Office for
Budget Responsibility

Economic and fiscal outlook

December 2012

Cm 8481

Office for Budget Responsibility: Economic and fiscal outlook

Presented to Parliament by
the Economic Secretary to the Treasury
by Command of Her Majesty

December 2012

Cm 8481

£38.50

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This publication is available for download at www.official-documents.gov.uk

This document is also available from our website at http://budgetresponsibility.independent.gov.uk

ISBN: 9780101848121
PU1374

Printed in the UK for The Stationery Office Limited on behalf of the Controller of Her Majesty's Stationery Office

ID P002523060 12/12

Printed on paper containing 75% recycled fibre content minimum.

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Foreword

The Office for Budget Responsibility (OBR) was established in 2010 to provide independent and authoritative analysis of the UK's public finances.

In this *Economic and fiscal outlook* (*EFO*) we set out forecasts for the period to 2017-18. We also make an updated assessment of whether the Government is on course to meet the medium-term fiscal objectives that it has set itself. The forecasts presented in this document represent the collective view of the three independent members of the OBR's Budget Responsibility Committee (BRC). We take full responsibility for the judgements that underpin them and for the conclusions we have reached.

We have, of course, been hugely supported in this by the full-time staff of the OBR. We are enormously grateful for the hard work, expertise and professionalism that they have brought to the task. Given the highly disaggregated nature of the fiscal forecasts we produce, we have also drawn heavily on the help and expertise of officials across government, including in HM Revenue and Customs, the Department for Work and Pensions, HM Treasury, the Department for Communities and Local Government, the Department for Business, Innovation and Skills, the Department of Energy and Climate Change, the Office for National Statistics, the UK Debt Management Office, and the various public sector pension schemes. We are very grateful for their time and patience. We have also had useful exchanges with staff at the Bank of England and the National Institute for Economic and Social Research, regarding their recent forecasts, for which again we are very grateful.

The forecast process for this *EFO* has been as follows:

- We began the forecast process with the preparation by OBR staff of a revised economic forecast, drawing on economic data released since the last published forecast in March 2012 and with our preliminary judgements on the outlook for the economy.

- Using the economic determinants (such as growth, inflation and unemployment) from this forecast, we then commissioned new forecasts from the relevant Government departments for the various tax and spending streams that determine the state of the public finances. We then discussed these in detail with the officials producing them, which allowed us to investigate proposed changes in forecasting methodology and to assess the

significance of recent tax and spending outturns. In many cases, the BRC requested changes to methodology and/or the interpretation of recent data.

- We sent our first economic forecast to the Chancellor on 5 October and our first fiscal forecast, including a provisional judgement on progress towards meeting his fiscal targets, on 18 October. We provided the Chancellor with these early forecasts and provisional judgement on compliance with the fiscal targets in order to inform his policy choices for the Autumn Statement.

- As the forecasting process continued, we identified the key judgements that we would have to make in order to generate our full economic forecast. Where we thought it would be helpful, we commissioned analysis from the relevant experts in the Treasury and consulted outside forecasters to help inform our views. The BRC then agreed the key judgements, allowing the production by OBR staff of a second full economic forecast.

- This provided the basis for a further round of fiscal forecasts. Discussion of these forecasts with HMRC, DWP and the other departments gave us the opportunity to follow up the various requests for further analysis, methodological changes and alternative judgements that we made during the previous round. We provided the second round economic and fiscal forecast to the Chancellor on 8 November.

- Meanwhile, we also began to scrutinise the costing of tax and spending measures that were being considered for announcement at the Autumn Statement. The OBR requested a number of changes to the draft costings prepared by HMRC and DWP. We have certified all of the final published costings for new Autumn Statement policies as reasonable and central estimates. In the Treasury's Autumn Statement 2012 policy costings document we highlight the uncertainties around a number of the costings.

- We then produced a third economy and fiscal forecast which allowed us to take on latest data and to ensure that our judgements on the fiscal forecast had been incorporated. This included our preliminary assessment of the impact of the provisional Autumn Statement policy package on the forecast. We finalised this forecast and sent it to the Chancellor on 22 November, and we met with him and Treasury officials to discuss it on 23 November.

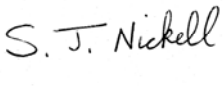
- During the week before publication we produced our final forecast, incorporating the effects of the third quarter GDP release on 27 November and the final package of new policy measures. To this end we were provided with final details of all major policy decisions with a potential impact on the economy forecast on 26 November. We provided the Treasury with our final post-measures economic and fiscal forecast on 30 November. Our final

fiscal forecast included the direct fiscal effects of the full set of Autumn Statement policy decisions, the final version of which was provided to us on 30 November.

- At the Treasury's written request, and in line with pre-release access arrangements for data releases from the ONS, we provided the Treasury with a full draft of the *EFO* on 30 November. This allowed the Treasury to prepare the Chancellor's statement and documentation. We provided a full and final copy 24 hours in advance of publication.

During the forecasting period, the BRC has held around 75 scrutiny and challenge meetings with officials from departments, in addition to numerous further meetings at staff level. We have been provided with all the information and analysis that we requested. We have come under no pressure from Ministers, advisers or officials to change any of our conclusions as the forecast has progressed. A full log of our substantive contact with Ministers, their offices and special advisers can be found on our website.

We would be pleased to receive feedback on any aspect of our analysis or the presentation of the analysis. This can be sent to OBRfeedback@obr.gsi.gov.uk.


Robert Chote Steve Nickell Graham Parker

The Budget Responsibility Committee

1 Executive summary

Overview

1.1 The economy has performed less strongly this year than we expected at the time of our last forecast in March, primarily reflecting the weakness of net exports. Looking forward, the recovery still lacks momentum. We now expect a small fall in GDP in the fourth quarter of this year, followed by a gradual pick-up next year. GDP is forecast to fall by 0.1 per cent in 2012 and then to grow by 1.2 per cent in 2013.

1.2 We are more pessimistic about the economy's medium term growth prospects than we were in March. We expect weak productivity to constrain nominal earnings growth for longer, with a slower fall in inflation delaying the pick-up in real incomes. The outlook for the world economy and UK exports has deteriorated and we expect the difficulties of the euro area to depress confidence and put upward pressure on bank funding costs for longer. Investment is likely to be restrained by poor credit conditions and uncertainty about demand.

1.3 Our central forecast is for the economy to grow by 2 per cent in 2014, 2.3 per cent in 2015, 2.7 per cent in 2016 and 2.8 per cent in 2017. This would leave real GDP 3.2 per cent lower in 2016 than we forecast in March. But most of this downward revision is assumed to be cyclical – and therefore eventually reversible – rather than structural and permanent. We have revised down our forecasts for nominal GDP slightly more than our forecasts for real GDP, as we expect whole economy inflation to be lower in the medium term than we assumed in March.

1.4 Public sector net borrowing (PSNB) is forecast at £108 billion or 6.9 per cent of GDP this year, excluding the transfer of the Royal Mail's historic pension deficit and associated assets into the public sector. This is £11 billion less than we forecast in March, primarily reflecting the decision to transfer balances from the Bank of England's Asset Purchase Facility (APF) to the Exchequer. Other receipts are likely to be weaker than we expected, although we assume that the Government will raise an extra £3.5 billion from the 4G spectrum auction (which will score as negative capital spending). We assume that central and local government will once again significantly underspend against their budgets.

1.5 PSNB is then forecast to decline to £31 billion or 1.6 per cent of GDP by 2017-18, a smaller and slower improvement than in March – mainly because the weaker outlook for the economy will reduce expected tax receipts. Receipts are

expected to remain broadly flat at around 38 per cent of GDP over the forecast, with spending falling from 43.1 per cent this year to 39.5 per cent in 2017-18.

1.6 Our forecast includes the impact of the policy measures announced in the Autumn Statement. Auctioning spectrum reduces borrowing this year, with 'giveaways' and 'takeaways' broadly offsetting each other through to 2016-17. Cuts in non-investment spending then extend into 2017-18 for the first time, reducing borrowing by a little over 1 per cent of GDP in that year. As regards the economy, we expect the Autumn Statement measures to deliver a small boost to growth over the next two years, partially reversed thereafter.

1.7 The decision to transfer surpluses and deficits generated by the APF to the Treasury means they will be reflected in the public finances on an ongoing basis. This will reduce PSNB and public sector net debt (PSND) through to 2016-17, given our assumptions for the future of quantitative easing (QE) and the way the ONS might treat these flows. But as monetary policy tightens and QE is unwound, PSNB will be higher thereafter and the reduction in PSND partially unwound. We estimate that QE will eventually result in a relatively small net reduction in the level of PSND.

1.8 We now expect PSND to peak at 79.9 per cent of GDP in 2015-16, compared to a peak of 76.3 per cent of GDP in 2014-15 in our March forecast. PSND is pushed higher as a share of GDP by weaker nominal GDP growth, higher net borrowing, and the reclassification of Bradford and Bingley plc and Northern Rock (Asset Management) into central government. These upward pressures are partially offset by the impact of the APF transfers and our forecast that the Debt Management Office will continue to sell gilts at a premium to nominal value.

1.9 The Government now appears more likely than not to miss its 'supplementary target', which requires PSND to fall as a share of GDP between 2014-15 and 2015-16. We now predict that PSND will rise by 1 per cent of GDP in 2015-16, falling by 0.8 per cent a year later. In the absence of the reclassifications and APF transfers, we estimate that PSND would be stable as a share of GDP between 2015-16 and 2016-17, and then fall in 2017-18.

1.10 The Government's 'fiscal mandate' requires it to balance the cyclically-adjusted current budget (CACB) at the end of a rolling five-year period, now 2017-18. Our central forecast shows the CACB in surplus by 0.9 per cent of GDP in 2017-18, implying that the Government is more likely than not to meet the mandate. This is a result of the additional year of cuts in non-investment spending. The CACB is also expected to be in surplus by 0.4 per cent of GDP in 2016-17, although this largely reflects the bank reclassifications and APF transfers.

1.11 There is huge uncertainty around all public finance projections, especially over this time horizon. We stress test the Government's chances of achieving its targets using sensitivity and scenario analysis. A key risk is that potential output turns out to be lower at the end of the forecast than we currently assume.

