2009–10.

Source: PFI payments from table B25, page 240 of HM Treasury, *Pre-Budget Report 2005*, Cm. 6701, 2005, http://www.hm-treasury.gov.uk/pre_budget_report/prebud_pbr05/report/prebud_pbr05_repindex.cfm. GDP figures from table B.3 of the 2005 PBR for the period up to 2010–11 and then assumed to grow at 5% a year in nominal terms.

³⁶ HM Treasury, *Public Finances Databank*, London, December 2005, http://www.hm-treasury.gov.uk/media/576/54/public_fin_databank_dec_05.xls.

³⁷ Speech by the Chief Secretary to the Treasury, Paul Boateng, to the PFI Congress, 10 June 2003, http://www.pppforum.com/government/cst10_06_03_2003.html.

public sector net debt.³⁸ The total capital value of the deals signed up to December 2004 was £42.7 billion or 3.4% of national income.³⁹ Unfortunately, figures are not available on when the capital spending is actually to take place. Had this capital spending all been conventionally financed at the same cost, and delivered by the end of 2004–05, this would have added 3.4% of national income to public sector net debt in that year. Since some of this capital spending will not yet have been undertaken, this calculation overstates the reduction in public sector net debt that would have occurred through the use of the PFI. However, it is also important to note that further deals will have been signed since December 2004 – indeed, the 2005 Pre-Budget Report (table B.24) states that deals with a capital value of £11.6 billion are currently at the preferred bidder stage – with most of this being projects in the Department of Health (£5.2 billion) and the Ministry of Defence (£4.1 billion).

Contingent liabilities

Private Finance Initiative payments are not the only off-balance-sheet liabilities that might be faced by the government. For example, borrowing carried out by Network Rail could be considered similar to conventional government borrowing, even though the Office for National Statistics defines it as a private sector company and therefore off the public sector's balance sheet. After all, the government in effect determines Network Rail's income by controlling the prices that train operators have to pay the company to use the track and associated infrastructure, as well as guaranteeing to repay its debt if the company collapses. More likely, if the company got into serious trouble, the government would take greater control and the ONS would reclassify it as part of the public sector for the purposes of the National Accounts, even if Network Rail had not been formally renationalised. This would further reduce the Chancellor's room for manoeuvre in remaining below the current debt ceiling.

Conclusion

Given the suspicions raised by the growth of off-balance-sheet liabilities, it might be thought desirable on grounds of transparency to widen the definition of public sector debt and raise the ceiling in the sustainable investment rule correspondingly. But it is hard to know where to stop in deciding which future payments we might want to bring onto the balance sheet. For example, it might be easier to renegotiate the payments due to a contractor under the PFI than to reduce the future NHS pay-bill, but nobody suggests including the latter as debt as a commitment to future spending. And, unlike a private company, the government also has future revenue guaranteed by its ability to levy taxes. A comprehensive treatment of the public sector balance sheet would presumably take this into account.

In terms of intergenerational fairness, it is also important to remember that while future taxpayers will have to service obligations undertaken by today's taxpayers, today's taxpayers are already having to service obligations undertaken by past taxpayers. So while it is true that today's public sector pension commitments are expected to cost 2.1% of national income in

³⁸ The Office for National Statistics has stated that conceptually the imputed finance lease loan element of PFI deals should be included in public sector net debt and that work on developing an estimate is underway (<http://www.statistics.gov.uk/pdfdir/pfi0505.pdf>).

³⁹ Source: HM Treasury, *PFI Signed Projects List*, December 2004, http://www.hm-treasury.gov.uk/documents/public_private_partnerships/ppp_pfi_stats.cfm.

2054–55, past public sector pension commitments were already costing 1.5% of national income in 2004–05.⁴⁰ It is the increase in the servicing burden over time that implies the need for a fiscal policy response, not the total burden.

2.6 Conclusion

Gordon Brown created his fiscal rules with the best of intentions. He believed that under previous Labour governments, the ‘promise of long term and sustained improvements in our public services could not be met’ since, as a result of excessive borrowing, ‘short term bursts of spending had to be reined back’.⁴¹ Mr Brown was determined to persuade voters and financial market participants that he would not allow history to repeat itself.

He staked his credibility on clear promises: to borrow only to invest on average over the current economic cycle (the golden rule) and to keep public sector net debt below 40% of national income in every year of the cycle (the sustainable investment rule). Both are reasonable rules of thumb, but neither has particularly firm analytical or statistical foundations as defined operationally. The direct economic importance of strictly obeying the rules as defined has been overstated.

Four or five years ago, these appeared safe promises to make. The public finances had evolved more favourably than expected over Labour’s first term. The current budget was projected to remain in surplus and net debt well below 40% of national income. As a result, there seemed little danger that the rules would be breached.

But, as the Treasury conceded last year, its forecasts tend to be pessimistic when the economy is performing well and optimistic when there is spare capacity. The economy moved into a ‘down-phase’ in 2001 and the Chancellor has had to downgrade his forecasts for the public finances repeatedly ever since.

As the margin by which the Treasury expects to meet the rules has gradually eroded, issues of precise definition and interpretation have gained undue significance. Under the revised dating of the economic cycle, the golden rule will be easier to meet. If this re-dating had taken place when everyone expected the golden rule to be met regardless, no one would have made a fuss. But because the re-dating took place at a time when it was likely to make the difference between meeting the golden rule and missing it, natural cynicism means that the credibility of the framework has been diminished.

As things stand now, both fiscal rules would be met if the economy and the public finances evolve as the Treasury expects. But, given the uncertainty implied by the Treasury’s past forecasting record, there is still a significant possibility even on its own figures that, unless the Chancellor takes action, one or both could be breached by the end of the current forecasting horizon. The Chancellor will have to decide whether the probability of success

⁴⁰ Source: Table 5.1, page 45, of HM Treasury, *Long-Term Fiscal Report*, December 2005, http://www.hm-treasury.gov.uk/media/F59/32/pbr05_longterm_513.pdf.

⁴¹ Gordon Brown, Labour Party Conference speech, 29 September 2003, <http://www.scottishlabour.org.uk/brownconfspeech2003/>.

under existing policies is sufficient or whether he wishes to implement further measures to increase it.

There are a number of ways in which the framework could be reformed for the better, although in the current environment, changes risk being interpreted as a cynical attempt to make the rules easier to meet.

It is not clear that a more sophisticated distinction between current and capital spending in the golden rule would outweigh the costs, but there is a strong case for making the rule symmetric and more forward-looking. It would also be helpful for the Treasury to take a probabilistic view of the outlook for the public finances in deciding the appropriate degree of caution to aim for. To the extent that the rules depend on dating of the economic cycle or estimates of the output gap, credibility could be enhanced if the Treasury used the estimates of an independent body.