

THE GOVERNMENT'S FISCAL RULES

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April 2001

Updated November 2005

1. Introduction

The government announced in June 1998 that, under the guidelines of its ‘Code for Fiscal Stability’, it would keep to two fiscal rules. These are designed to ‘help to achieve the central economic objective of high and stable levels of growth and employment’.¹ This Briefing Note starts by describing the two fiscal rules and then looks at the latest set of HM Treasury forecasts, which suggest that these rules will indeed be met. We compare the UK’s fiscal rules to the system used by countries that have adopted the Euro, and discuss briefly the UK’s present and potential future obligations under the Eurozone’s ‘Stability and Growth Pact’. We then go on to discuss the level of uncertainty that is implicit in any public finance forecasts and the importance of

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Acknowledgements: The paper was funded by the ESRC-funded Centre for the Microeconomic Analysis of Public Policy at the Institute for Fiscal Studies (grant number M535255111) and draws on Chapter 2 of R. Chote, C. Emmerson, D. Miles, and Z. Oldfield (eds), *The IFS Green Budget: January 2005*, Commentary 98, IFS, London, 2005 (<http://www.ifs.org.uk/budgets/gb2005/index.php>). The authors thank Robert Chote and Andrew Dilnot for help and advice during preparation of this and earlier drafts of this paper and Judith Payne for copy-editing. All remaining errors are the responsibility of the authors.

¹HM Treasury, *Economic and Fiscal Strategy Report 1998: Long Term Stability and Investment*, Cm. 3978, Stationery Office, London, 1998 (http://www.hm-treasury.gov.uk/documents/uk_economy/economic_and_fiscal_strategy_report_1998/ukecon_efsr_index.cfm).

remembering that, if the rules are to continue to be met, a degree of caution should be maintained.

2. An overview of public borrowing

Since coming to office in May 1997, the government has consistently stated that it will keep to two strict fiscal ‘rules’:

- The **golden rule**: over the economic cycle, the government will borrow only to invest and not to fund current spending. In the terminology defined below, the government will run a surplus on current budget.
- The **sustainable investment rule**: over the economic cycle, the ratio of net public sector debt to GDP will be set at a ‘stable and prudent’ level, defined by the Chancellor as no more than 40% of GDP.

The government’s fiscal objectives

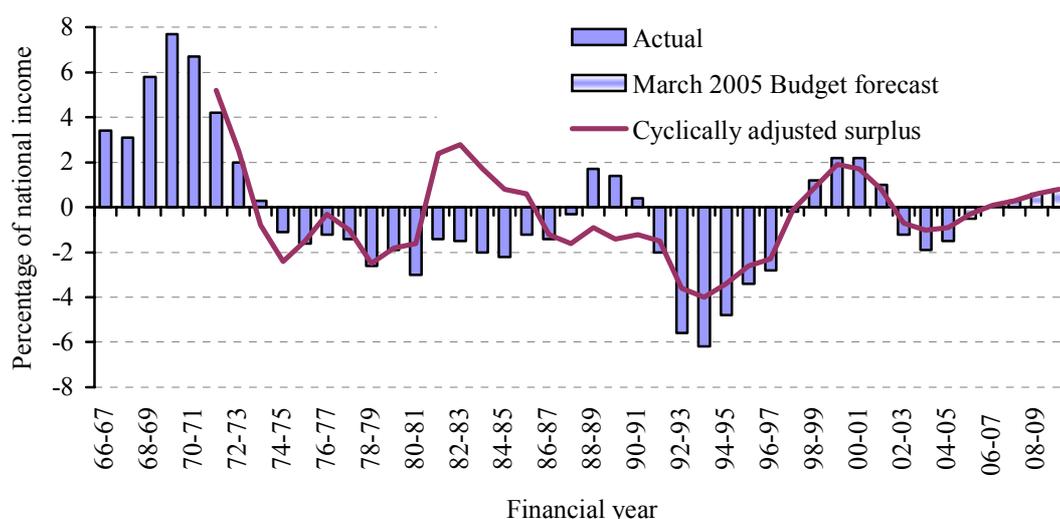
One of the government’s arguments for adopting these rules is that the burden of public spending should fall fairly across generations. The government has taken this to mean that all public consumption benefiting the current generation should be paid for by that generation. By stating that the government does not borrow to fund current spending, the golden rule seeks to ensure that this is achieved. The sustainable investment rule supplements the golden rule, seeking to avoid the creation of an excessive burden of debt repayments on future generations. The sustainable investment rule aims to keep debt at a level that does not prove unsustainable or unfair to future generations.