Developments since the March 2012 forecast

1.12 Economic growth this year has been much weaker than we expected in our March forecast. We expected the economy to grow by 0.3 per cent in the first quarter of 2012 and to be flat in the second. Instead the latest ONS estimates show that GDP contracted in both quarters. The latest data show growth of 1 per cent in the third quarter of 2012. This was above our March forecast of 0.6 per cent, but does not fully offset the unexpected weakness in earlier quarters. Aggregate growth in the first three quarters of 2012 was 0.3 per cent, which is 0.6 percentage points lower than our March forecast. Most survey evidence suggests little pick-up in underlying activity in the coming months.

1.13 Given the weakness of GDP, the labour market has once again shown surprising strength. The overall level of employment rose to 29.6 million in the three months to September, against our March forecast that it would remain at 29.1 million. Around half the increase since the final quarter of 2011 was driven by a rise in self-employment and part-time employees. Nevertheless, total hours worked per week have also risen by 21.9 million since the fourth quarter of 2011, to 945 million. The unemployment rate has fallen to 7.8 per cent, against our forecast of an increase to 8.7 per cent in the three months to September.

1.14 Our March forecast for GDP growth in 2012 of 0.8 per cent was a little above the average outside forecast at the time. Outside forecasts have been progressively downgraded over the course of this year, and now stand at -0.2 per cent for 2012 and 1.1 per cent for 2013. In addition to the weakness in GDP growth so far this year, this likely reflects subdued forward-looking indicators and the ongoing problems in the euro area. Some of these forecasts will not have taken into account the unexpected strength of growth in the third quarter.

The economic outlook

1.15 Recent data suggest less short-term momentum in the economy than we expected in March. Most survey evidence also points to continued weak underlying growth. The situation in the euro area looks likely to continue to weigh on confidence and trade in the near term and for some time to come. Inflation is also likely to be higher in the short term than we expected in March, reducing the growth of real household disposable income and consumption. As a result we have revised down our estimate of GDP growth in 2013 to 1.2 per cent. We expect a return to positive GDP growth after the fall seen in 2012, through a rebound in stock-building, a small recovery in net trade, and falling inflation supporting real household consumption.

1.16 Business and consumer surveys, and other cyclical indicators, would suggest an output gap of between -1.9 and -2.3 per cent in the third quarter of 2012. This

would imply that the output gap had narrowed since the end of 2011 despite actual output being roughly flat over this period and much weaker than expected in March. This in turn would imply that the weakness in output over this period was structural and that trend total factor productivity (TFP) had contracted.

1.17 However, wider indicators (such as the continued strength of the labour market) are difficult to square with such severe renewed structural weakness, and we do not think it is plausible that trend TFP has been negative over this period. Our central assumption therefore is that the output gap was -2.7 per cent of GDP in the third quarter of 2012, which is consistent with flat rather than negative trend TFP over 2012. This chimes with our assessment that the weakness of the economy compared to our forecast in the first half of 2012 was mostly cyclical.

1.18 However, our latest estimate of the output gap – combined with the recent path of actual output – continues to imply that potential output growth has been extremely depressed in the UK since the financial crisis. Rather than potential growth returning to its long-term rate by 2014, as in our March forecast, we now assume that it will still be slightly below its long-term rate at the end of our forecast. This judgement is consistent with the view that uncertainty surrounding the stability of the euro area will continue to undermine the functioning of financial markets for some time to come, and that a persistently negative output gap will also weigh down on potential GDP growth throughout the forecast.

1.19 Our judgements on the current output gap and future path of potential GDP shape our forecast of actual GDP growth in the medium-term. We now expect the economy to grow by 2.0 per cent in 2014, 2.3 per cent in 2015, 2.7 per cent in 2016 and 2.8 per cent in 2017. With GDP growing less quickly than potential GDP in the near term, the output gap widens to -3½ per cent by mid-2013. This cyclical deterioration reflects the effect of subdued wage growth on consumption and the relatively weak growth of UK export markets.

Table 1.1: Economic forecast overview

	Percentage change on a year earlier, unless otherwise stated						
	Outturn	Forecast[1]					
	2011	2012	2013	2014	2015	2016	2017
Output at constant market prices							
Gross domestic product (GDP)	0.9	-0.1	1.2	2.0	2.3	2.7	2.8
GDP Level (2011 =100)	100.0	99.9	101.1	103.2	105.6	108.4	111.4
Output gap (per cent of potential output)	-2.7	-3.1	-3.5	-3.3	-3.0	-2.5	-1.9
Expenditure components of GDP at constant market prices							
Household consumption[2]	-0.9	0.5	0.9	1.6	1.8	2.4	2.9
Business investment	2.9	3.8	4.9	8.1	10.2	10.1	9.5
General government consumption	0.2	2.4	-0.7	-1.4	-1.2	-2.1	-3.0
General government investment	-20.4	-9.2	-2.5	4.8	-3.0	-2.6	0.7
Net trade[3]	1.2	-0.6	0.3	0.2	0.2	0.2	0.1
Inflation							
CPI	4.5	2.8	2.5	2.2	2.0	2.0	2.0
Labour market							
Employment (millions)	29.2	29.5	29.6	29.7	29.9	30.2	30.4
Average earnings[4]	2.2	2.7	2.2	2.8	3.7	4.0	4.0
ILO unemployment (% rate)	8.1	8.0	8.2	8.2	8.0	7.6	7.1
Claimant count (millions)	1.53	1.59	1.66	1.69	1.63	1.53	1.43
	Changes since March forecast						
Output at constant market prices							
Gross domestic product (GDP)	0.1	-0.9	-0.8	-0.7	-0.7	-0.4	
GDP Level (2011=100)	0.0	-0.9	-1.7	-2.4	-3.2	-3.7	
Output gap (per cent of potential output)	0.0	-0.4	-0.9	-1.2	-1.7	-2.0	
Expenditure components of GDP at constant market prices							
Household consumption[2]	0.0	0.0	-0.5	-0.8	-1.2	-0.6	
Business investment	2.7	3.1	-1.5	-0.7	-0.1	0.0	
General government consumption	-0.1	1.8	0.4	0.7	1.6	0.5	
General government investment	-7.3	-4.2	1.1	4.7	-3.3	-1.2	
Net trade[3]	0.0	-1.1	-0.2	-0.2	-0.1	0.0	
Inflation							
CPI	0.0	0.0	0.6	0.2	0.0	0.0	
Labour market							
Employment (millions)	0.0	0.4	0.4	0.3	0.2	0.2	
Average earnings[4]	1.0	0.1	-0.9	-1.6	-0.7	-0.6	
ILO unemployment (% rate)	0.0	-0.7	-0.4	0.2	0.8	1.3	
Claimant count (thousands)	2	-62	22	166	275	340	

[1] The forecast is consistent with the second estimate of GDP data for the third quarter of 2012, released by the Office for National Statistics on 27th November 2012.

[2] Includes households and non-profit institutions serving households.

[3] Contribution to GDP growth, percentage points.

[4] Wages and salaries divided by employees.

1.20 Growth is not forecast to return to firmly above-trend rates until 2015 as credit conditions begin to normalise and financial markets return to a more stable position. The increase in real disposable incomes resulting from higher productivity growth and lower price inflation is expected to support the growth of consumption over the medium term, allowing GDP growth to move to above-trend rates.

1.21 Nevertheless, the output gap is assumed to close only gradually, which means that we now expect a significant margin of spare capacity to remain at the end of the forecast. This reflects the significant constraints on growth over the period – in particular, slow growth of productivity and real incomes, continued problems in the euro area and financial markets, and the generally weak outlook for the global economy. Our forecast assumes that these factors limit the extent to which the economy will grow and eliminate the output gap over the forecast period.

1.22 The situation in the euro area remains a major risk to our forecast. Policy action during the summer, including the ECB's new bond purchase facility, appears to have reduced some of the immediate pressures in euro area financial markets. However, the underlying situation remains very fragile and the feed through to the euro area real economy looks to have been more significant than we assumed in March. The difficulties of the euro area will not be resolved quickly and our central assumption is that they are likely to constrain UK growth for several years to come. A more disorderly outcome remains a clear possibility.

1.23 We expect the recovery in UK GDP growth in our forecast to be supported by contributions from private consumption, business investment and net trade:

- the contribution from private consumption is relatively small over the near term, before rising subsequently as wage growth recovers and inflation falls;

- business investment is forecast to make a relatively significant contribution to the recovery in growth in the medium term. We have revised down our near-term forecast for business investment growth since March, reflecting the ongoing uncertainty in the euro area and a tighter outlook for credit conditions. But the starting level for real business investment is significantly higher than we expected in March following upward data revisions;

- there is a small positive contribution from net trade over the forecast period, though weaker expected growth in UK export markets means that this contribution is smaller than we forecast in March; and

- government consumption makes a negative contribution to growth, though we have become less pessimistic on this score since March, reflecting the

pattern over the past two years of real government consumption holding up relatively well relative to nominal spending growth.

1.24 Our forecast for real household disposable income growth is weaker than in March, reflecting a weaker outlook for nominal wage growth and somewhat higher price inflation. We expect real disposable income growth to be weaker than in 2012 and only slightly positive in 2013 and 2014, before picking up from 2015 as productivity and nominal wage growth recover and inflation falls.

1.25 The unemployment rate is lower now than we expected in March. Reflecting the weaker growth outlook, we expect the unemployment rate to increase slightly over the coming year – peaking at 8.3 per cent at the end of 2013 – before recovering gradually from 2014 and reaching 6.9 per cent at the end of 2017.

