5. Public finance forecasts

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Summary

- The current budget deficit this year is likely to be in line with the Treasury's December Pre-Budget Report forecast, but in 2006–07 it is likely to be almost 0.3% of national income (£3 billion) bigger than the Treasury expects, according to the Green Budget baseline forecast. We expect weaker revenues.
- We expect the gap between our forecast for the current budget balance and the Treasury's to widen to 0.5% of national income by 2008–09 and then to narrow to 0.2% of national income by 2010–11. We expect more revenue to be raised over time from 'fiscal drag' than the Treasury, mostly through rising income tax bills.
- The Treasury expects government revenues to rise by 1.3% of national income by 2010–11, with two-thirds of the increase occurring next year. We expect an increase of 1.1% of national income, with around half coming next year.
- The Pre-Budget Report forecast suggests that the golden rule will be met over a 12-year economic cycle ending in 2008–09, with the current budget in surplus by a cumulative £12.8 billion. On current policies, we forecast that the rule would be broken very narrowly over this period, with a cumulative deficit of £0.7 billion.
- If the past forecasting performances of the Treasury and the Green Budget are a
 reliable guide to the future, the Treasury's forecast implies a 58% probability of
 meeting the rule and the Green Budget forecast a 50% probability of meeting it.
- Our central forecast is for net debt to reach 39.2% of national income in 2008–09 and 39.6% in 2010–11. On past forecasting performance, this implies at least a 44% chance that net debt will breach the 40% of national income debt ceiling laid down in the sustainable investment rule by the last year of the current cycle.
- In the Pre-Budget Report, the Chancellor announced a £3 billion tax increase and pencilled in a cut in public spending as a share of national income worth £8½ billion a year in today's terms by the end of the 2007 Comprehensive Spending Review period. We see a reasonable case for a further £2½ billion tax increase. More would be needed if the Chancellor decides to cut spending less aggressively.

5.1 Introduction

This chapter presents the IFS public finance forecasts and assesses whether the path of the public finances is consistent with the fiscal rules being met. Section 5.2 presents the 2006 Green Budget baseline forecasts for 2005–06 and 2006–07. Section 5.3 focuses on the medium term, looking at forecasts for the years until 2010–11, and discusses the uncertainties

in these forecasts. Section 5.4 presents the forecasts based on Morgan Stanley's alternative macroeconomic assumptions, as outlined in Chapter 3. Section 5.5 concludes by considering whether the fiscal rules would be met under our forecasts and what this implies for tax and spending decisions in the next and future Budgets.

5.2 Short-term projections

In 2004–05, receipts came in lower and current spending (including depreciation) higher than forecast either by the Treasury in the December 2004 Pre-Budget Report (PBR) or by us in the January 2005 Green Budget. As a result, we underpredicted the £19.9 billion current budget deficit by £4.0 billion, while the Treasury underpredicted it by £7.4 billion (see Table 5.1). However, the Treasury believes that its over-optimism was more than explained by the unexpected weakness of the economy and that the structural deficit was actually smaller than anticipated.

Public sector net investment last year is estimated to have been £0.4 billion stronger than we predicted and £2.8 billion weaker than the Treasury predicted at £18.9 billion. Adding this to the current budget, the Treasury and we both underpredicted last year's £38.8 billion public sector net borrowing by about £4½ billion. More details are given in Appendix A.

Table 5.1. Comparison of forecasts for last year

£ billion	HM Treasury PBR forecast, December 2004	IFS Green Budget forecast, January 2005	Estimate, PBR, December 2005
Current receipts	451.0	449.6	448.4
Current expenditure ^a	463.5	465.5	468.3
Net investment	21.7	18.5	18.9
Public sector net borrowing	34.2	34.4	38.8
Surplus on current budget	– 12.5	-15.9	-19.9

a Includes depreciation.

Sources: Out-turn figures for 2004–05 from HM Treasury, *Pre-Budget Report 2005*, Cm. 6701, December 2005, http://www.hm-treasury.gov.uk/pre-budget-report/prebud-pbr05/report/prebud-pbr05-repindex.cfm. Forecasts from HM Treasury, *Pre-Budget Report 2004*, Cm. 6408, December 2004, http://www.hm-treasury.gov.uk/pre-budget-report/prebud-pbr05/report/prebud-pbr05-repindex.cfm. Forecasts from HM Treasury, *Pre-Budget Report 2004*, Cm. 6408, December 2004, https://www.hm-treasury.gov.uk/pre-budget-pbr05-report/prebud-pbr05-report/prebud-pbr05-repindex.cfm.

treasury.gov.uk/pre_budget_report/prebud_pbr04/prebud_pbr04_index.cfm, and table 4.1 of R. Chote, C. Emmerson, D. Miles and Z. Oldfield (eds), *The IFS Green Budget: January 2005*, IFS Commentary no. 98, January 2005, http://www.ifs.org.uk/budgets/gb2005/index.php.

Borrowing in 2005–06

The Treasury cut its 2005–06 forecast for current receipts and increased its forecast for current spending (including depreciation) between the March 2005 Budget and the December 2005 Pre-Budget Report, as shown in Table 5.2. As a result, it now expects a current budget deficit of £10.6 billion this year rather than the £5.7 billion predicted in the Budget. It has only fractionally increased its forecast of public sector net investment, implying a similar increase in the forecast for public sector net borrowing to that for the current budget deficit. The Treasury now expects public sector net borrowing of £37.0 billion this year, up from £31.9 billion in the Budget.

Table 5.2. Comparison of forecasts for government borrowing, 2005–06

£ billion	Budget, Mar. 05	PBR, Dec. 05	Green Budget, Jan. 06	Differences Budget f relativ	orecast
				Budget	PBR
Current receipts	486.7	483.0	483.1	-3.6	0.1
Current expenditure ^a	492.4	493.6	493.6	1.2	0.0
Net investment	26.2	26.3	26.3	0.1	0.0
Total managed expenditure	518.6	519.9	519.9	1.3	0.0
Public sector net borrowing	31.9	37.0	36.8	4.9	-0.2
Surplus on current budget	- 5.7	-10.6	-10.5	-4.8	0.1

^a In line with the National Accounts, depreciation has been included as current expenditure.