There is nothing sacrosanct about these two rules, nor are they necessarily optimal. While it is true that meeting them would mean that the public finances were kept in relatively good shape, a failure to do so would not automatically render the public finances unsustainable, and meeting them does not even necessarily imply generational fairness. The government has provided no justification for a net debt target of 40% of GDP – it could just as easily have chosen 38% or 42%. The Maastricht Treaty, for instance, allows UK gross general government debt of no more than 60% of GDP, which is consistent with net public debt being considerably higher than 40% of GDP. Indeed, even if it is thought that there is an optimal level of debt, there is no reason why this should remain constant over time. Slavish adherence to the golden rule may also be suboptimal. The definitions of current and capital spending are determined by National Accounts conventions rather than by economic criteria. For example, some education spending, which tends to be classified as current spending, may well be beneficial to future generations. Conversely, government policy can impose costs on future generations that are not reflected in current spending, the most obvious example being future pension liabilities.²

²For a discussion of how to measure intergenerational equity and the golden rule, see, for example, M. Robinson, ‘Measuring compliance with the golden rule’, *Fiscal Studies*, 1998, vol. 19, pp. 447–62 (http://www.ifs.org.uk/fiscalstudies.php?issue_id=2146). R. Cardarelli, J. Sefton and L. Kotlikoff, ‘Generational accounting in the UK’, *Economic Journal*, 2000, vol. 110, issue 467, pp. F547–74, discusses the costs of an ageing

The fiscal rules chosen by the government are probably best regarded as sensible rules of thumb, but they are no more than that. This should always be borne in mind when assessing the sustainability of fiscal policy. Figure 2.1 shows the current budget surplus as a share of national income from 1966–67 to the end of the present forecast period. Also shown, from 1970 onwards, is the cyclically adjusted current budget surplus. In the late 1960s and early 1970s, the golden rule was met. This was not because public sector net borrowing was particularly low, but because public investment at the time was high. For example, in 1967–68, despite a current budget surplus of 3.1% of GDP, public sector net borrowing was some 4.0% of GDP. During the late 1970s and 1980s, only two years – 1988–89 and 1989–90 – had a surplus on the current budget. Using the Treasury’s preferred method of assessing the golden rule – namely, averaging the current budget surpluses as a share of national income over the economic cycle – it seems likely that the golden rule was not met during the period running from the late 1970s to the mid-1980s, despite the more favourable cyclically adjusted performance.³ During the economic cycle running from 1986–87 to 1996–97, the golden rule was far from met, with the deficit on current budget averaging over 4% of GDP between 1991–92 and 1996–97. This was due to high levels of public borrowing combined with low levels of public investment.

Figure 2.1. Compliance with the golden rule? Current budget surpluses and deficits, from 1966–67 to 2009–10, as a percentage of national income



Source: HM Treasury, *Budget 2005*, HC 372, London, March 2005 (http://www.hm-treasury.gov.uk/budget/budget_05/budget_report/bud_bud05_report.cfm); HM Treasury, *Public Finances Databank*, 21st September 2005 (http://www.hm-treasury.gov.uk/economic_data_and_tools/finance_spending_statistics/pubsec_finance/psf_statistics.cfm).

population in a generational accounts framework. J. Banks, R. Disney and Z. Smith, ‘What can we learn from generational accounts in the UK?’, *Economic Journal*, 2000, vol. 110, issue 467, pp. F575–97, discusses the sensitivity of generational accounts forecasts to the underlying assumptions.

³ HM Treasury’s statement of their preferred methodology can be found in Paragraph 4.8 of HM Treasury, *Analysing UK Fiscal Policy*, London, November 1999 (http://www.hm-treasury.gov.uk/Documents/UK_Economy/Fiscal_Policy/ukecon_fisc_policy99.cfm?).

The Treasury believes that the current economic cycle began during the financial year 1997–98.⁴ The Treasury’s methodology for assessing compliance with the golden rule is that the cumulative (or average) current budget surplus as a share of national income should be zero or positive. This includes both the financial year during which the economic cycle began and the financial year in which it ended, which has the strange result that financial years that cover the beginning or the ending of an economic cycle will be double counted. Under the government’s projections, the golden rule is set to be met over the current cycle, as there is an average surplus on current budget. Table 2.1 shows that the total surplus, both in cash terms and as a share of national income, is forecast by the Treasury to be positive regardless of when the current economic cycle comes to a close. For example if the cycle ends in 2005–06 then there would be a cash surplus of £3.1 billion over the 9 year cycle. The cumulative current budget as a share of national income would have been 1.4% of national income which equates to £17 billion in 2005–06 terms. This is much larger than the £3.1 billion cash surplus as taking the surplus as a share of national income puts relatively more weight on the large surpluses that were accrued in the early years of this economic cycle.

Table 2.1. The government’s projections for the current budget surplus over the present economic cycle

	Current budget surplus (£bn)	Cumulative cash surplus since April 1997	Current budget surplus (% GDP)	Cumulative % GDP surplus since April 1997
1997–98	–1.2	–1.2	–0.2	–0.2
1998–99	10.4	9.1	1.2	1.0
1999–2000	20.3	29.4	2.2	3.2
2000–01	21.5	50.9	2.2	5.5
2001–02	10.2	61.1	1.0	6.5
2002–03	–13.1	48.0	–1.2	5.3
2003–04	–21.5	26.5	–1.9	3.3
2004–05	–17.7	8.8	–1.5	1.8
<i>Budget 2005 forecasts</i>				
2005–06	–5.7	3.1	–0.5	1.4
2006–07	0.6	3.7	0.0	1.4
2007–08	4.2	7.9	0.3	1.7
2008–09	8.8	16.7	0.6	2.3