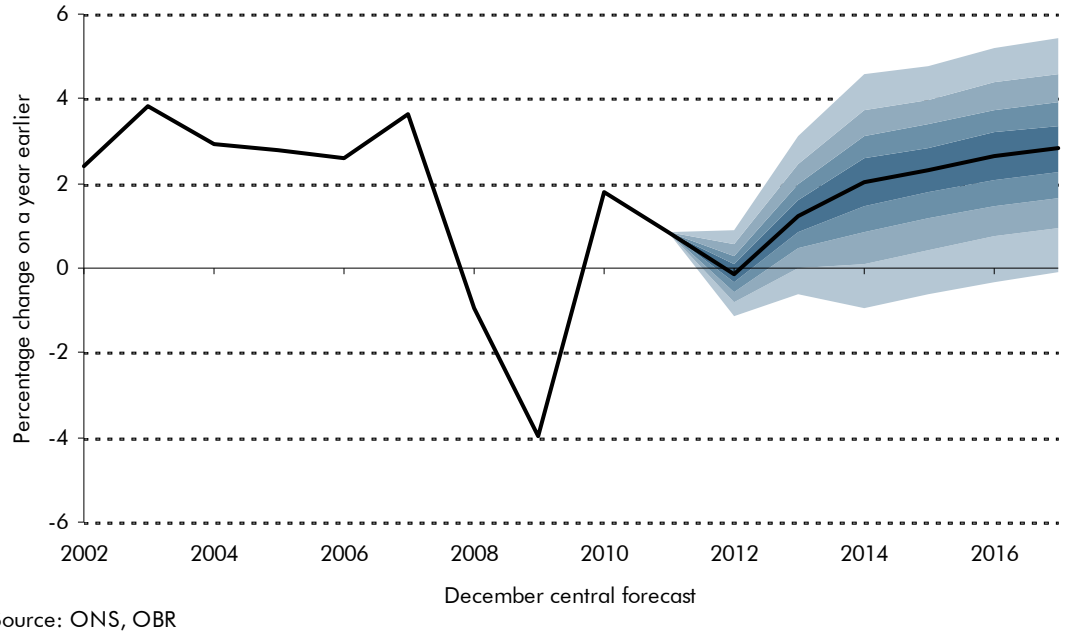
1.26 Between the start of 2011 and the start of 2018 we expect total market sector employment to increase by around 2.4 million, more than offsetting a total reduction in general government employment of around 1.1 million. General government employment is expected to fall further than we expected in March, mainly reflecting the additional year of spending cuts pencilled in for 2017-18.

1.27 We expect CPI inflation to fall gradually over the next few years, but to be higher in 2013 and 2014 than we expected in March, largely due to a bigger-than-expected contribution from tuition fee increases and the announced rises in domestic energy prices. In the medium term we expect CPI inflation to fall back to target, remaining close to 2 per cent from 2015 onwards. We expect downward pressure on prices from the negative output gap over the forecast period to be offset to some extent by upward pressure from above-trend growth rates and falling unemployment in the later years.

1.28 We have also reassessed our estimate of the medium-term GDP deflator. Our medium-term assumption for the growth of the GDP deflator is now 2.0 per cent, compared to 2.5 per cent in March. The level of nominal GDP in 2016 is 5.1 per cent lower than in our March forecast. Of this, 3.2 percentage points is accounted for by the downward adjustment to our forecast for real GDP growth, with the remainder due to lower GDP deflator growth.

1.29 There is always considerable uncertainty around any economic forecast. Chart 1.1 presents our central growth forecast with a fan showing the range of possible different outcomes based purely on past official forecasting errors. The solid black line shows our median forecast, with successive pairs of lighter shaded areas around it representing 20 per cent probability bands. It suggests that there is a roughly 20 per cent chance that the economy will shrink again in 2013, judging from past forecasting errors.

Chart 1.1: GDP fan chart



Source: ONS, OBR

The fiscal outlook

1.30 We now forecast that public sector net borrowing (PSNB) will total £80 billion or 5.1 per cent of GDP this year. Excluding the transfer of Royal Mail pension assets to the public sector, which distorts the figures this year, PSNB would be £108 billion or 6.9 per cent of GDP. This is £13 billion lower than in 2011-12.

1.31 The latest forecast for 2012-13 is £11 billion lower than the estimate we made in March. Policy decisions by the Government and reclassifications have reduced PSNB this year by £16 billion – in particular the auction of spectrum (which is expected to raise £3.5 billion) and the transfer of proceeds from the Asset Purchase Facility (which reduces PSNB this year by £11.5 billion).

1.32 These effects more than offset other forecast changes, which overall have pushed borrowing in 2012-13 up by £4 billion compared to our March forecast. Other receipts are likely to be weaker than we expected, but we also expect central and local government to once again underspend significantly against their budgets.

1.33 On the basis of this forecast PSNB will have fallen by 4.3 per cent of GDP, excluding the Royal Mail transfer, since its post-war peak in 2009-10. Our central forecast shows it continuing to fall to 1.6 per cent of GDP in 2017-18. This is driven by falling public sector expenditure – largely as a result of lower

departmental spending under the Government's fiscal consolidation plan – with public sector receipts expected to be broadly flat as a share of GDP.

Table 1.2: Fiscal forecast overview

	Per cent of GDP						
	Outturn	Forecast					
	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Public sector net borrowing	7.9	5.1	6.1	5.2	4.2	2.6	1.6
Cyclically-adjusted net borrowing	6.0	3.0	3.8	2.9	2.0	0.9	0.3
Surplus on current budget	-6.2	-5.7	-4.6	-3.7	-2.9	-1.4	-0.4
Fiscal mandate and supplementary target							
Cyclically-adjusted surplus on current budget	-4.3	-3.6	-2.2	-1.4	-0.8	0.4	0.9
Public sector net debt[1]	66.4	74.7	76.8	79.0	79.9	79.2	77.3
	Changes since March forecast						
Public sector net borrowing	-0.3	-0.7	0.2	0.9	1.3	1.6	-
Cyclically-adjusted net borrowing	-0.4	-1.0	-0.4	0.0	0.1	0.2	-
Surplus on current budget	0.3	0.4	-0.1	-0.7	-1.2	-1.5	-
Cyclically-adjusted surplus on current budget	0.3	0.6	0.5	0.2	-0.1	-0.1	-
Public sector net debt[1]	-0.9	2.8	1.8	2.6	3.9	4.9	-
Memo: PSNB excluding Royal Mail transfer	*7.9*	*6.9*	*6.1*	*5.2*	*4.2*	*2.6*	*1.6*

[1] Debt at end March; GDP centred on end March.

1.34 Compared to our March forecast PSNB is considerably higher in each year from 2013-14, with the difference reaching £28 billion in 2016-17. Table 1.3 shows that this is driven by the following factors:

- policy measures on the Treasury's Autumn Statement policy decisions table increase PSNB slightly from 2013-14 to 2015-16, and are broadly neutral in 2016-17;
- the decision to change the treatment of the proceeds of the Asset Purchase Facility reduces PSNB significantly – by £7 billion in 2016-17. This decision will lead to higher borrowing in 2017-18 and the years beyond our forecast horizon;
- the reclassification of Bradford & Bingley plc (B&B) and Northern Rock (Asset Management) (NRAM) reduces borrowing by around £1 billion by 2016-17; and
- other forecasting changes increase borrowing by £36 billion in 2016-17. This is primarily driven by lower expected receipts, due to our weaker economic forecast.

Table 1.3: Change in public sector net borrowing

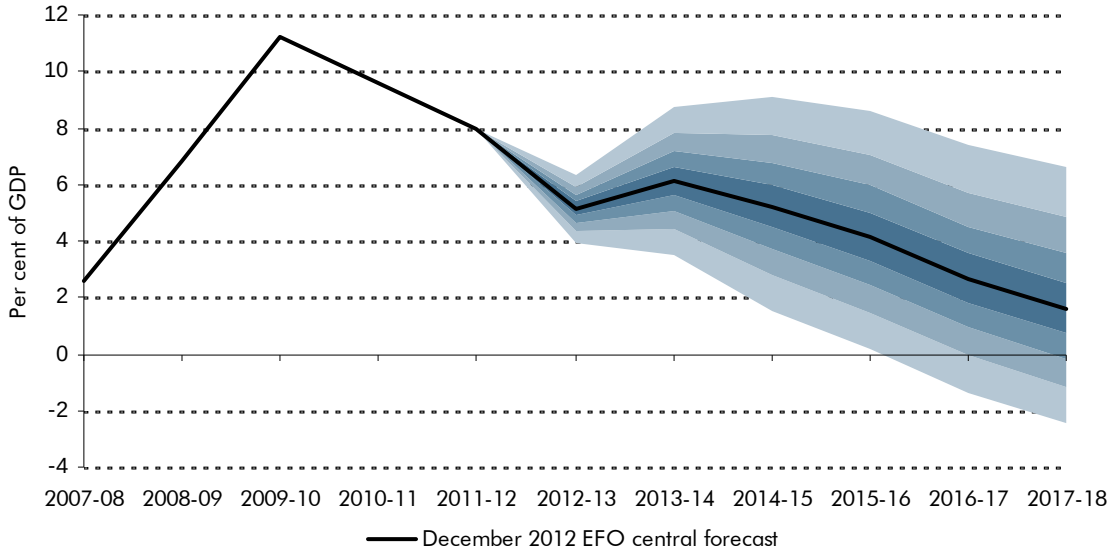
	£ billion					
	Outturn	Forecast				
	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
March forecast	126.0	91.9	98	75	52	21
December forecast	121.4	80.5	99	88	73	49
Change	-4.6	-11.4	1.8	12.9	21.3	27.9
of which:						
Forecast changes	*-4.6*	*4.4*	*13.6*	*23.0*	*29.1*	*36.0*
Policy measures	*0.0*	*-4.0*	*0.9*	*0.9*	*0.9*	*-0.3*
APF transfers	*0.0*	*-11.5*	*-12.3*	*-10.6*	*-8.0*	*-6.6*
B&B/NRAM classification	*-*	*-0.4*	*-0.5*	*-0.4*	*-0.8*	*-1.1*
Memo: March EFO PSNB ex Royal Mail	*126.0*	*119.9*	*97.5*	*75.0*	*52.0*	*21.1*
Memo: PSNB excluding Royal Mail	*121.4*	*108.5*	*99.3*	*87.9*	*73.3*	*49.0*
Memo: PSNB ex Royal Mail and APF	*121.4*	*119.9*	*111.6*	*98.6*	*81.2*	*55.6*
Memo: PSNB ex RM, B&B, NRAM and APF	*-*	*120.3*	*112.1*	*99.0*	*82.0*	*56.7*

1.35 The current budget is forecast to move from a deficit of £89 billion, or 5.7 per cent of GDP, this year to a deficit of £8 billion, or 0.4 per cent of GDP in 2017-18. Compared to our March forecast, the deterioration in the current budget is of a similar magnitude to the deterioration in PSNB, as changes to investment spending are relatively minor.