Sources: Treasury forecasts from HM Treasury, *Pre-Budget Report 2005*, Cm. 6701, December 2005, http://www.hm-treasury.gov.uk/pre-budget-report/prebud-pbr05/report/prebud-pbr05-repindex.cfm, and HM Treasury, *Financial Statement and Budget Report*, HC372, March 2005, http://www.hm-treasury.gov.uk/budget/budget_05/budget_report/bud_bud05-report.cfm.

For the IFS Green Budget 2006, we have very similar predictions to the Treasury's December 2005 PBR for both the current budget deficit and public sector net borrowing. We foresee marginally higher revenues than the Treasury and the same level of spending.

Receipts and spending in 2005-06

Although our forecast for current receipts in aggregate this year is only marginally higher than the Treasury's, there are some larger differences in composition, as Table 5.3 shows. We expect higher revenues than the Treasury from income tax and corporation tax receipts, but less from fuel duties. Appendix A provides more analysis on the tax-by-tax forecasts.

The Green Budget forecasts for both current spending (including depreciation) and net investment for 2005–06 are in line with the PBR forecasts. So far this year, central government current spending is running slightly below the level consistent with the PBR forecasts, but weak spending growth in the late months of 2004–05 means that some acceleration in the annual rate of increase looks plausible. Net investment spending is also running below the level consistent with the PBR forecast, but the difference is lower than in previous years. As in previous years, we expect an increase in investment spending in the final months of this financial year. There is a risk that there could be an underspend on public sector net investment as in previous years; while this would reduce borrowing and therefore future debt, this would not be permanent if the investment were carried out by departments in subsequent years under the End-Year Flexibility arrangements. There would also be no significant impact on whether or not the Chancellor met his golden rule.

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¹ There would be a very small impact from reduced debt interest payments.

Table 5.3. Comparison of Green Budget and HM Treasury forecasts for government borrowing, 2005–06 and 2006–07

£ billion	200	5–06	2006	6-07
	PBR	Green	PBR	Green
	Dec. 2005	Budget	Dec. 2005	Budget
		Jan. 2006		Jan. 2006
Income tax (net of tax credits)	131.3	131.6	140.3	140.5
National Insurance contributions	84.2	84.2	88.8	89.0
Value added tax (VAT)	74.4	74.4	77.3	77.6
Corporation tax (net of tax credits)	41.3	41.5	49.5	46.5
Petroleum revenue tax	2.2	2.2	2.1	2.2
Fuel duties	23.9	23.3	24.4	24.0
Capital gains tax	2.8	2.8	3.6	3.1
Inheritance tax	3.3	3.3	3.6	3.5
Stamp duties	10.2	10.2	11.4	11.0
Tobacco duties	8.2	8.3	8.2	8.6
Spirits duties	2.4	2.4	2.5	2.7
Wine duties	2.3	2.3	2.5	2.4
Beer and cider duties	3.4	3.4	3.4	3.5
Betting and gaming duties	1.4	1.4	1.4	1.5
Air passenger duty	1.0	1.0	1.0	1.0
Insurance premium tax	2.5	2.5	2.6	2.6
Landfill tax	0.8	0.8	0.9	8.0
Climate change levy	0.8	8.0	0.7	8.0
Aggregates levy	0.3	0.3	0.4	0.3
Customs duties and levies	2.2	2.2	2.2	2.3
Total HM Revenue and Customs	398.8	399.0	426.9	423.9
Vehicle excise duties	4.9	4.9	5.2	5.1
Business rates	20.3	20.3	21.4	21.4
Council tax ^a	21.1	21.1	22.6	22.6
Other taxes and royalties ^b	12.9	12.9	14.2	14.2
Net taxes and NI contributions ^c	458.0	458.2	490.3	487.2
Accruals adjustments on taxes	1.4	1.4	0.8	8.0
Less Own resources contribution to EU budget	-3.9	-3.9	-4 .0	-4.0
Less PC corporation tax payments	-0.1	-0.1	-0.1	-0.1
Tax credits adjustment ^d	0.6	0.6	0.6	0.6
Interest and dividends	5.1	5.0	5.1	5.1
Other receipts ^e	21.9	21.9	23.8	23.8
Current receipts	483.0	483.1	516.6	513.4

^a HM Treasury figures are based on stylised assumptions rather than government forecasts, as council tax increases are determined annually by local authorities, not by the government.

^b Includes VAT refunds and money paid into the National Lottery Distribution Fund.

^c Includes VAT and the traditional 'own resources' contributions to the EU budget.

^d Tax credits that are scored as negative tax in the calculation of 'Net taxes and NI contributions' but expenditure in the National Accounts.

e Includes gross operating surplus and rent; net of oil royalties and business rates payments by local authorities. Sources: Treasury forecasts from HM Treasury, *Pre-Budget Report 2005*, Cm. 6701, December 2005, http://www.hm-treasury.gov.uk/pre-budget-report/prebud-pbr05/report/prebud-pbr05-repindex.cfm (this table is similar to table B14 on page 225); IFS calculations.

Borrowing in 2006-07

The Treasury was more pessimistic about the current budget and public sector net borrowing next year in the December 2005 PBR than in the March 2005 Budget, downgrading its forecasts by £5.2 billion and £4.5 billion respectively. This can be seen in Table 5.4. In this Green Budget, we are £3.2 billion more pessimistic again in each case, reflecting our belief that the Treasury is still overestimating the likely strength of current receipts. We expect a current budget deficit of £7.4 billion and public sector net borrowing of £36.7 billion for 2006–07.