Source: HM Treasury, *Public Finances Databank*, 21st September 2005 (http://www.hm-treasury.gov.uk/economic_data_and_tools/finance_spending_statistics/pubsec_finance/psf_statistics.cfm)

It is also expected that the rule will also be met over the next cycle, because both the absolute and the cyclically adjusted current budget surplus are forecast to be positive at the end of the planning period.⁵ It is important to note, though, that (as will be seen below) there is a considerable amount of measurement error when predicting the public

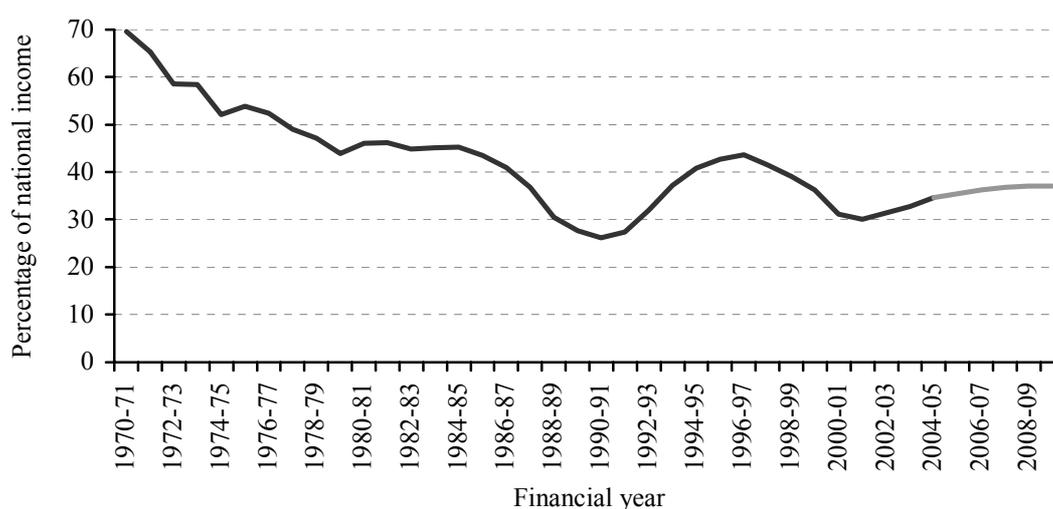
⁴ See HM Treasury, *Evidence on the UK economic cycle*, July 2005 (http://www.hm-treasury.gov.uk/media/2E6/A5/economic_cycles190705.pdf).

⁵ See Chapter 2 of R. Chote, C. Emmerson, D. Miles, and Z. Oldfield (eds), *The IFS Green Budget: January 2005*, Commentary 98, IFS, London, 2005 (<http://www.ifs.org.uk/budgets/gb2005/index.php>), for further details.

finances. Whether the golden rule is actually met will depend on how accurate the projections are.⁶

Net public sector debt is shown in Figure 2.2. During the Conservatives' period of office from 1979 to 1997, the net public debt ratio averaged 38.9% of national income, which is in line with the second of the current government's fiscal rules. This was achieved during a period of historically low growth in public spending, enabled in part by public sector net capital investment falling, in real terms, from £15.3 billion in 1978–79 to £6.6 billion in 1996–97 (2003–04 prices).⁷ In the process, the government's balance sheet deteriorated markedly. The net worth of the public sector fell from 82.9% of national income in 1988–89 to 16.6% of national income in 1996–97.⁸ According to the government's projections, the sustainable investment rule should continue to be met into the future. Moreover, this is planned to coincide with a time of increasing, rather than decreasing, investment.

Figure 2.2. Meeting the sustainable investment rule?
Net public sector debt, from 1970–71 to 2008–09, as a percentage of national income



Source: HM Treasury, *Budget 2005*, HC 372, London, March 2005 (http://www.hm-treasury.gov.uk/budget/budget_05/budget_report/bud_bud05_report.cfm); HM Treasury, *Public Finances Databank*, 21st September 2005 (http://www.hm-treasury.gov.uk/economic_data_and_tools/finance_spending_statistics/pubsec_finance/psf_statistics.cfm).

⁶For a discussion of the errors in Treasury forecasts in the late 1980s, see HM Treasury, *Fiscal Policy: Lessons from the Last Economic Cycle*, London, 1997 (<http://www.hm-treasury.gov.uk/mediastore/otherfiles/lessons.pdf>).

⁷Source: Table C25 of HM Treasury, *Financial Statement and Budget Report, March 2005*, HC 372, London, March 2005 (http://www.hm-treasury.gov.uk/budget/budget_05/budget_report/bud_bud05_report.cfm). The largest part of the fall in gross public investment over this period was by public sector corporations, with investment by local authorities also falling – see chart 2.3, page 6 of HM Treasury, *Investing in the Future: Departmental Investment Strategies – A Summary*, November 2000, Cm. 4916, Stationery Office, London, 2000 (<http://www.hm-treasury.gov.uk/mediastore/otherfiles/whitepaper.pdf>). For a description of which spending programmes were most affected by the cuts to public sector investment, see T. Clark, M. Elsby and S. Love, 'Trends in British public investment', *Fiscal Studies*, 2002, vol. 23, pp. 305–42 (http://www.ifs.org.uk/publications.php?publication_id=2127).