1.36 The cyclically-adjusted current budget (CACB) moves from a deficit of 3.6 per cent of GDP in 2012-13 to a surplus of 0.9 per cent of GDP in 2017-18. The medium-term forecast for the CACB is only slightly worse than in March, with a difference of 0.1 per cent of GDP in 2016-17. While the headline current budget has deteriorated by 1.5 per cent of GDP in 2016-17 since March, we expect the output gap in that year to be 2.0 per cent of GDP wider, which means that the deterioration in the CACB is much smaller. This reflects our judgement that most of the additional weakness in the economy compared to our March forecast is cyclical rather than structural. We have also reduced our forecast of potential output compared to March which, other things equal, would lead to a widening in the CACB. However, this has been offset in this forecast by the positive effect of the additional receipts from the APF and other fiscal forecast changes.

1.37 All fiscal forecasts are subject to significant uncertainty. Chart 1.2 shows our median (central) forecast for PSNB with successive pairs of shaded areas around it representing 20 per cent probability bands. The bands show the probability of different outcomes if past official forecasting errors are a reasonable guide to likely future forecasting errors.

Chart 1.2: PSNB fan chart



1.38 In our latest forecast, PSND rises as a share of GDP in each year up to and including 2015-16, peaking at 79.9 per cent of GDP, before falling to 79.2 per cent of GDP in 2016-17 and then 77.3 per cent of GDP in 2017-18. PSND in 2016-17 is now expected to be around 4.9 per cent of GDP higher than we forecast in March. Table 1.4 breaks down this change as follows:

- the level of nominal GDP over the past year has been slightly lower than we forecast in March, and we expect lower nominal GDP growth in the future. By reducing the denominator we use when calculating PSND as a share of GDP, this increases PSND by 3.9 per cent of GDP in 2016-17;

- our forecast for PSND in cash terms is also higher than in March, by 1.0 per cent of GDP in 2016-17. This is the result of a number of offsetting factors shown in the bottom half of Table 1.4:

  - the reclassification of B&B and NRAM raises the current stock of debt by £68 billion. As these banks wind down their mortgage books the stock of liabilities falls, so the total addition to PSND by 2016-17 is lower at £42 billion;

  - the transfers from the APF reduce PSND over this forecast period – by £71 billion in 2016-17. Beyond the forecast horizon we would expect transfers to flow from the Exchequer to the APF, and consequently the size of the reduction in PSND to diminish;

- other forecasting changes increase PSND by £105 billion by 2016-17. This is largely the consequence of the weaker economic forecast increasing net borrowing;

- for the purposes of calculating net debt, gilts are valued at their nominal value rather than their market value. In the past, gilts have typically been sold by the Debt Management Office (DMO) at close to their nominal value, but with gilt rates expected to remain low, we assume that the DMO will continue to issue gilts at a premium, though we expect this effect to diminish over time as gilt rates rise. This reduces our forecast of PSND by £39 billion by 2016-17; and

- finally, changes to our financial transactions forecasts, and a lower starting level of debt, lead to a fall in PSND of £17 billion by 2016-17.

Table 1.4: Change in public sector net debt

	Per cent of GDP					
	Outturn	Forecast				
	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
March forecast	67.3	71.9	75.0	76.3	76.0	74.3
December forecast	66.4	74.7	76.8	79.0	79.9	79.2
Change	**-0.9**	**2.8**	**1.8**	**2.6**	**3.9**	**4.9**
of which:						
Change in nominal GDP[1]	0.0	1.1	1.9	2.8	3.6	3.9
Change in cash level of net debt	-0.9	1.7	-0.1	-0.2	0.3	1.0
	£ billion					
March forecast	1039	1159	1272	1365	1437	1479
December forecast	1025	1186	1270	1362	1442	1498
Change in cash level of net debt	**-13**	**27**	**-2**	**-3**	**5**	**19**
of which:						
Reclassification of B&B and NRAM		68	62	56	50	42
Inclusion of APF transfers		-11	-43	-55	-63	-71
Other changes in net borrowing	-5	-4	11	36	67	105
Auction price effects		-12	-20	-28	-34	-39
Financial transactions and other	-9	-14	-11	-12	-14	-17

[1] Non-seasonally-adjusted GDP centred end-March.

Asset purchase facility

1.39 On 9 November the Chancellor announced that the excess cash held in the Bank of England's Asset Purchase Facility (APF) will be transferred to the Exchequer. This decision means that the cash surpluses and deficits generated by the Bank of England's quantitative easing (QE) facility will be reflected in the public finances on an ongoing basis, rather than as a one-off profit or loss to the Exchequer when QE has been fully unwound and the facility closed.

1.40 Capturing the impact quarter by quarter, rather than at some indeterminate date in the future, is more transparent than the current approach. The decision will not have a significant impact on the eventual net profit or loss to the Exchequer from QE, but it will mean that net borrowing will be lower than it otherwise would have been in the near term and then higher when monetary policy tightens.

1.41 To quantify the impact of this decision on the public finances we need to make a set of assumptions about the way it will be treated in the official statistics (which the ONS will decide next month) and how and when QE is unwound.

1.42 Our central forecast assumes that the Bank makes gilt sales of £10 billion per quarter from the middle of 2016, when the market expects Bank Rate to have returned to 1 per cent. This implies that QE would be unwound by late 2022, thanks to roughly £250 billion of gilt sales and £125 billion of redemptions. In this event PSNB, the current budget deficit and PSND will be lower in each year until 2016-17 than they otherwise would have been, as the Treasury receives the stock of cash currently in the APF and the future flow of coupon payments on the gilts held by the APF (minus the interest that the APF has to pay the Bank for the loan that allowed it to purchase them).

1.43 As monetary policy tightens and QE is unwound, the stream of regular payments to the Treasury will shrink and the APF will face capital losses. Consequently, the Treasury will need to make net payments into the APF between 2017-18 and 2022-23. This will increase PSNB and reverse some of the reduction in PSND. It will have no impact on the current budget deficit if the ONS treats the payments as capital grants, but will increase it if the ONS treats them as subsidies.

1.44 The overall transfer to the Exchequer is expected to be positive but modest under our central assumption, leaving PSND around 2.2 per cent of GDP lower after QE has been fully unwound in 2022-23 than it otherwise would have been. The net flow to the Exchequer will be smaller if gilt yields end up higher than the markets currently expect. If gilt yields were to jump by 200 basis points when the unwinding of QE began this would reduce the overall reduction in PSND to 0.7 per cent of GDP in 2022-23.

1.45 The eventual impact of QE on net debt is unlikely to be significantly different as a result of the Government's decision to transfer the surpluses and deficits. (In the absence of this decision there would be a one-off adjustment to net debt when the APF was closed). The decision does mean that the Government is likely to issue fewer gilts in the near term and more in the longer term than it otherwise would have done. As gilt rates are expected to rise, debt interest payments will be higher beyond the horizon presented in this projection than they otherwise would have been, possibly outweighing lower costs in the preceding years.

Performance against the fiscal targets

1.46 In the June 2010 Budget the Coalition Government set itself a medium-term fiscal mandate and a supplementary target:

- to balance the cyclically-adjusted current budget (CACB) by the end of a rolling, five-year period, which is now 2017-18; and
- to see public sector net debt (PSND) falling as a share of GDP in 2015-16.

1.47 Our latest forecasts suggest that the Government has a greater than 50 per cent chance of hitting the fiscal mandate. The CACB is forecast to be in surplus by 0.9 per cent of GDP in 2017-18, thanks to the Government's decision to continue cutting non-investment spending as a share of GDP into that year now that the forecast has been rolled forward. The CACB is also forecast to be in surplus in 2016-17 by 0.4 per cent of GDP, slightly less than we forecast in March.

1.48 The Government's supplementary target is more likely than not to be missed in our latest forecast. PSND rises as a share of GDP by 1.0 per cent of GDP between 2014-15 and 2015-16. In our March forecast we expected PSND to fall by 0.3 per cent of GDP between these two years. We now forecast that PSND will fall by 0.8 per cent of GDP between 2015-16 and 2016-17.

1.49 The proceeds from the Asset Purchase Facility do not materially affect our assessment of the chances of meeting the fiscal mandate in 2017-18. We forecast small payments from the Exchequer to cover capital losses in this year, but we currently assume these would be classified as capital transfers and would not therefore affect the CACB. In 2016-17, the CACB would be marginally in deficit without the reclassification of B&B and NRAM, and the proceeds from the Asset Purchase Facility.

1.50 We forecast that PSND will increase by 1.0 per cent of GDP in 2015-16 compared to 2014-15, and that the increase would be 1.8 per cent of GDP without the reclassification of B&B and NRAM and the proceeds from the Asset Purchase Facility. PSND then falls by 0.8 per cent of GDP between 2016-17 and 2017-18. PSND would be flat between these two years in the absence of these two factors. These differences are small in comparison to the overall uncertainty around the forecast of PSND at this time horizon.

1.51 There is considerable uncertainty around our central forecast, as there is around all fiscal forecasts. This reflects uncertainty both about the outlook for the economy and about the performance of revenues and spending for any given state of the economy. Given these uncertainties we probe the robustness of our central judgement in three ways:

- first, by looking at past forecast errors. If our central forecasts are as accurate as official forecasts were in the past, then there is a roughly 70 per cent probability that the CACB will be in balance or surplus in 2017-18 (as the mandate requires) and a roughly 60 per cent chance a year earlier;

- second, by looking at its sensitivity to varying key features of the economic forecast. The biggest risk to the achievement of the mandate is that we again need to revise down our estimates of future potential output. If the output gap was around 1¼ per cent of potential GDP narrower, or rather the level of potential output 1¼ per cent lower, than in our central forecast then the Government would no longer be on course to balance the CACB in 2017-18; and

- third, by looking at alternative economic scenarios. We examine the implications of two illustrative scenarios where the output gap closes within our five-year forecast horizon: first, a 'weaker supply' scenario where the output gap closes due to a slower rate of trend growth; and second, a 'stronger demand' scenario where the output gap closes due to stronger private investment. Under the weaker supply scenario the fiscal mandate and the supplementary target would both be breached. Under the stronger demand scenario the fiscal mandate would be met (although with less margin for error than in the central forecast) and the supplementary target would be achieved rather than breached.