Table 5.4. Comparison of forecasts for government borrowing, 2006–07

£ billion	Budget, Mar. 05	PBR, Dec. 05	Green Budget, Jan. 06	Differences Budget f relativ	orecast
				Budget	PBR
Current receipts	520	516.6	513.4	-6.6	-3.2
Current expenditure ^a	519.8	520.8	520.8	1.0	0.0
Net investment	29.4	29.3	29.3	-0.1	0.0
Total managed expenditure	549.2	550.1	550.1	0.9	0.0
Public sector net borrowing	29	33.5	36.7	7.7	3.2
Surplus on current budget	1	-4.2	-7.4	-8.4	-3.2

^a In line with the National Accounts, depreciation has been included as current expenditure.

Sources: Treasury forecasts from HM Treasury, *Pre-Budget Report 2005*, Cm. 6701, December 2005, http://www.hm-treasury.gov.uk/pre-budget-report/prebud-pbr05/report/prebud-pbr05-repindex.cfm, and HM Treasury, *Financial Statement and Budget Report*, HC372, March 2005, http://www.hm-treasury.gov.uk/budget/budget-05/budget-report/bud-bud05-report.cfm.

Spending and receipts in 2006-07

The Green Budget forecasts for current and net investment spending in 2006–07 are in line with the PBR forecasts (despite fractionally lower debt interest costs, reflecting our belief that borrowing may be marginally lower than the Treasury expects this year).

The Treasury and we both expect strong growth in revenues between 2005–06 and 2006–07, although the 6.3% increase we expect is slightly lower than the 7.0% forecast in the PBR. Table 5.3 sets out the detailed tax-by-tax forecasts. We foresee slightly higher receipts than the Treasury from income tax, National Insurance contributions, VAT, petroleum revenue tax, tobacco duties, alcohol duties, betting and gaming duties, the climate change levy, and customs duties and levies. We expect slightly less than the Treasury from fuel duties, capital gains tax, inheritance tax, stamp duties, landfill tax, the aggregates levy and vehicle excise duties.

The most significant difference between the Green Budget and PBR revenue forecasts is for corporation tax. The PBR forecasts revenues of £49.5 billion from corporation tax, while we expect £3.0 billion less (even if the economy behaves as the Treasury expects). Differences between the medium-term forecasts for corporation tax receipts are discussed in more detail in Section 5.3.

5.3 Medium-term prospects

We predict a very similar current budget balance to the Treasury this year, with a gap opening between its forecast and ours next year and continuing to widen until 2008–09 (when the Treasury expects a surplus of 0.5% of national income or £7 billion, while we believe that it will be roughly zero). Thereafter the gap narrows and by 2010–11 we are only 0.2% of national income or £3 billion more pessimistic than the Treasury (Tables 5.5 and 5.6). With little difference between our forecast and the Treasury's for public sector net investment, the pattern for public sector net borrowing is very similar to that for the current budget.

There is little difference between the Green Budget and PBR forecasts for spending. This is because for the period from 2008–09, we assume the same growth as implied by the figures in the PBR. Therefore we have slightly higher current spending (including depreciation) from 2007–08 as our forecast for higher levels of borrowing in previous years increases subsequent debt interest payments. As discussed in Chapter 4, the Chancellor could choose to allocate a more, or less, generous spending envelope over the period to be covered by the 2007 Comprehensive Spending Review. This is a point that we return to in our budget judgement in Section 5.5.

Revenues are the more important reason for our relative pessimism. The Treasury expects receipts to increase by 1.3% of national income by 2010–11, with about two-thirds of the increase coming next year. We expect revenues to rise by 1.1% of national income over the same period, and more evenly, with around half the increase being seen next year.

Table 5.5. Medium-term public finance forecasts under 'cautious' assumptions

£ billion	2005–	2006–	2007–	2008–	2009–	2010-
	06	07	80	09	10	11
Green Budget forecasts						
Current budget						
Current receipts	483.1	513.4	544.1	575.7	607.3	639.2
Current expenditure ^a	493.6	520.8	549.7	575.2	602.2	629.2
Surplus on current budget	-10.5	-7.4	-5.6	0.5	5.2	10.0
Capital budget						
Net investment	26.3	29.3	31.1	32.0	34.0	35.0
Public sector net borrowing	36.8	36.7	36.7	31.5	28.8	25.0
HM Treasury forecasts						
Current budget						
Current receipts	483.0	516.6	550	581	612	642
Current expenditure ^a	493.6	520.8	549.5	575	602	629
Surplus on current budget	-10.6	-4.2	0	7	11	13
Capital budget						
Net investment	26.3	29.3	31.1	32	34	35
Public sector net borrowing	37.0	33.5	31	26	23	22

^a In line with the National Accounts, depreciation has been included as current expenditure.

Sources: Authors' calculations; Treasury forecasts from HM Treasury, *Pre-Budget Report 2005*, Cm. 6701,

December 2005, http://www.hm-treasury.gov.uk/pre-budget-report/prebud-pbr05/report/prebud-pbr05-repindex.cfm
(this table is similar to table B9 on page 220).

Table 5.6. Medium-term public finance forecasts under 'cautious' assumptions

% of national income	2005–	2006-	2007-	2008-	2009-	2010-
	06	07	08	09	10	11
Green Budget forecasts						
Current budget						
Current receipts	39.4	40.0	40.1	40.2	40.4	40.5
Current expenditure ^a	40.3	40.6	40.5	40.2	40.1	39.9
Surplus on current budget	-0.9	-0.6	-0.4	0.0	0.3	0.6
Capital budget						
Net investment	2.1	2.3	2.3	2.2	2.3	2.2
Public sector net borrowing	3.0	2.9	2.7	2.2	1.9	1.6
Public sector net debt	36.5	37.6	38.6	39.2	39.5	39.6
HM Treasury forecasts						
Current budget						
Current receipts	39.4	40.2	40.5	40.6	40.7	40.7
Current expenditure ^a	40.3	40.6	40.5	40.1	40.0	39.9
Surplus on current budget	-0.9	-0.3	0.0	0.5	0.7	0.8
Capital budget						
Net investment	2.1	2.3	2.3	2.3	2.3	2.3
Public sector net borrowing	3.0	2.6	2.3	1.8	1.6	1.4
Public sector net debt	36.5	37.4	37.9	38.2	38.2	38.2

^a In line with the National Accounts, depreciation has been included as current expenditure.