⁸ Source: Table A8 of HM Treasury, *Public Finances Databank*, 21st September 2005 (http://www.hm-treasury.gov.uk/economic_data_and_tools/finance_spending_statistics/pubsec_finance/psf_statistics.cfm).

treasury.gov.uk/economic_data_and_tools/finance_spending_statistics/pubsec_finance/psf_statistics.cfm)

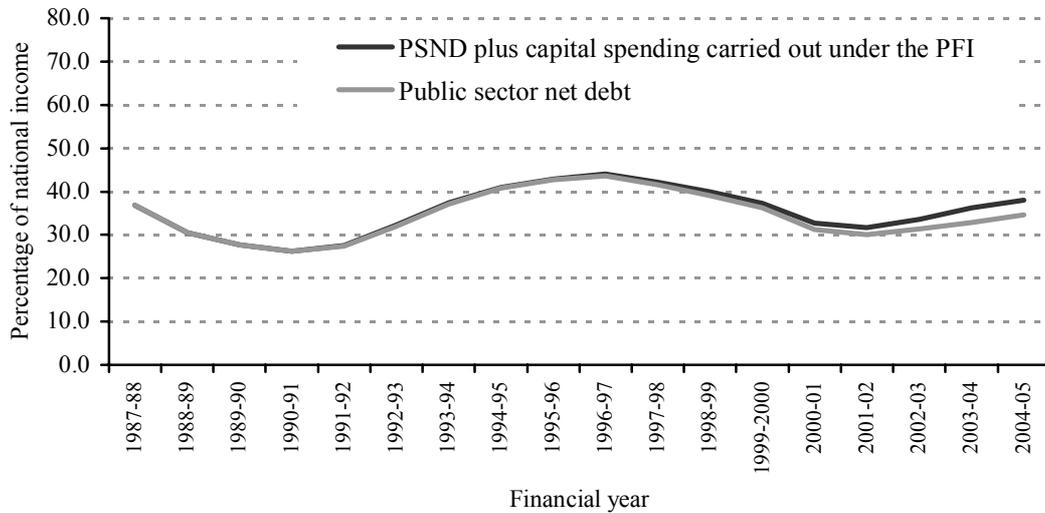
In addition to ‘traditional’ public sector investment, private firms now undertake some capital spending on behalf of the public sector under the Public Finance Initiative (PFI). The public sector pays the private firms a rental price for use of a capital asset that the private sector delivers. In the absence of the PFI, the public sector would have had to undertake the accumulation of the capital itself, leading to higher debt if this was financed through borrowing. While the use of the PFI should make little difference to the golden rule, the reduction in public sector net debt does make the sustainable investment rule easier to meet.⁹

Figure 2.3 compares the Treasury’s projections of public sector net debt with an illustration of the path that would have been seen if all PFI deals signed up to December 2004 had been conventionally financed through borrowing. The total capital value of the deals signed up to December 2004 was £42.7 billion or 3.4% of national income in 2004–05. Since figures are not available on when the capital spending took place the calculations assume that all capital spending took place in the year that the deal was signed.¹⁰ This will tend to overstate the difference between public sector net debt and what public sector net debt would have been had all PFI projects been financed conventionally. But on the other hand, the signed projects list only extends to December 2004, and further deals are likely to be signed in the future. Adding 3.4% of national income to public sector net debt in 2004–05 would have increased it from 34.6% of national income to 38.0% of national income – i.e. closer to, but not above, the 40% ceiling. It seems possible that by the end of the current planning period, adding PFI spending could push public sector net debt above the 40% of national income ceiling. But the Chancellor might reasonably argue that if he had intended to include PFI spending he would have set the ceiling higher.

⁹ While some PFI investment is already ‘on balance sheet’ (i.e., included in the public sector net investment total) it still does not score in public sector net debt. In June 2004 57% of the capital value of signed PFI deals were on balance sheet. Source: Speech given by the then Chief Secretary Paul Boateng to the Treasury on 10 June 2003 (see http://www.hm-treasury.gov.uk/newsroom_and_speeches/speeches/chiefsecspeeches/speech_cst_100603.cfm).

¹⁰ Since figures are available on a calendar year basis we actually attribute capital spending to the financial year that has a nine month overlap with the calendar year. For example the capital value of PFI deals signed in 1987 is assigned to 1987–88.

Figure 2.3. Net public sector debt with and without PFI spending as a percentage of national income, 1987–88 to 2004–05



Notes: The figures for capital spending under PFI are based on the breakdown by year of signed projects from 1987 to 2004.