2 Developments since the March 2012 forecast

Introduction

2.1 This chapter summarises:

- the main economic and fiscal data developments since our last forecast in March 2012 (from paragraph 2.2); and
- recent external forecasts for the UK economy (from paragraph 2.16).

Economic developments

Data revisions and Blue Book 2012 changes

2.2 Each year the publication of the *Blue Book* provides the ONS with an opportunity to make methodological changes to the National Accounts. This year has seen only modest changes.[1] The most significant was the introduction of a new method for measuring insurance services, leading to revisions back to 1987.

2.3 The ONS has also applied the improved deflation method introduced in *Blue Book* 2011 to the pre-1997 GDP data. The *Blue Book* 2012 changes mean that the average annual GDP growth rate between 1966 and 1997 has been revised up by 0.3 percentage points, from 2.3 per cent to 2.6 per cent. The average annual growth rate post 1997 is unchanged at 2.1 per cent, having been revised higher in last year's *Blue Book*.

2.4 There have also been small revisions to GDP growth and its composition over the past couple of years. GDP growth between the trough of the recession in the second quarter of 2009 and the end of 2011 now appears marginally slower than the data suggested at the time of the March forecast, as shown in Table 2.1 (see Box 2.1 for how the latest data compare to earlier vintages). There have also been changes to the composition of GDP growth during this period. Private investment is now thought to have contributed more and government spending

[1] ONS, 2012, *Content of UK National Accounts: the Blue Book 2012*.

less to growth than at the time of our March forecast. Other components are broadly unchanged. In all, the revisions suggest that the momentum of GDP growth going into 2012 was not significantly different to the picture painted by the official statistics at the time of our March forecast.

Table 2.1: Contributions to real GDP growth from 2009Q2 to 2011Q4

	Percentage points						
	Private consumption	Private investment	Total Government	Net trade	Stocks	GDP	Statistical discrepancy
March data	0.7	0.3	0.7	1.1	0.6	3.4	0.1
Latest data	0.8	0.8	-0.1	0.9	0.5	3.0	0.1
Difference[1]	0.1	0.6	-0.7	-0.1	-0.1	-0.3	0.1

[1] Difference in unrounded numbers, rounded to one decimal place.

Economic developments between March and December 2012

2.5 We now turn to data showing how the economy has evolved since our last forecast.

2.6 Since our last forecast the official data suggest the UK has suffered a 'double-dip' recession. In March we forecast that the economy would grow by 0.3 per cent in the first quarter of 2012 and growth to be flat in the second, having shrunk in the final quarter of 2011. Instead the latest ONS estimates show that GDP contracted in both quarters in the first half of 2012.

2.7 The latest data show that the economy exited the double dip recession in the third quarter of 2012, growing by 1 per cent. This was above our March forecast of 0.6 per cent growth, but does not fully offset the unexpected weakness in earlier quarters. Aggregate growth in the first three quarters of 2012 was 0.3 per cent, 0.6 percentage points lower than our March forecast.

2.8 The composition of quarterly GDP growth relative to our March forecast is shown in Table 2.2. The weaker than expected growth can be more than accounted for by over-optimism regarding net trade. In the first three quarters of 2012 the contribution of net trade to GDP growth was 0.9 percentage points lower than forecast. Government consumption added to growth rather than being flat as we had forecast. Private consumption also added more to growth than we expected whereas private investment was slightly weaker.

Table 2.2: Contributions to real GDP growth from 2011Q4 to 2012Q3

	Percentage points						
	Private consumption	Private investment	Total Government	Net trade	Stocks	GDP	Statistical discrepancy
OBR March forecast	0.3	0.3	0.0	0.3	0.0	0.9	0.0
Latest data	0.5	0.2	0.4	-0.6	-0.2	0.3	0.0
Difference[1]	0.2	-0.2	0.4	-0.9	-0.2	-0.6	0.0

[1] Difference in unrounded numbers, rounded to one decimal place.

2.9 Most survey evidence suggests little pick-up in underlying activity in the coming months. The composite *CIPS Purchasing Managers' Index* fell in October to a level consistent with broadly flat growth, although the *CIPS Index* has had a mixed relationship with official GDP statistics over the past year.[2] This was most obvious in the first quarter of 2012, when the current vintage of official data shows that GDP fell whereas the *CIPS Index* was at a level consistent with a return to growth. Other survey evidence also points to little improvement in underlying activity in the final quarter of 2012. The Confederation of British Industry (CBI)'s *Industrial Trends Survey* reported a weakening in order books in manufacturing in the third quarter of 2012. The November Bank of England Agent's Summary reports a slight pick-up in demand for consumer goods, but further weakness for UK exports, while the *Gfk Consumer Confidence* measure suggests consumer sentiment has been weak over the past year.

2.10 Given the weakness of GDP relative to our March forecast, the labour market has once again shown surprising strength. Employment rose to 29.6 million in the three months to September, against our March forecast that it would remain at 29.1 million (Chart 2.1). Around half the increase since the final quarter of 2011 was driven by a rise in self-employment and part-time employees. Nevertheless, total hours worked per week have risen by 21.9 million since the fourth quarter of 2011, to 945 million. The unemployment rate has fallen to 7.8 per cent, against our forecast of an increase to 8.7 per cent in the three months to September.

2.11 The claimant count measure of unemployment has also performed better than we expected in March. It has fallen over the past two quarters and stood at 1.58 million in the third quarter of 2012, over 85,000 lower than our March forecast.

[2] The ONS has published an article looking at the relationship between CIPS indicators and official statistics. For more detail see ONS, 2012, *Measuring coherence between official estimates of economic activity and external estimates*, October.

Box 2.1: Rewriting history: the 2008-09 recession and recovery

In *Blue Book* 2012 the ONS fully 'balanced' the 2010 GDP data for the first time and rebalanced 2009. This process involves using detailed industry level data to align the output, income and expenditure measures of GDP. As a result we now have a different picture of the recession and recovery to that painted in the earlier vintages of data. These changes reflect the inclusion of more data in the GDP estimates and methodological changes, such as the move to a CPI based GDP deflator.[a]

The 2008-09 recession is now thought to have been shorter and sharper than the original ONS estimates. Latest estimates show the trough of the recession in the second quarter of 2009, a quarter earlier than the original estimate. The peak-to-trough fall in GDP is now estimated to have been 6.3 per cent, compared to the original estimate of a 5.8 per cent fall, as shown in Table A. The composition of the fall in GDP during the recession has also changed. Private consumption and government spending were weaker than previously thought, whereas private investment, stock building and net trade were stronger.

It is notable that the recovery so far has been driven by growth in private consumption and private investment with net trade making only a small contribution to GDP growth. This low contribution reflects the weakness of net trade in the first half of this year. Up until the final quarter of 2011 net trade had made a contribution to GDP growth of 0.9 per cent. The contribution of net trade and private consumption has been revised up from earlier vintages of data, while the contribution of stock building and government spending has been revised down. The revisions to net trade during the recession and early part of the recovery had helped to in part resolve the puzzle of why net trade had not responded more strongly to the depreciation of sterling. But data so far in 2012 suggests that this puzzle may be re-emerging, although the weakness of the euro area also helps to explain the recent net trade data.

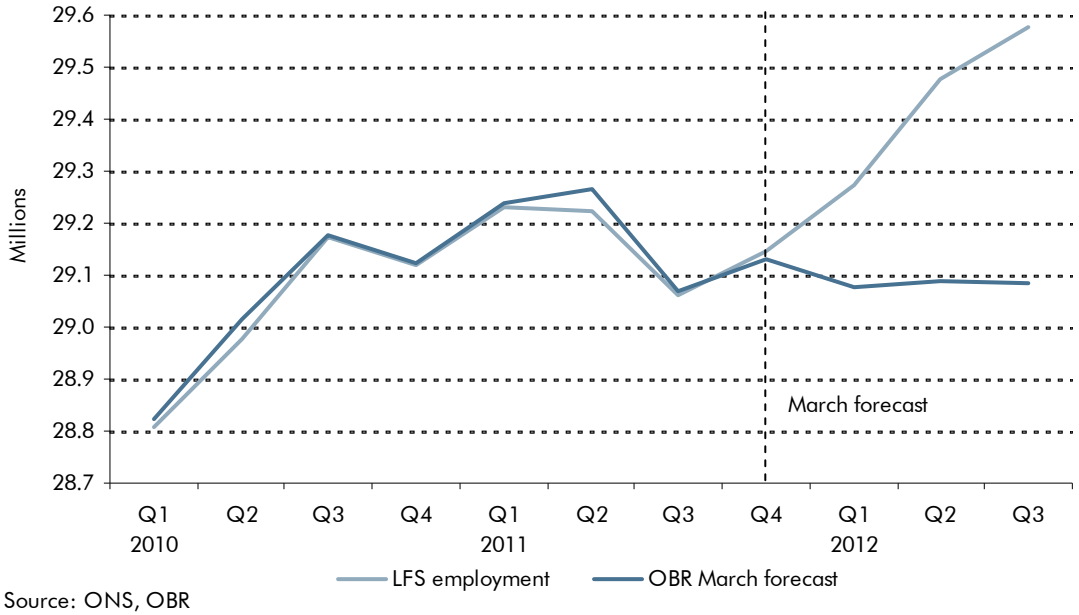
Table A: Contributions to real GDP growth during the 2008-09 recession and the recovery

	Percentage points						
	Private consumption	Private investment	Total Government	Net trade	Stocks	GDP	Statistical discrepancy
Initial data recession[1]	-2.5	-4.0	1.6	1.3	-2.2	-5.8	-0.1
Latest data recession[1]	-3.7	-3.7	0.2	1.7	-1.1	-6.3	0.0
Difference[2]	-1.2	0.3	-1.4	0.3	1.1	-0.4	0.1
Latest data recovery[1]	1.3	1.0	0.4	0.3	0.3	3.3	0.1

[1] Initial recession data is from the first quarter of 2008 to the third quarter of 2009, latest recession data is to the second quarter of 2009. Recovery data is from the second quarter of 2009 to the third quarter of 2012.
[2] Difference in unrounded numbers, rounded to one decimal place.