Sources: Authors' calculations; Treasury forecasts from HM Treasury, *Pre-Budget Report 2005*, Cm. 6701,

December 2005, http://www.hm-treasury.gov.uk/pre-budget-report/prebud-pbr05/report/prebud-pbr05-repindex.cfm
(this table is similar to table B10 on page 220).

The higher borrowing that we expect would push up public sector net debt. While the PBR forecasts show net debt increasing from 36.5% of national income this year to 38.2% by 2010–11, the Green Budget forecasts show it increasing to 39.6% of national income over the same period.

As discussed in Chapter 2, the sustainable investment rule states that net debt will be kept below 40% of national income in each year of the current economic cycle. We expect the Treasury to have headroom of just 0.8% of national income in 2008–09 (currently expected by the Treasury to be the last year of this cycle) and 0.4% by 2010–11 if the rule were to be applied in the same way thereafter. This is discussed in more detail later in this section.

Breakdown of medium-term revenue projections

The largest difference between the medium-term revenue forecasts in the Green Budget and in the PBR is in corporation tax (including petroleum revenue tax). Starting from a base of 3.6% in 2005–06, we expect revenue to rise to 3.7% of national income in 2010–11 while the PBR expects it to reach 4.1% (Table 5.8). Part of the increase in both cases is due to the increase in North Sea revenues from 2006–07 included in this year's PBR (0.2% of national income or £2.3 billion in the first year). This, however, is largely offset by a fall in revenues after 2008–09 as the profits expected from the North Sea decline.

Box 5.1. Company earnings and corporation tax revenues

By Graham Secker (Morgan Stanley)

Strong global economic growth and highly profitable oil companies should ensure that UK stockmarket earnings and corporate tax receipts grow by 20% or more in 2005. While this has partially vindicated the Treasury's 2004 Pre-Budget Report forecast of 26% growth in corporate tax receipts (excluding North Sea oil revenues), we believe that the Treasury is still being too optimistic in its projections for future corporate profitability.

In Table 5.7, we compare the Treasury's predictions for corporate tax receipts in the 2004 PBR with those in the 2005 PBR and note that the Treasury has actually revised up the growth in receipts it expects in each year to the end of its forecasting horizon. For example, in 2006–07 the Treasury has increased the growth in corporate tax receipts it expects from 16% to 20%.

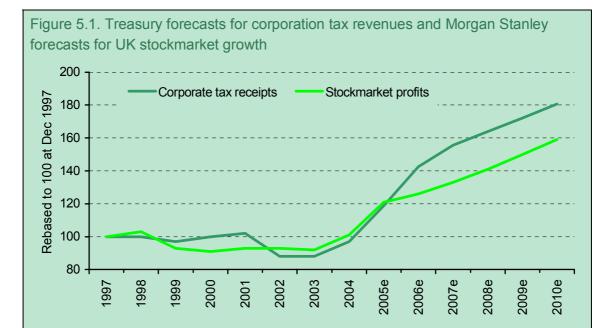
Table 5.7. Treasury forecasts for corporation tax revenues and Morgan Stanley forecasts for UK stockmarket growth

	03-04	04–05	05–06	06–07	07–08	08-09	09–10	10–11
HMT forecast: non-North-Sea corporate tax receipts								
November 2004 PBR (£bn)	28.6	32.9	41.3	47.8	51.7	54.2	56.9	
Annual growth (%)		15	26	16	8	5	5	
December 2005 PBR (£bn)		34.1	41.8	50.1	54.6	57.6	60.5	63.5
Annual growth (%)			23	20	9	5	5	5
HMT forecast: total corporate tax receipts								
November 2004 PBR (£bn)	32.9	38.2	47.2	53.9	58.1	60.9	62.3	
Annual growth (%)		16	24	14	8	5	2	
December 2005 PBR (£bn)		39.3	50.9	61.8	68.6	72.3	74.2	76.0
Annual growth (%)			30	21	11	5	3	2
Morgan Stanley forecast:								
UK stockmarket growth (%)			20	4	6	6	6	6

Sources: ONS; MSCI; Morgan Stanley Research.

As we highlighted in last year's Green Budget, there has been a close relationship between the level of corporate tax receipts and the earnings of companies quoted on the UK stock market. Figure 5.1 plots the Treasury's projections for future corporate tax receipts against Morgan Stanley's expectations for growth in stockmarket profits. It clearly illustrates the Treasury's relative optimism. According to IBES consensus data, the average forecast by equity analysts for the profit growth of companies quoted on the UK market is around 8% in 2006 and 7% in 2008. Morgan Stanley is slightly more pessimistic, expecting earnings to rise by 4% in 2006 and 6% the year after. In contrast, the Treasury forecasts growth in corporate tax receipts of 20% and 9% over the next two years.

Box 5.1 continued



Note: Stockmarket profits from 2005 onwards are based on Morgan Stanley forecasts. Sources: ONS; MSCI; Morgan Stanley Research.

Although the Treasury's expectations for growth in tax receipts slow significantly toward the end of its forecast range, a 9% compound growth rate over the next five years compares with long-run average earnings growth by the UK stockmarket of just 6% (since 1960). By 2010–11, the Treasury forecasts corporate tax receipts of £64 billion (rising to £76 billion if we include North Sea revenues). But if revenues grow in line with Morgan Stanley's estimates for earnings growth, corporate tax receipts would grow to no more than £54 billion (£62 billion including North Sea revenues) – a shortfall of 16% in 2010–11 or £10 billion (£14 billion including North Sea revenues).