Source: PFI figures are taken from HM Treasury's 'PFI Signed Projects List – December 2005', available at http://www.hm-treasury.gov.uk/documents/public_private_partnerships/ppp_pfi_stats.cfm. Figures on PSND from HM Treasury, *Budget 2005*, HC 372, London, March 2005 (http://www.hm-treasury.gov.uk/budget/budget_05/budget_report/bud_bud05_report.cfm); HM Treasury, *Public Finances Databank*, 21st September 2005 (http://www.hm-treasury.gov.uk/economic_data_and_tools/finance_spending_statistics/pubsec_finance/psf_statistics.cfm)

Measures of public borrowing

In order to facilitate monitoring of the government's two fiscal rules, there is a distinction between current and capital spending in the public accounts. In order to assess the state of the public finances, the government looks at three main fiscal aggregates:¹¹

- The **surplus on current budget** – defined as the difference between total government receipts and current public spending (including depreciation) – is the measure used to judge whether the golden rule is being achieved.
- **Public sector net borrowing** (PSNB) – the Treasury's preferred measure of government borrowing – is the finance needed to meet current and capital spending over and above that raised by total receipts.

¹¹A more detailed description of these, and other measures of public borrowing, can be found in HM Treasury, *Analysing UK Fiscal Policy*, London, 1999 (http://www.hm-treasury.gov.uk/Documents/UK_Economy/Fiscal_Policy/ukecon_fisc_policy99.cfm?).

- The **net public debt ratio** is total public sector debt, net of liquid assets, as a percentage of GDP. This is used to see whether the sustainable investment rule is being met.

Since its fiscal rules are judged over the economic cycle, the government can run current budget deficits and still keep to its rules, as long as it genuinely believes that the economy was below the level of output that it can sustainably produce. This is because lower levels of economic output reduce tax revenues – in particular, from corporation tax and income tax, since profits, employment and wages will be lower. In addition, public spending on social security benefits such as income support and the jobseeker's allowance is higher when economic output is lower.¹² Hence the government also uses measures of the current budget surplus and PSNB that are cyclically adjusted to see if the level of borrowing in any one year is consistent with meeting its fiscal rules.

The old measure of borrowing – the public sector borrowing requirement (PSBR) – is now known as the public sector net cash requirement (PSNCR). This is similar to the PSNB but is based on cash payments rather than accrued income. Privatisation receipts, other financial transactions and accruals adjustments are added to the PSNB to get to the PSNCR. Thus, for example, the sale of the third-generation mobile phone spectrum licences reduced the PSNCR in 2000–01 by a full £22.5 billion, but its effect on the PSNB is spread across the 20 years for which the licences have been awarded. The government no longer focuses on the actual cash needs of the public sector (PSNCR), although they still have a role to play as they measure the addition to net public debt each year. The central government component of the PSNCR determines the necessary amount of gilt sales. The general government component of the PSNB (i.e. excluding public corporations' net borrowing) is the aggregate used in judging compliance with the Maastricht criteria.

3. The Stability and Growth Pact

As a signatory of the Treaty on European Union, the UK is required to ensure that its fiscal policy meets the terms of the Stability and Growth Pact. Under its original 1997 specification, signatory countries must set a medium-term budgetary objective of 'close to balance or surplus'. This implied either higher taxes or lower public spending than required by the golden rule since it prohibited the government from borrowing to invest. Also, general government gross debt should be below 60% of national income and deficits should be below 3% of national income. If these last two conditions are not met, the path of debt and deficits are taken into account to assess whether progress is being made to meet these thresholds. At present the limit on general government gross debt is not constraining to the UK; on this measure debt currently stands at just over 40% of national income. However, for the second year running the UK exceeded the 3% limit on the deficit in 2004 and there is a strong possibility that this will occur again in 2005. Over the medium term, the golden rule is consistent with a cyclically adjusted

¹²In 2000–01, it was estimated that every additional 100,000 unemployed would cost an extra £580 million in public spending in the current year and £610 million in the subsequent year. Source: Department of Social Security, *Departmental Report: The Government's Expenditure Plans 2000/01–2001/02*, Stationery Office, London, 2000.

current budget deficit of 0% and the Treasury has plans for public sector net investment of around 2.3% of national income going forward.¹³ Any cyclical borrowing of over 0.7% of national income would therefore lead to a breach of the 3% deficit limit. According to Treasury estimates, this is the likely result of an output gap of over 1% of national income two years in a row. Output gaps have been large enough to cause cyclical borrowing of over 0.7% of GDP in 13 of the last 30 years.

In June 2005, the interpretation of the medium term budgetary objectives was amended to allow for variation between individual Member States' objectives, "to take into account the diversity of economic and budgetary positions and developments as well as of fiscal risk to the sustainability of public finances[...]"¹⁴. For the countries in the Euro and the Exchange Rate Mechanism II these will now be set in cyclically adjusted terms and may involve a medium term deficit of up to 1% of national income if the particular circumstances of the country make an economic case for it.¹⁵ The need for public investment could constitute such a case. As the UK is not in the Euro its compliance with these rules is not subject to the fines that the Council of the European Union can impose for countries that are deemed to have broken the limits, under the Excessive Deficits Procedure. However, if the UK were to join the Euro it would become subject to all censures available under the Excessive Deficits Procedure.

The danger of a strict balanced budget rule is that it could inappropriately prevent spending on beneficial investment projects that are prohibitively expensive for current taxpayers alone to finance, because it would not permit future generations to bear part of the cost.¹⁶ It seems unreasonable not to allow governments to borrow when individuals often do so to fund long-term purchases such as houses. As we discussed earlier, the golden rule would allow investment projects to go ahead because it distinguishes capital from current spending, although borrowing to finance current spending projects of value to future generations would still not be permitted.