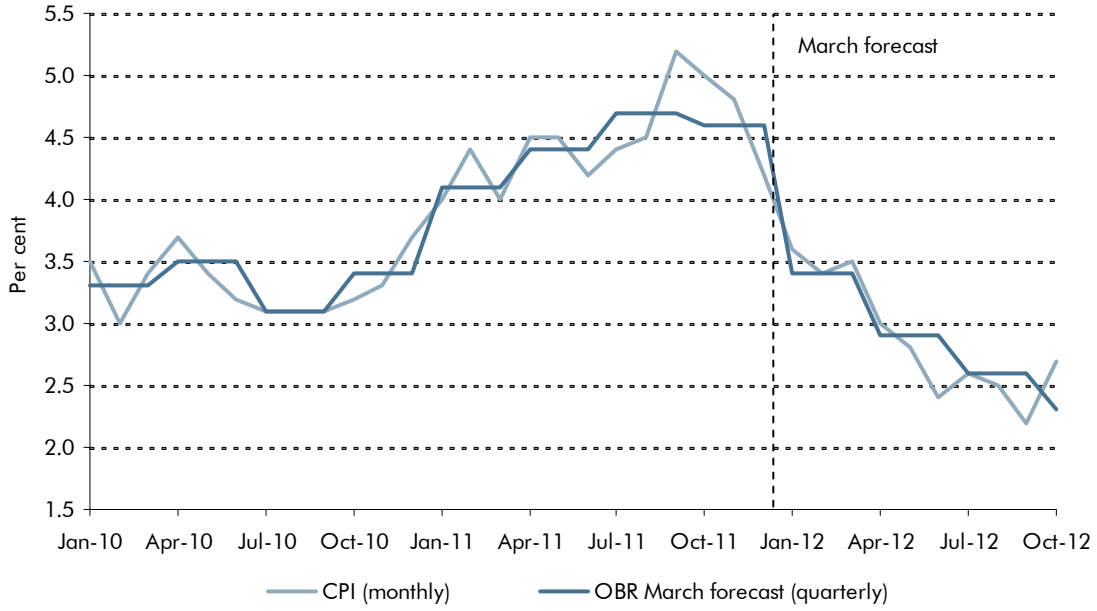
[a] ONS, May 2012, *Why is GDP revised.*

Chart 2.1: LFS employment and March forecast



Source: ONS, OBR

Chart 2.2: CPI inflation and March forecast



Source: ONS, OBR

2.12 Annual CPI inflation in October 2012 rose to 2.7 per cent from 2.2 per cent in September.[3] This was a larger increase that we expected in our March forecast, driven by the rise in university tuition fees and higher food and non-alcoholic beverages prices. Before October, inflation had fallen broadly in line with our March forecast (Chart 2.2).

2.13 At the time of our March forecast we expected the euro area economy to be weak in the first half of 2012, before beginning to recover in the second half. Conditions in euro area financial markets once again began to deteriorate after our March forecast, having improved at the start of the year following the ECB's long-term refinancing operations. This led to further ECB action, including a new bond purchase facility – Outright Monetary Transactions (OMT). Despite this the euro area real economy continued to contract in the third quarter of 2012, having performed broadly in line with our forecast for the first half of the year. US growth has so far been broadly in line with our March forecast, but growth in emerging markets, particularly China, has been slower.

2.14 World output growth has been slightly weaker than our March forecast, with world trade also slowing. Some survey evidence suggests that the current trough in world activity may have been reached. For example, the JP Morgan *Global Manufacturing PMI Index* rose to a five-month high in October, with the new orders balance picking-up.

Fiscal data developments

2.15 The joint Office for National Statistics and HM Treasury statistical bulletin on the public sector finances provides monthly data on central government receipts and expenditure and provisional estimates for the public sector fiscal aggregates. Since our previous forecast, bulletins have been released which cover the public finances over the months from March to October. The growth of total central government receipts in these months has been lower than in our March forecast, mainly reflecting a significant shortfall in corporation tax and VAT receipts. But PAYE income tax and national insurance contributions have been broadly in line with the March forecast, probably reflecting the resilience of the labour market over this period. Central government spending growth over this period has also been lower than we forecast. These developments and their implications for our latest fiscal forecast are discussed in more detail in Chapter 4.

[3] Our current forecast takes into account inflation outturns up to and including October 2012.

Box 2.2: The performance of past OBR economic and fiscal forecasts

This box summarises the key findings of our recent *Forecast evaluation report* (*FER*). The report considers two key questions. First, why we, and others, significantly over-estimated economic growth over the past two years. And second, why, despite this, public sector borrowing has fallen broadly as we expected it would.

In June 2010 we forecast a slow but steady recovery for the UK economy. Instead there has been little more than stagnation over the past two years. Between the first quarter of 2010 and the second quarter of 2012 real GDP increased by just 0.9 per cent against our forecast of 5.7 per cent. This error is split fairly evenly between: weaker private consumption (reflecting higher-than-expected inflation rather than weaker nominal spending); weaker private investment (reflecting demand uncertainty and credit conditions), and; weaker net trade (concentrated in the first half of 2012).

Despite real GDP growth being significantly slower than we forecast, public sector borrowing has fallen broadly as we expected. There are three main reasons for this:

- first, the labour market has shown surprising strength given the weakness of GDP. Total employment is above our June 2010 forecast as the private sector has created over 600,000 more jobs than we expected. This is not simply the result of more part-time working, as total hours are also above our June 2010 forecast. This has supported income tax and NICs receipts;
- second, inflation has been higher than expected. This means our nominal GDP forecast has not fallen as far short as our real GDP forecast. Indeed, nominal consumption growth, a key fiscal determinant, has been in line with our forecast. This has supported VAT and other consumption taxes; and
- third, there has been under-spending by both local and central government. In the fiscal years 2010-11 and 2011-12, taken together, spending has been £17.5 billion lower than we expected at the time of our June 2010 forecast.

Developments in outside forecasts

2.16 Many private sector, academic and other outside organisations forecast the UK economy, using different techniques and data. A number of publications collate

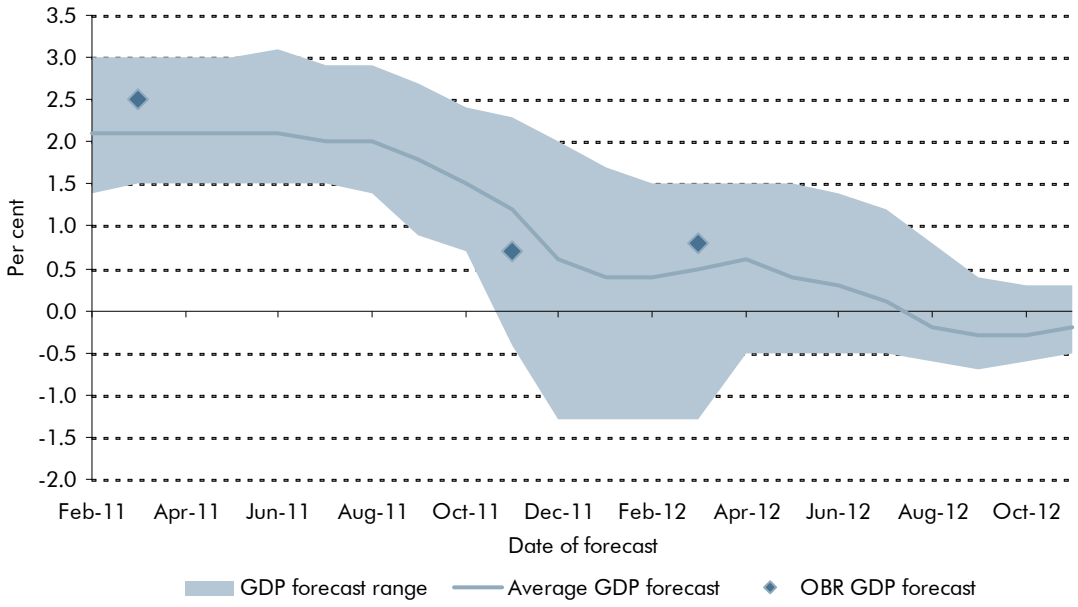
and average these forecasts.[4] This section sets out some of the movements in these forecasts since our March *EFO*.

2.17 When interpreting the average of outside forecasts, it is important to bear in mind that different analysts forecast different variables. So the average forecast is not constrained to paint an internally consistent picture, which makes it difficult to compare it directly with our own.

Growth

2.18 Outside forecasts for growth in 2012 were rising in the run-up to our March forecast, reflecting survey data suggesting stronger momentum into the year. Our forecast of 0.8 per cent was slightly above the average of outside forecasts at the time. Subsequently, unexpectedly weak outturn GDP figures prompted successive downgrades in outside forecasts (Chart 2.3). The average forecast for GDP growth in 2013 has also fallen. In addition to the weakness in GDP growth so far this year, this likely reflects subdued forward-looking indicators and the ongoing problems in the euro area.

Chart 2.3: Forecasts for GDP growth in 2012



Source: HM Treasury, OBR

[4] See HM Treasury, 2012, *Forecasts for the UK economy: a comparison of independent forecasts*, November. A full list of contributors is available at the back of the Treasury publication. A number of financial reporting services also monitor these average or consensus figures.