Table 5.8. Medium-term revenue forecasts under 'cautious' assumptions

% of national income	2005	- 06	2010	–11
	PBR,	Green	PBR,	Green
	December	Budget,	December	Budget,
	2005	January	2005	January
		2006		2006
Income tax (net of tax credits)	10.7	10.7	11.5	11.6
National Insurance contributions	6.9	6.9	7.0	7.0
Corporation tax ^a	3.6	3.6	4.1	3.7
Tax credits	-0.4	-0.4	-0.3	-0.3
VAT	6.1	6.1	5.9	5.9
Excise duties	3.3	3.2	2.9	3.0
Other	8.4	8.9	9.0	9.3
Current receipts	39.4	39.4	40.7	40.5

a Includes petroleum revenue tax.

Sources: Authors' calculations; Treasury forecasts from HM Treasury, *Pre-Budget Report 2005*, Cm. 6701, December 2005, http://www.hm-treasury.gov.uk/pre_budget_report/prebud_pbr05/report/prebud_pbr05_repindex.cfm (this table is similar to table B15 on page 229).

The Green Budget forecasts assume that the yield from corporation tax returns to its long-term average in the medium term, adjusting for changes in the structure of the corporation tax system. Achieving this level of receipts by 2008–09 (when the economy is expected by the Treasury to have returned to trend) requires strong growth in revenues of 7.1% per year on average. The PBR forecasts require increases of 11.3% per year over the same period. The Green Budget forecasts assume that non-North-Sea corporation tax receipts remain constant as a share of national income thereafter. Box 5.1 discusses the PBR forecasts for corporation tax further.

Forecasts for the other taxes are more similar. We expect 0.1% of national income more from income tax in 2010–11 than the Treasury, thanks to a bigger estimate of the impact of fiscal drag – the increase in the yields of tax due to the nominal values of the thresholds increasing less quickly than taxable income. We also expect higher revenues from excise duties and from the remaining categories that are not broken down in the table and which cannot be compared in detail to the Pre-Budget Report as the Treasury has declined to provide sufficient detail.

Uncertainties around the baseline Green Budget forecast

As we noted in Chapter 2, when forecasting the public finances it is important to acknowledge that there is a substantial degree of uncertainty and that this increases the further into the future the forecasts are made for. Probabilistic fan charts for the Green Budget current budget and net debt forecasts are shown in Figures 5.2 and 5.3 respectively. These assume that the Green Budget forecasts are likely to be as accurate as the Treasury's have been in the past, as evidence suggests has previously been the case.² If the Green Budget forecasts are more error-prone than the Treasury's, then the fan chart will be wider and the uncertainty greater, while the opposite would be the case if the Green Budget forecasts were less error-prone.

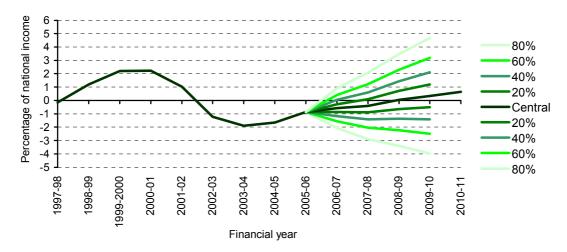
The black line in each figure shows the Green Budget's central estimate for the current budget or for public sector net debt. On either side, the dark 20% lines denote the range of outcomes within which there is a 20% probability that actual outcome will fall. As uncertainty is greater the further into the future a forecast relates to, there is a 'fanning-out' effect. Our central current budget forecast for 2009–10 is for a surplus of 0.3% of national income, which implies on past performance that there is a 20% probability that it will lie between –0.5% and 1.2%. The 40%, 60% and 80% lines bound the values within which there is a 40%, 60% or 80% probability that the out-turn will eventually lie. There is therefore a 10% probability that the out-turn will be higher than the top 80% line, for example.

According to the Treasury, the next economic cycle is due to start in 2008–09 (the last year of one cycle is also counted as the first year of the next). We forecast a 0.0% of national income surplus on the current budget in that year, implying a 50% probability that there will be a deficit in the first year of the next cycle. In 2009–10, our forecast of a surplus of 0.3% of national income implies a still sizeable 46% probability of a deficit in that year.

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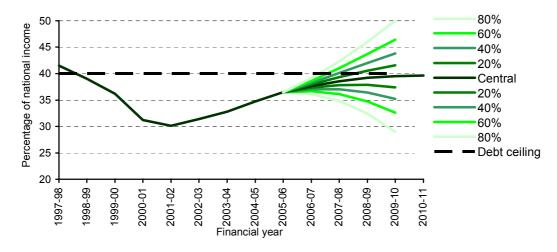
² For evidence, see C. Giles and J. Hall, 'Forecasting the PSBR outside government: the IFS perspective', *Fiscal Studies*, vol. 19, pp. 83–100, 1998, http://www.ifs.org.uk/publications.php?publication_id=2250.

Figure 5.2. Probabilities of current budget balance outcomes (Green Budget baseline)



Notes: Central projections are taken from Table 5.6 and assume that the Green Budget projection 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 5.3. Probabilities of public sector net debt outcomes (Green Budget baseline)