The recent amendment to the Stability and Growth Pact allows for a 1% of GDP deviation from the strict balanced budget rule under certain circumstances, with specific reference being made to reforms that raise potential growth. The Code of Conduct adopted on the 11th of October 2005 by the Council further expands on this by stating that one of the three aims of the medium term budgetary objectives is to "allow[] room for budgetary manoeuvre, in particular taking into account the needs for public

¹³ Note that the UK fiscal rules are given in terms of the public sector, while the EU ones are for general government which equals the public sector excluding public corporations. According to the 2005 Budget, public corporations are expected to invest a negative amount in 2004–05 and 2005–06 so public sector net investment is an underestimate of general government investment. Public corporations' borrowing is expected to make little contribution to public sector borrowing.

¹⁴ Council Regulation (EC) No 1055/2005, Official Journal of the European Union L 174/1 7.7.2005.

¹⁵ It is currently not clear what the range of acceptable medium term budgetary objectives for the Member States that are neither part of the Euro nor the ERMII will be.

¹⁶ An argument made in favour of a balanced budget rule is that a golden rule would simply provide an incentive for countries to redefine how they classify investment spending, and in particular how depreciation is measured. This is discussed in, for example, M. Buti, S. Eijffinger and D. Franco, 'Revisiting the Stability and Growth Pact: grand design or internal adjustment?', Centre for Economic Policy Research, Discussion Paper 3692, 2002 (<http://www.cepr.org/pubs/new-dps/dplist.asp?dpno=3692>).

investment". While these changes are the first move towards allowing a medium term deficit to fund investment, they obviously do not go as far as the golden rule by explicitly allowing unlimited borrowing for investment. However, the combination of the golden rule and sustainable investment rule do not allow this either. Once the 40% of GDP debt threshold of the sustainable investment rule has been reached, keeping debt at or below this level is consistent with borrowing of around 2% of GDP, based on a nominal GDP growth of 5% per year (corresponding to real growth of 2½%). So although the recent changes to the Stability and Growth Pact bring it closer in line with the UK's fiscal rules, more changes would be necessary to one of the sets of rules for the two sets of rules to be reconciled should the UK choose to join the Euro.

Table 3.1 shows how the UK compared with other EU countries, in terms of both government borrowing and debt, in 2004. The UK's public balance (net borrowing or lending) had deteriorated from a deficit of 1.6% of national income in 2002 to one of 3.1% in 2003. This compared unfavourably with a weighted average of -1.3% across the 15 'old' EU members and -2.7% across the Eurozone. Equally, when the cyclically adjusted measure of the public balance is considered, the UK's deficit of 3.5% of national income is bigger than both the weighted average of -0.8% (for the 14 EU countries excluding Luxembourg) and the Eurozone countries' weighted average of -2.0%. But the UK had a relatively low level of general government gross debt (41.5% of national income compared with a weighted EU-15 average of 61.1% and a weighted Eurozone average of 70.8%).

**Table 3.1. Public finances across the EU in 2003,
as a percentage of national income**

	Public balance	Cyclically adjusted public balance	Debt
	Public balance	Structural balance	Debt
Greece	-6.6	-6.7	109.3
Germany	-3.7	-2.6	66.4
France	-3.6	-3.0	65.1
Italy	-3.2	-3.0	106.5
UK	-3.1	-3.5	41.5
Portugal	-3.0	-1.5	59.4
Netherlands	-2.1	-0.3	53.1
Austria	-1.0	-0.8	64.3
Luxembourg	-0.6		6.6
Spain	-0.1	0.1	46.9
Belgium	0.0	0.5	95.7
Ireland	1.4	1.5	29.8
Sweden	1.6	1.9	51.1
Finland	2.1	1.7	45.1
Unweighted EU average	-1.3	-0.9 ^a	58.9
Weighted EU average	-1.3	-0.8 ^{ab}	61.1
Unweighted Eurozone	-1.7	-1.3 ^a	62.4
Weighted Eurozone	-2.7	-2.0 ^{ab}	70.8

^aThese averages exclude Luxembourg.

^bThe weighted averages are weighted according to GDP figures from Eurostat, while the cyclically adjusted public balance is obtained from the OECD.

Note: Public balance refers to net borrowing or lending of consolidated general government sector. Debt refers to general government consolidated gross debt. The EU-15 average refers to the 15 member states prior to the May 2004 expansion of the EU.

Source: EUROSTAT website (<http://europa.eu.int/comm/eurostat/>) for the public balance and debt figures and OECD, *Economic Outlook*, 77, May 2005 <http://www.oecd.org/dataoecd/5/51/2483816.xls> for the cyclically adjusted public balance.

4. How large are errors in the projections?

Figures 2.1 and 2.2 above show that the government is on course to meet both the golden rule and the sustainable investment rule. But there have been many occasions in the past when it has proved unwise to place too much weight on forecasts of future levels of public borrowing without considering the large margins of error that these contain. There are two main ways in which the public finances could follow a different course from the Treasury's forecasts.