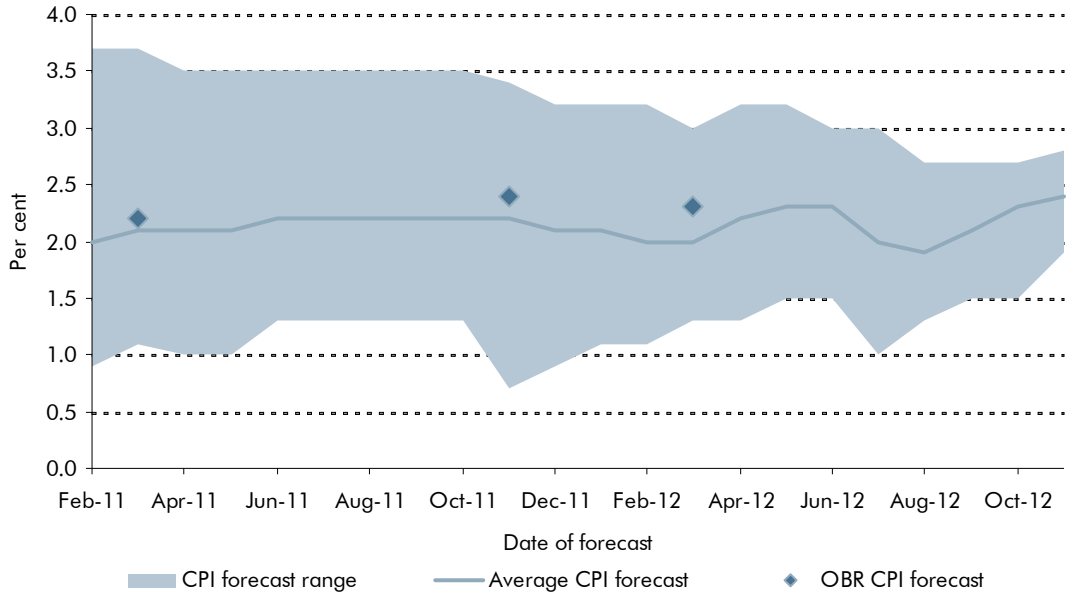
2.19 Expectations for the composition of demand have also changed significantly between March and November. The average forecast for the contribution of net trade to GDP growth in 2012 fell 1.1 percentage points to -0.7 per cent. Meanwhile the average forecast for fixed investment growth this year was revised up from 0.2 per cent to 1.3 per cent. The average forecast for growth in private consumption has been broadly unchanged, rising by 0.1 percentage points to 0.5 per cent.

2.20 Looking at the smaller sample of medium-term forecasts, the average forecasts for GDP growth in 2014 and 2015 have fallen since the publication of the March EFO by 0.3 and 0.2 percentage points respectively. These downward revisions are attributed to weaker expected domestic demand.

Inflation

2.21 The average external forecast for CPI inflation for the fourth quarter of 2012 has risen 0.4 percentage points since March to 2.4 per cent in November (Chart 2.4). The average forecast for fourth quarter RPI inflation has been revised up to 2.9 per cent in November. The range of forecasts for CPI inflation in the fourth quarter of 2013 is 1.7 to 3.3 per cent. This range probably reflects uncertainty over possible increases in energy and food prices during 2013 as well as the amount of spare capacity in the economy and the extent to which it will affect inflation.

Chart 2.4: Forecasts for CPI inflation in the fourth quarter of 2012

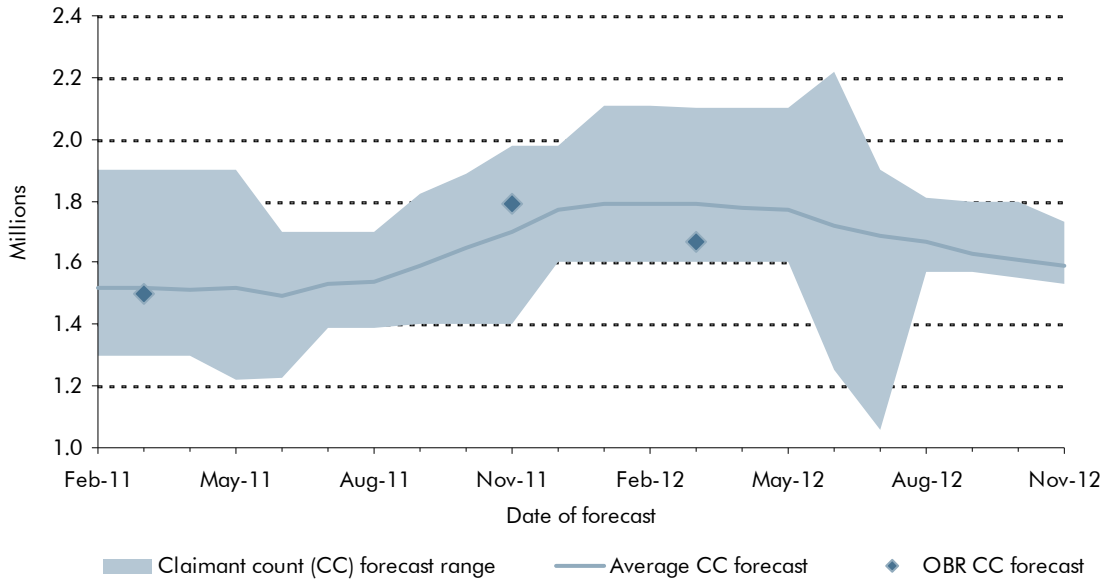


Source: HM Treasury, OBR

Labour market

2.22 The average forecast for claimant count unemployment for the final quarter of 2012 has been falling since May 2012. It now stands at 1.59 million, which is 200,000 lower than in March (Chart 2.5). The average forecast for employment growth in 2012 has risen from -0.4 per cent in March to 1.1 per cent in November.

Chart 2.5: Forecasts for the claimant count in the fourth quarter of 2012



Source: HM Treasury, OBR

Public finances

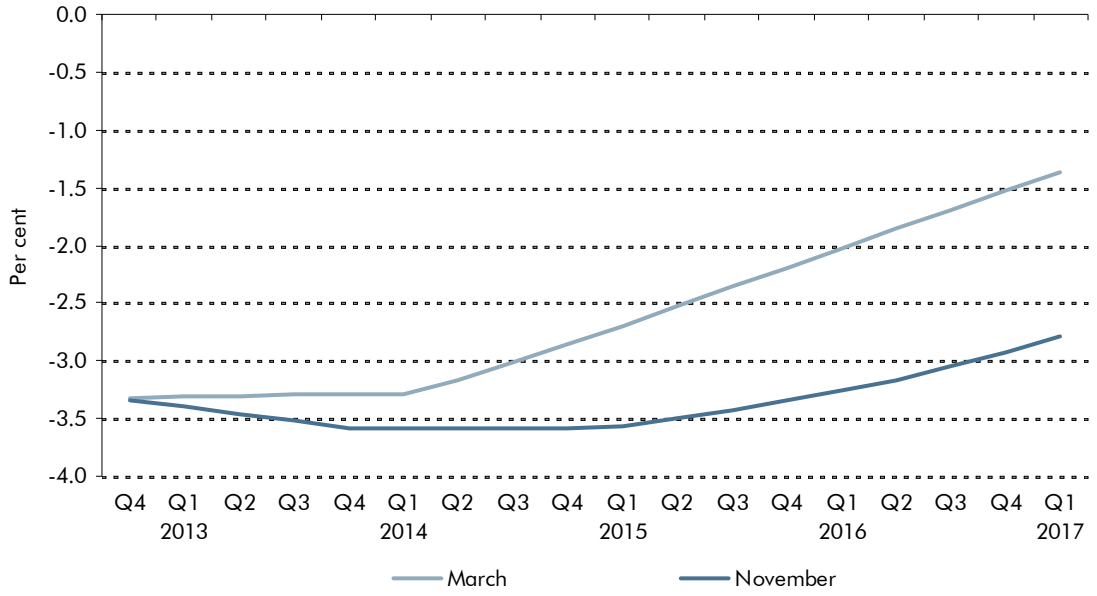
2.23 The average forecast for public sector net borrowing (PSNB) for 2012-13 has declined since March from £115.6 to £100.3 billion. A large part of this change may be due to forecasters adjusting their PSNB forecasts for the transfer of Royal Mail pension assets into the public sector. The average forecast for PSNB in 2013-14 has risen to £111.9 billion.

Market expectations of interest rates

2.24 Expectations of interest rates derived from financial market instruments have direct implications for our forecast, as we assume that monetary policy follows the path expected by participants in financial markets. Market expectations are for Bank rate to start rising in 2015 rather than in 2014 as at the time of the

March *EFO*. By the start of 2017 Bank rate is now expected to be 1.3 per cent, a little over half the level expected in March. The shift in expectations towards looser monetary policy since March is even starker when expectations of QE are taken into account alongside expectations of Bank rate, as Chart 2.6 demonstrates. The latest Treasury survey showed market participants expecting additional QE in 2013 compared to March, of around £29 billion. But these expectations have not had much chance to adjust to the Government's recent decision to transfer surpluses from the Asset Purchase Facility to the Exchequer, which has a similar effect to additional QE.

Chart 2.6: Market expectation for Bank rate adjusted for QE[5]



Source: Bank of England, OBR

Key judgements and scenarios

2.25 Forecasters differ not just in their numerical forecasts for key variables, but also in their assessment of important economic and policy trends. Differences of opinion on such trends can help explain the dispersion of external forecasts. One current topic of debate is uncertainty regarding when the output gap will close. A key assumption in our economic forecast is that the output gap remains significantly

[5] We adjust Bank rate expectations by 100 basis points for each £100 billion of QE that market participants expect, consistent with Bank of England analysis. For more details see Joyce, Tong, and Woods, 2011, *The United Kingdom's quantitative easing policy: design, operation and impact*, Bank of England Quarterly Bulletin Volume 51 No. 3. Market expectations for QE are based on the average new forecast reported in HM Treasury, 2012, *Forecasts for the UK economy: a comparison of independent forecasts*, March and November.

negative at the end of the forecast horizon. If instead we were to assume the output gap closes in our forecast, without changing our assumption of the current size of the output gap, this could happen in two ways. Either we would need weaker potential growth or stronger actual GDP growth in our forecast.

2.26 We investigate the potential impact of the output gap closing rather than remaining open on our fiscal forecasts through the use of scenarios. In Chapter 5 we examine the potential impact on our central economic and fiscal forecasts of:

- a 'weaker supply' scenario, where the output gap closes due to a slower rate of trend growth than our forecast; and
- a 'stronger demand' scenario where the output gap closes due to stronger private investment.