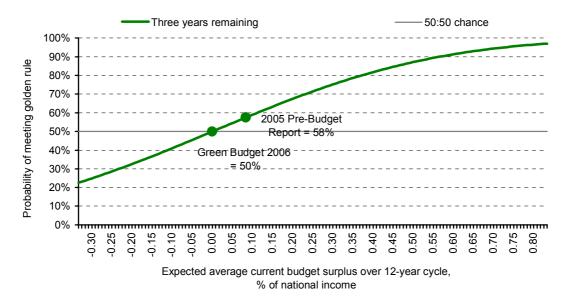


Notes: Central projections are taken from Table 5.6 and assume that the Green Budget projection for 2005–06 is correct and that any cumulative variation in public sector net borrowing from that forecast in the Green Budget projection directly adds to public sector net debt. The second-order impact of changes in debt interest is ignored. 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 5.4 shows the probability that the golden rule will be missed for a cycle ending in three years' time for different levels of the expected average surplus over the years 1997–98 to 2008–09. It assumes that a given forecast will be, on average, right and presents the cumulative uncertainty over the three years from now until the end of the cycle. For example, if the forecast average surplus were exactly 0.0% of national income, there would be a 50% chance of the actual surplus being higher and a 50% chance of it being lower – in which case the golden rule would have been missed. As discussed in Chapter 2, assuming that this year's

forecast is correct, there is a 58% probability that the golden rule will be met on the Pre-Budget Report forecasts. The Green Budget forecasts are for the golden rule to be narrowly missed. However, because the margin with which it is expected to be missed is very small, there is still a 50% chance that the golden rule will be met.

Figure 5.4. Probabilities of meeting the golden rule under the Green Budget and Pre-Budget Report forecasts



The sustainable investment rule requires public sector net debt to be kept below 40% of national income in each year of this cycle. Our central forecasts show this being adhered to, but past forecasting performance suggests that the probability of breaching the ceiling will rise from 2% in 2006–07, to 31% in 2007–08 and 44% in 2008–09. The Pre-Budget Report forecasts imply a probability rising from 1% to 24% and then 37% in the same years.

5.4 Alternative macroeconomic assumptions

The Green Budget baseline forecasts are based on the same macroeconomic assumptions underlying the Treasury's forecast for the public finances in the Pre-Budget Report. These assume below-trend growth this year and next, with a negative and widening output gap, followed by stronger growth closing the cycle in 2008–09. Beyond 2008–09, the Treasury assumes that the economy grows at its trend rate (which it assumes for cautious forecasting purposes to be ¼ of a percentage point below its genuine expectation of trend growth). This keeps the assumed output gap at zero. The Green Budget baseline forecasts are based on these macroeconomic assumptions to aid direct comparability with the PBR public finance forecasts.

Table 5.9 presents alternative public finance forecasts under the two sets of Morgan Stanley macroeconomic assumptions presented in more detail in Chapter 3.

Table 5.9. HM Treasury and Green Budget public finance forecast under alternative macroeconomic scenarios

	2005–	2006-	2007-	2008–	2009-	2010-
	06	07	08	09	10	11
Treasury Pre-Budget Report forecasts (PBR 'cautious' macro assumptions)						
GDP growth	13/4	21/4	3	23/4	21/4	21/4
Output gap (% of potential GDP)	-1.4	-1.5	-0.7	-0.1	0.0	0.0
Public finance forecasts (% of GDP)						
Current budget surplus	-0.9	-0.3	0.0	0.5	0.7	0.8
Cyclically adjusted current budget surplus	-0.1	0.7	0.7	0.7	0.7	8.0
Net borrowing	3.0	2.6	2.3	1.8	1.6	1.4
Net debt	36.5	37.4	37.9	38.2	38.2	38.2
Green Budget baseline (PBR 'cautious' macro assumptions)						
GDP growth	13/4	21/4	3	23/4	21/4	21/4
Output gap (% of potential GDP)	-1.4	-1.5	-0.7	-0.1	0.0	0.0
Public finance forecasts (% of GDP)						
Current budget surplus	-0.9	-0.6	-0.4	0.0	0.3	0.6
Cyclically adjusted current budget surplus	-0.1	0.5	0.2	0.2	0.4	0.6
Net borrowing	3.0	2.9	2.7	2.2	1.9	1.6
Net debt	36.5	37.6	38.6	39.2	39.5	39.6
Alternative Green Budget scenario I (Morgan Stanley central forecast)						
GDP growth	13/4	21/4	23/4	21/4	2½	21/2
Output gap (% of potential GDP)	-0.2	-0.2	0.0	-0.1	0.0	0.1
Public finance forecasts (% of GDP)						
Current budget surplus	-0.8	-0.6	-0.5	-0.1	0.2	0.5
Cyclically adjusted current budget surplus	-0.7	-0.4	-0.4	- 0.1	0.2	0.4
Net borrowing	2.9	2.9	2.8	2.4	2.1	1.8
Net debt	36.4	37.6	38.6	39.4	39.8	40.1
Alternative Green Budget scenario II (Morgan Stanley 'worse case' forecast)						
GDP growth	13/4	11/2	2	2	21/2	21/2
Output gap (% of potential GDP)	-0.1	-0.2	-0.2	-0.2	-0.1	0.1
Public finance forecasts (% of GDP)						
Current budget surplus	-0.8	-0.6	-0.5	-0.4	-0.0	0.3
Cyclically adjusted current budget surplus	-0.8	- 0.5	-0.4	-0.2	0.0	0.3
Net borrowing	2.9	2.8	2.9	2.6	2.4	2.0
Net debt	36.4	37.6	38.6	39.7	40.3	40.8

Sources: Morgan Stanley; HM Treasury, *Pre-Budget Report 2005*, Cm. 6701, December 2005, https://www.hm-treasury.gov.uk/pre-budget-report/prebud-pbr05/report/prebud-pbr05-repindex.cfm.

The Morgan Stanley central case assumes that the economic cycle closed in 2003–04 as output moved above potential. Growth is forecast to be in line with the Treasury's prediction this year, slightly higher than the Treasury for 2006–07, lower in 2007–08 and 2008–09, and then higher in the medium term as Morgan Stanley uses a central rather than a 'cautious' rate of GDP growth for the medium term. Overall, this scenario implies less real output growth between 2005–06 and 2010–11 than the Treasury's Pre-Budget Report.

The Morgan Stanley 'worse case' macro scenario also assumes that the economy is near the beginning of a new economic cycle, with the previous one having closed in 2003–04. It assumes a similar rate of GDP growth to the Treasury for 2005–06, followed by 3 years of lower growth, before a levelling-off in 2009–10 when economic growth returns to trend. This scenario implies less real output growth between 2005–06 and 2010–11 than either the Pre-Budget Report or the Morgan Stanley central case.