Incorrect assessment of sustainable output in the economy

Judging whether the golden rule is being met is not possible without an assessment of the level of output the economy can sustain both now and in the future. In particular, if the government overestimates what level of output the economy can sustain, it will underestimate the likely future level of public borrowing. To assess what output the economy can sustain, forecasters make a judgement on the level of the current output gap (i.e. the difference between what the economy is currently producing and what its current sustainable capacity is) and the trend rate of growth of the economy (i.e. the rate at which the economy's sustainable capacity will grow). Errors can be made in both these judgements.

Overestimating the output gap

The output gap is the difference between what the economy is currently producing and the level of output that it could sustainably produce. The government needs to judge whether the current levels of borrowing are consistent with meeting the fiscal rules, which are assessed over the economic cycle. This means that a current budget deficit in any given year is still potentially consistent with meeting the golden rule, as long as the economy is operating below its sustainable level (i.e. there is a negative output gap). Hence, the size of the output gap is used to adjust cyclically the measures of borrowing, to remove the effect of the economic cycle on government receipts and spending.¹⁷ Incorrectly estimating the size of the output gap will lead to policymakers believing that the current level of cyclically adjusted borrowing is better (or worse) than it actually is.

¹⁷For more details, see HM Treasury, *Fiscal Policy: Public Finances and the Cycle*, London, 1999 (<http://archive.treasury.gov.uk/budget/1999/cycles.pdf>).

Overestimating the trend rate of growth

The trend rate of growth is the rate at which the economy can sustainably grow. Since the fiscal rules are judged over the economic cycle, an overestimate of the trend rate of growth has more serious consequences than an overestimate of growth in a particular part of the cycle. The golden rule is perfectly consistent with deficits on the current budget, as long as the economy is correctly judged to be operating below its potential level of output. Any revision to trend output will change the assessment of how comfortably the golden rule is being met, since it will affect the amount of economic growth that is possible in future years.

If trend output is overestimated, then future economic growth will also be overestimated, and hence borrowing will turn out worse than forecast. The current government believes that the trend rate of growth will be 2¾% until 2006–07 and 2½% thereafter. Since the cost of overestimating the trend rate of growth is that taxes would have to rise or spending commitments be cut back during a period of lower economic growth, the government is using a lower estimate in its public finance forecasts of 2½% until 2006–07 and 2¼% thereafter.¹⁸ Prior to the April 2002 Budget, the trend growth had been considered to be 2½% since the late 1990s, with the government working with 2¼% to ensure caution in its public finance forecasts.

Errors in forecasting levels of government spending and receipts

Forecasts for public borrowing are still subject to large margins of error, even if growth in the economy is correctly forecast. The reason for this is that even if forecasts of both government receipts and government spending are almost accurate, there can still be large errors in forecasts for borrowing.¹⁹ For example, the March 2005 Budget forecast for government revenues in 2005–06 is £487 billion, while the forecast for current expenditure (including depreciation) is £492 billion. This gives a forecast current budget deficit of £6 billion. Should government revenues turn out to be just 1% lower and government spending turn out to be 1% higher, the current budget deficit will be not £6 billion but £16 billion.

Magnitude of the errors made in the past

A look at the accuracy of previous forecasts shows that there are errors in forecasting levels of government receipts and expenditure. Table 4.1 shows the average error in Treasury forecasts of PSNB over the period 1977–78 to 2002–03. The average absolute error for borrowing in the year following the forecast is 1.0% of national income, which in 2005–06 is equivalent to £12 billion. Looking further ahead, the errors are much larger. It would not be unusual for the borrowing forecasts made this year for 2009–10 to be in excess of £30 billion out. Of course, this could mean that the golden rule will be

¹⁸See paragraph C27 of HM Treasury, *Financial Statement and Budget Report, March 2005*, HC 372, London, March 2005 (http://www.hm-treasury.gov.uk/budget/budget_05/budget_report/bud_bud05_report.cfm).

¹⁹For a discussion of forecasting techniques, see, for example, M. Robson (ed.), 'Symposium on forecasting the state of the public finances', *Fiscal Studies*, 1998, vol. 19, pp. 39–100 (http://www.ifs.org.uk/fiscalstudies.php?issue_id=2146).

met very comfortably. It is also possible that the out-turn will be worse than expected, which would potentially require tax increases or spending cuts in future Budgets.

Table 4.1. Average errors in forecasting public sector net borrowing (PSNB), as a percentage of national income and in £ billion

Time period	Average absolute error (% of GDP)	Average absolute error (£bn)
One year ahead	1.0	12
Two years ahead	1.7	21
Three years ahead	2.2	27
Four years ahead	3.0	37

Note: Figures in £ billion are calculated assuming HM Treasury forecast for national income in 2005–06 of £1,240. Average error corresponds to the average absolute error over the period 1977–78 to 2002–03 for one year ahead, 1981–82 to 2002–03 for two years ahead, 1982–83 (excluding 1996–97 to 1999–2000) for three years ahead, and 1983–84 to 2002–03 (excluding 1984–85 to 1986–87 and 1997–98 to 2000–01) for four years ahead.

Source: Authors' own calculations, using Table 2.8 of HM Treasury (2003), *End of year fiscal report*, London, December 2003 (http://www.hm-treasury.gov.uk/pre_budget_report/prebud_pbr03/assoc_docs/prebud_pbr03_adend.cfm).

One key implication of the presence of uncertainty in any public finance forecast is that it would be preferable for less emphasis to be placed on the precise forecasts for fiscal aggregates and greater emphasis to be placed on the magnitude of the risks to those forecasts. Using the projections contained in the March 2004 Budget, and information on the size of errors made in the past, Emmerson, Frayne and Love (2004) estimated that there was a 60% chance that the Chancellor's "golden rule" would be met over the current economic cycle without further tax increases or spending cuts compared to 74% for the forecast made by the Treasury 12 months earlier. As well as clarifying how cautious forecasts are, the uncertainty surrounding projections for fiscal aggregates also has implications for the way in which progress towards any fiscal rules should be interpreted.²⁰

5. Conclusions

Since coming into office in 1997, the government has committed itself to meeting the golden rule and the sustainable investment rule. Given current levels of planned investment, meeting these rules implies historically low levels of borrowing. Under the

²⁰ See pages 22 to 28 of C. Emmerson, C. Frayne and S. Love (2004), *Updating the UK's code for fiscal stability*, Working Paper No. 04/29 (http://www.ifs.org.uk/publications.php?publication_id=3163), London: IFS.

present forecasts, the government is set to meet its rules over both the current cycle and future economic cycles.

If the UK were to adopt the Euro, it would not only have to meet the more onerous obligations of the Stability and Growth Pact but would, theoretically, face fines for not doing so. The UK currently meets with ease the requirement relating to government gross debt. If the UK were to adhere to a balanced budget rule, it would require either an increase in taxation or cuts in public spending, as the level of borrowing currently forecast to pay for investment would no longer be permitted. In addition, meeting the golden rule could still imply public sector net borrowing of more than 3% of national income, depending on the level of investment spending and the performance of the economy. In principle, levels of net borrowing in excess of 3% are subject to sanction under the Excessive Deficits Procedure.

An important reason for including a level of caution in the government's projections is that past experience shows that there are large margins of error when predicting both the state of the economy and the public finances. If the difference between actual borrowing and government forecasts were similar to that of previous years, a favourable difference would allow substantial tax cuts or spending increases. An unfavourable one would lead to the fiscal rules not being met unless taxes were increased or spending cut. One potential danger with the current fiscal rules is that too much emphasis is placed on whether a particular target for borrowing will be hit or missed and not enough on the uncertainties inherent in any fiscal position.

Appendix A. Historical series of government borrowing

**Table A.1. Public sector net borrowing and current budget surplus,
in £ billion and as a percentage of GDP, 1971–72 to 2009–10**

Year	Public sector net borrowing		Current budget surplus	
	£bn	% of GDP	£bn	% of GDP
1971–72	0.6	1.1	2.5	4.2
1972–73	1.9	2.8	1.3	2.0
1973–74	3.7	4.9	0.2	0.3
1974–75	5.9	6.6	–0.9	–1.1
1975–76	7.8	7.0	–1.8	–1.6
1976–77	7.2	5.5	–1.6	–1.2
1977–78	6.5	4.3	–2.1	–1.4
1978–79	8.7	5.0	–4.5	–2.6
1979–80	8.5	4.1	–4.0	–1.9
1980–81	11.5	4.9	–7.2	–3.0
1981–82	6.0	2.3	–3.6	–1.4
1982–83	8.5	3.0	–4.3	–1.5
1983–84	11.7	3.8	–6.2	–2.0
1984–85	12.2	3.7	–7.2	–2.2
1985–86	8.7	2.4	–4.2	–1.2
1986–87	8.0	2.1	–5.3	–1.4
1987–88	4.3	1.0	–1.4	–0.3
1988–89	–6.3	–1.3	8.0	1.7
1989–90	–1.1	–0.2	7.3	1.4
1990–91	5.8	1.0	2.3	0.4
1991–92	22.5	3.8	–11.6	–2.0
1992–93	46.7	7.6	–34.4	–5.6
1993–94	51.0	7.8	–40.8	–6.2
1994–95	43.2	6.3	–33.2	–4.8
1995–96	34.7	4.8	–24.8	–3.4
1996–97	27.4	3.5	–21.7	–2.8
1997–98	6.5	0.8	–1.2	–0.2
1998–99	–3.6	–0.4	10.4	1.2
1999–2000	–15.5	–1.7	20.3	2.2
2000–01	–16.0	–1.7	21.5	2.2
2001–02	0.1	0.0	10.2	1.0
2002–03	24.7	2.3	–13.1	–1.2
2003–04	35.1	3.1	–21.5	–1.9
2004–05	36.7	3.1	–17.7	–1.5
<i>HM Treasury forecasts</i>				
2005–06	31.9	2.6	–5.7	–0.5
2006–07	29	2.2	1	0.0
2007–08	27	2.0	4	0.3
2008–09	24	1.6	9	0.6
2009–10	22	1.5	12	0.8

Source: HM Treasury, *Public Finances Databank*, 21st September 2005 (http://www.hm-treasury.gov.uk/economic_data_and_tools/finance_spending_statistics/pubsec_finance/psf_statistics.cfm)