As discussed earlier, the Green Budget forecast shows a worse outcome for the current budget and higher borrowing than the Pre-Budget Report for the years from 2006–07. This, in turn, leads to higher debt in every year.

Under the Morgan Stanley central case, the current budget position is weaker and borrowing higher than the baseline case from 2007–08 onwards. Similar forecasts for the macroeconomy for 2005–06 and 2006–07 lead to similar outcomes for the public finances, while the lower growth for 2007–08 and 2008–09 leads to weaker public finance outcomes. The two following years display stronger economic growth, but the boost to the public finances this provides is not sufficient to offset the need for higher spending to service the debt accumulated previously and the less favourable composition of growth in terms of tax revenues. Debt is expected to breach the 40% of national income level in 2010–11.

Under the Morgan Stanley 'worse case' scenario, lower growth leads to higher borrowing. The lower growth in national income masks some of the weakness in the current budget at the end of the forecasting period, as the figures shown in Table 5.9 are given as a percentage of this lower national income. The higher borrowing leads to an expected breach of the 40% limit for net debt one year earlier, in 2009–10.

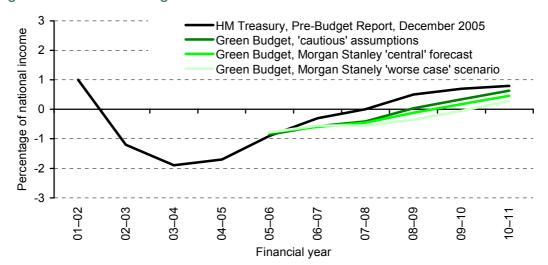
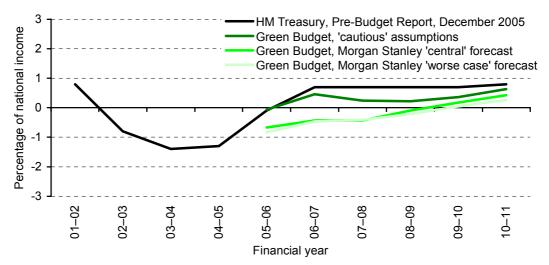


Figure 5.5. Current budget balance forecasts

Sources: Authors' calculations; Treasury forecasts from HM Treasury, Pre-Budget Report 2005, Cm. 6701.

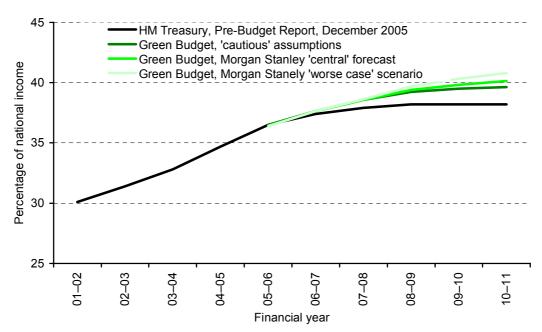
Figure 5.6. Cyclically adjusted current budget balance forecasts



Sources: Authors' calculations; Treasury forecasts from HM Treasury, *Pre-Budget Report 2005*, Cm. 6701, December 2005, http://www.hm-

treasury.gov.uk/pre budget report/prebud pbr05/report/prebud pbr05 repindex.cfm.

Figure 5.7. Public sector net debt forecasts



Sources: Authors' calculations and Treasury forecasts from HM Treasury, *Pre-Budget Report 2005*, Cm. 6701, December 2005, http://www.hm-

 $\underline{treasury.gov.uk/pre_budget_report/prebud_pbr05/report/prebud_pbr05_repindex.cfm}.$

Figures 5.5, 5.6 and 5.7 show the evolution of the current budget balance, the cyclically adjusted current budget balance and net debt under the Pre-Budget Report forecasts and the Green Budget forecasts for various macroeconomic scenarios. All the scenarios show a gradual improvement in the current budget over time, but the PBR forecast has more of the improvement happening early on and the final position of the current budget is higher.

As is shown in Figure 5.6, both the PBR and the baseline Green Budget forecasts (based on the PBR macroeconomic scenarios) show the cyclically adjusted current balance being close

to zero for this year and further improvement in 2006–07. In contrast, the forecasts based on the two Morgan Stanley macroeconomic scenarios show a significant cyclically adjusted deficit on the current budget this year. This is because they both assume a smaller absolute output gap, so the public finances are not assumed to be underperforming by as much due to the cyclical position. For a given forecast or out-turn of the public finances, a less negative output gap suggests a weaker structural position. Although under both Morgan Stanley scenarios the cyclically adjusted position is expected to improve over time, the cyclically adjusted position remains weaker than in the PBR and baseline Green Budget scenarios in every year.

Figure 5.7 shows the trajectory of public sector net debt under all four forecasts. The 40% of national income level is breached under both the Morgan Stanley macroeconomic scenarios, but this only occurs at the end of the forecast period. Under both Morgan Stanley scenarios, the first full economic cycle since Gordon Brown became Chancellor ended in 2003–04, so the breach would occur well into the next cycle. As we do not yet know how compliance with the sustainable investment rule will be assessed going forward, it is not clear whether this would constitute a breach of the rule or not in the next cycle.

Over the current economic cycle, the golden rule has been more constraining than the sustainable investment rule. But, in the future, under all the scenarios presented, the sustainable investment rule is likely to be the more binding – all three Green Budget scenarios show a mounting cyclically adjusted surplus on the current budget by 2010–11 but public sector net debt near or above 40% of national income.

5.5 The fiscal rules and the budget judgement

The current cycle

Since the December 2005 Pre-Budget Report, the Treasury has assumed that the current economic cycle will run from 1997–98 to 2008–09. For the golden rule to be met over this cycle, there must a cumulative (and therefore average) surplus on the current budget over the 12 years that constitute this economic cycle. Over the cycle to date (1997–98 to 2004–05), there has been an average surplus on the current budget of 0.2% of national income. In today's terms, that corresponds to a cumulative surplus of £21.4 billion – the room for manoeuvre that the government has for the remaining years of this cycle. According to the PBR, the remaining 4 years in this cycle will yield an average deficit of 0.2% of national income, reducing the average surplus over the whole cycle to 0.1% of national income. This implies a cumulative surplus in today's terms of £12.8 billion.

As we discussed in Section 5.3, we expect larger current budget deficits than the Pre-Budget Report from next year onwards. This makes the golden rule more difficult to meet.

Table 5.10 shows the annual surplus on the current budget under the Green Budget forecasts going forward and the average and cumulative surpluses over the years from 1997–98. The larger deficits in 2006–07 and 2007–08 eliminate the Chancellor's room for manoeuvre so that by 2007–08 there is a very small average deficit on the current budget. By 2008–09, the expected end of the cycle, the Green Budget forecast is for an average surplus of –0.0% of

national income (rounded to one decimal place), corresponding to a cumulative deficit of £0.7 billion in today's GDP terms.

Our central forecast is thus for the Chancellor to break the golden rule over the current cycle by a very narrow margin. Given our past forecasting performance, it would be more meaningful to say that we think the chances of meeting the rule are marginally less than 50:50. As we argued in Chapter 2, we see no direct economic significance in meeting or missing the rule by a margin as small as £0.7 billion, especially over a period as long as 12 years. It follows that this roughly equal chance of meeting or breaching the golden rule does not in and of itself justify fresh tax increases or spending cuts.

Table 5.10. The golden rule under the Green Budget baseline forecast

% of national income	2005–	2006-	2007-	2008-	2009-	2010-
	06	07	08	09	10	11
Surplus on current budget	-0.9	-0.6	-0.4	0.0	0.3	0.6
Average surplus since 1997–98	0.1	0.0	-0.0	-0.0		
Cumulative surplus (£bn)				-£0.7		

Note: Figures rounded to one decimal place.

Of course, the Chancellor has staked his reputation on strict adherence to the rule – and his credibility has been undermined by the suspicion that he has re-dated the cycle to make his life easier. He must therefore decide whether the slightly less than 50% chance of meeting the rule under our forecasts – or the 58% chance of meeting the rule under his own – is sufficient, or whether further tightening is desirable to increase his probability of success.

Looking forward

We have argued in past Green Budgets that the need for changes in taxes or public spending plans should be assessed in a forward-looking way, rather than by focusing too heavily on performance over an arbitrarily dated economic cycle. The Treasury's fortuitously timed redating of the cycle over the past year only confirms us in this view.

One might argue that there is now a stronger case for endeavouring to meet the golden rule over this newly elongated cycle in order to help restore the credibility of the framework. But one might also take the view that having shifted the start and end points of the cycle once, the Treasury might well do so again. Why take steps now to hit a target that might well move again?

As we noted in the previous subsection, our central forecast is for the golden rule to be breached narrowly over the present cycle. But we expect the current budget to begin the next cycle in balance, with fiscal drag generating mounting surpluses thereafter. This implies that the golden rule is more likely than not to be met in the following cycle, however long it is.

The Chancellor has always sought to have the current budget in healthy surplus by the end of the forecasting horizon. Given the uncertainty surrounding estimates of the output gap, this can be taken as an alternative benchmark for the caution the Chancellor sees as desirable in planning the public finances. In the March 2005 Budget, the Chancellor signalled that he was content with a current budget surplus of 0.8% of national income at the end of the then forecasting horizon in 2009–10. We estimate that the current budget surplus will be 0.6% of

national income at the end of the new forecasting horizon in 2010–11, implying that an increase in taxes or a reduction in current spending equivalent to £2½ billion in today's prices would restore the same degree of caution on this interpretation. This would also lift the probability of meeting the golden rule over the current cycle above 50% and provide slightly more headroom in meeting the sustainable investment rule, which may be important if Morgan Stanley and others are right in assuming that there is less scope for above-trend growth (and the associated boost to tax revenues) over coming years than the Treasury thinks.

All this, of course, assumes that the Chancellor sets the envelope for public spending in the 2007 Comprehensive Spending Review at the relatively restrictive levels assumed in the Pre-Budget Report. As we noted in Chapter 4, this may be hard to square with the government's aspirations in areas such as health, education, overseas aid and poverty reduction, while there may also be additional pressures on spending due to the reduction in the EU rebate that the Prime Minister has agreed to since the Pre-Budget Report was published. If, for example, the Chancellor were to 'lock in' the increase in spending he has delivered and planned to date – keeping spending constant as a share of national income beyond 2007–08 – fresh tax increases worth £8½ billion would be needed to offset the impact on the path of borrowing and debt and on performance relative to the fiscal rules.

To summarise: In the last two Green Budgets, we have argued that the Treasury should publish less optimistic forecasts for tax revenues, and that some combination of fresh tax increases and tougher public spending plans worth about £11–13 billion would be needed to deliver the improvement in the public finances that the Chancellor was looking for. The Pre-Budget Report went a considerable way in this direction, if we assume that the Chancellor is willing to adopt and deliver the figures he has pencilled in for the period of the next spending review. These would cut public spending as a share of national income by the equivalent of £8½ billion in today's terms, on top of the £3 billion tax increase announced in the PBR. In the wake of a further downgrade of the Treasury's public finance forecasts in the PBR, we still see a reasonable case for some further modest increase in taxation of around £2½ billion to restore the caution the Chancellor was looking for in the last Budget and to increase his chances of meeting his fiscal rules. If the Chancellor wants to spend more than his forecasts currently assume, the tax increase required would be correspondingly larger – £8½ billion larger if he wished to keep public spending constant as a share of national income beyond 2007–08.