3 Economic outlook

Introduction

3.1 This chapter:

- sets out our estimates of the amount of spare capacity in the economy and the likely growth in its productive potential (from paragraph 3.2);
- discusses how quickly economic activity is likely to return to potential (from paragraph 3.20), how monetary policy and credit conditions are assumed to affect this, (from paragraph 3.32) and how the composition of growth is likely to evolve (from paragraph 3.46);
- assesses prospects for inflation (from paragraph 3.80) and the labour market (from paragraph 3.100); and
- compares our central forecast to selected external forecasts (from paragraph 3.109).

Potential output and the output gap

3.2 The amount of spare capacity in the economy (the 'output gap') and the growth rate of potential output are key judgements in our forecast. Together, they determine the scope for actual growth as activity returns to a level consistent with maintaining stable inflation in the long term. The size of the output gap also determines how much of the fiscal deficit at any given time is cyclical and how much is structural. In other words, how much will disappear automatically, as the recovery boosts revenues and reduces spending, and how much will be left when economic activity has returned to its full potential. The narrower the output gap, the larger the proportion of the deficit that is structural, and the less margin the Government will have against its fiscal mandate, which is set in structural terms.

3.3 In this section we first consider how far below potential the economy is currently operating. We then consider how quickly potential output has grown in the recent past and the speed at which it is likely to grow in the future.

Latest estimates of the output gap

3.4 Our first step in the forecast process is to assess how the current level of activity in the economy compares with the potential level consistent with stable inflation in the long term. We cannot measure the supply potential of the economy directly, but various techniques can be used to estimate it indirectly.

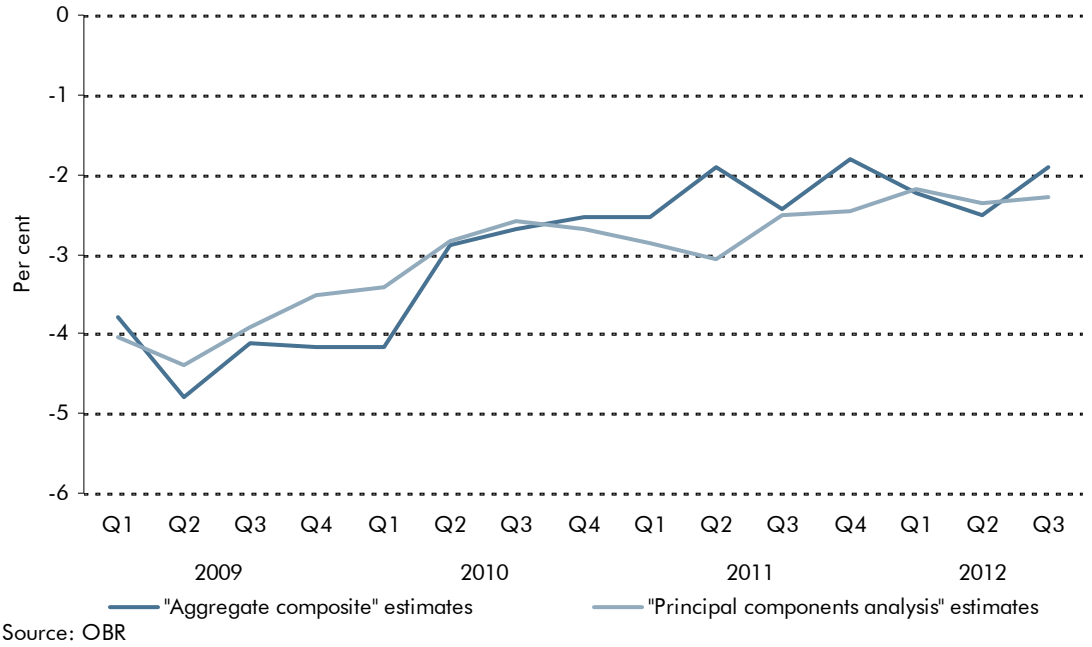
3.5 Primarily we use cyclical indicators to help us judge the amount of spare capacity in the economy, although we supplement this analysis by looking at estimates derived from other methodological approaches. To estimate the output gap from cyclical indicators, we use two approaches: 'aggregate composite' estimates, which weight together business survey indicators; and 'principal components analysis', which combine survey and non-survey based indicators.[1]

3.6 Our latest cyclical indicator estimates point to an output gap of between -1.9 and -2.3 per cent in the third quarter of 2012 (Chart 3.1).[2] This suggests that the output gap has narrowed against our March estimate of 2.5 per cent for the final quarter of 2011, despite actual output being roughly flat over this period and much weaker than expected in March. This would imply that the weakness in output over this period was structural, or, in other words, that potential output contracted. Given the strength of the labour market over this period, this would suggest a sharp fall in trend total factor productivity (TFP), the efficiency with which different inputs are combined to produce a unit of output.

[1] More details are set out in OBR, 2011, Briefing Paper No.2: *Estimating the output gap*; and Pybus, T, 2011, Working Paper No.1: *Estimating the UK's historical output gap*.

[2] As set out in Pybus, T, 2011, Working Paper No.1: *Estimating the UK's historical output gap*, to translate the estimates from the aggregate composite and principal components analysis into a proxy for the output gap, the standardised series are scaled to the mean and standard deviation of the OECD's historical output gap series. In their recent *Economic Outlook*, the OECD has made large revisions to their historical output gap estimates and the mean and standard deviation of this series has changed considerably. While the previous series has had a mean near zero, the mean has been revised up significantly in the most recent series over the period from 1995 to 2011. We have therefore opted to continue to use the same mean and standard deviation as we did in March. This is consistent with the OECD series presented in its *Economic Outlook* No. 90 up to the fourth quarter of 2011. Using the most recent mean and standard deviation would suggest an output gap of -1.3 per cent and -1.7 per cent in the third quarter of 2012 using the aggregate composite and principal components approaches respectively.

Chart 3.1: Estimates of the output gap based on cyclical indicators



Source: OBR

Is negative total factor productivity (TFP) growth plausible?

3.7 The average of our cyclical indicator estimates of the output gap for the last three quarters would suggest that the output gap was around -2.2 in the first quarter of 2012, -2.4 in the second quarter and -2.1 in the third quarter. We have used our assessment of trend labour input and the capital stock in a production function framework (see Box 3.1) to analyse what these estimates of the output gap, and therefore potential output, imply for trend TFP. As shown in Chart 3.2, they suggest a sharp fall in trend TFP in the first half of the year and a small bounce back in the third quarter of 2012. This follows a period during which trend TFP has been broadly flat after falling sharply during the financial crisis in 2008-09.[3] Such a sharp fall in trend TFP normally goes hand in hand with a drop in trend labour productivity unless there is a large increase in capital per worker. This is unlikely to have been the case in recent years. In Box 3.2 we discuss the potential explanations for the recent fall in labour productivity in more detail.

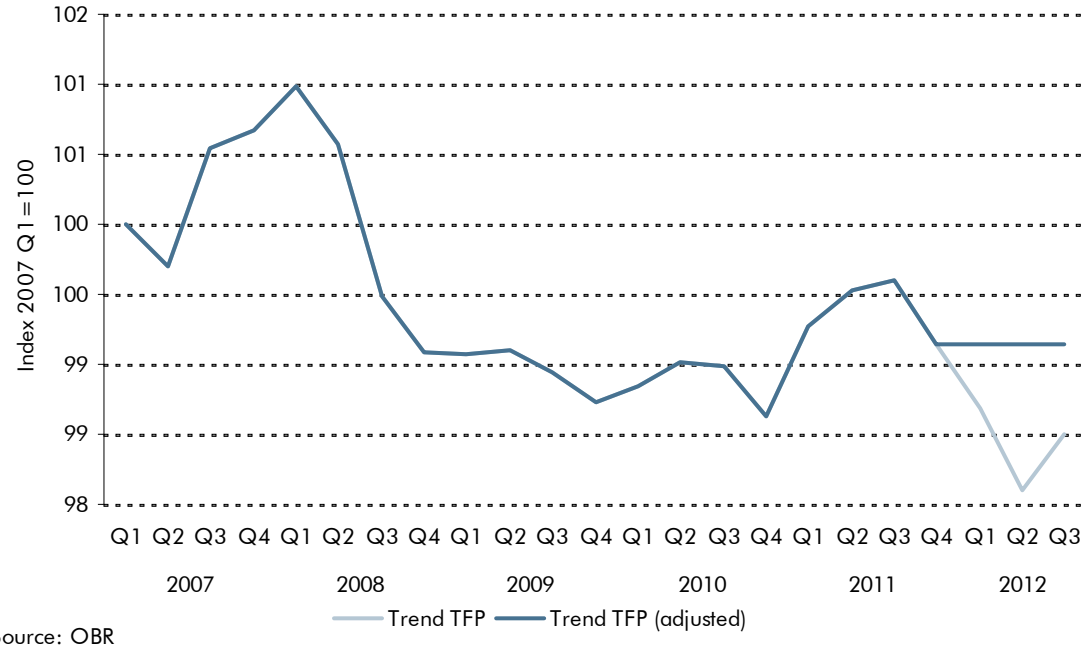
3.8 As set out in Box 3.2 various studies have looked at the impact of financial crises on labour productivity and TFP. The sustained fall in trend TFP in 2008-09 seems plausible given the severity of the financial crisis at that time, its impact on output

[3] The dip in implied trend TFP in the fourth quarter of 2010 reflects the impact of the heavy snowfall in December 2010 on actual GDP, which reversed in the following quarter.

from the financial sector and the consequences for capital allocation in the rest of the economy. But in recent quarters the UK financial markets have not been under the same degree of stress as in 2008-09. In addition, wider indicators (such as the continued strength of the labour market) are difficult to square with a period of severe and sudden structural weakness.

3.9 Consequently we have made a judgement to adjust the output gap estimate derived from the cyclical indicators approach, so that the output gap is consistent with flat rather than negative trend TFP growth from the first quarter of 2012 onwards (Chart 3.2). Using the production function approach, set out in Box 3.1, this suggests an output gap of -2.9 per cent for the first quarter of 2012, -3.4 in the second quarter and -2.7 in the third. This estimate is consistent with our current assessment that the weakness of the economy compared to our forecast in the first half of 2012 was largely cyclical rather than structural.

Chart 3.2: Implied trend TFP from cyclical indicators approach

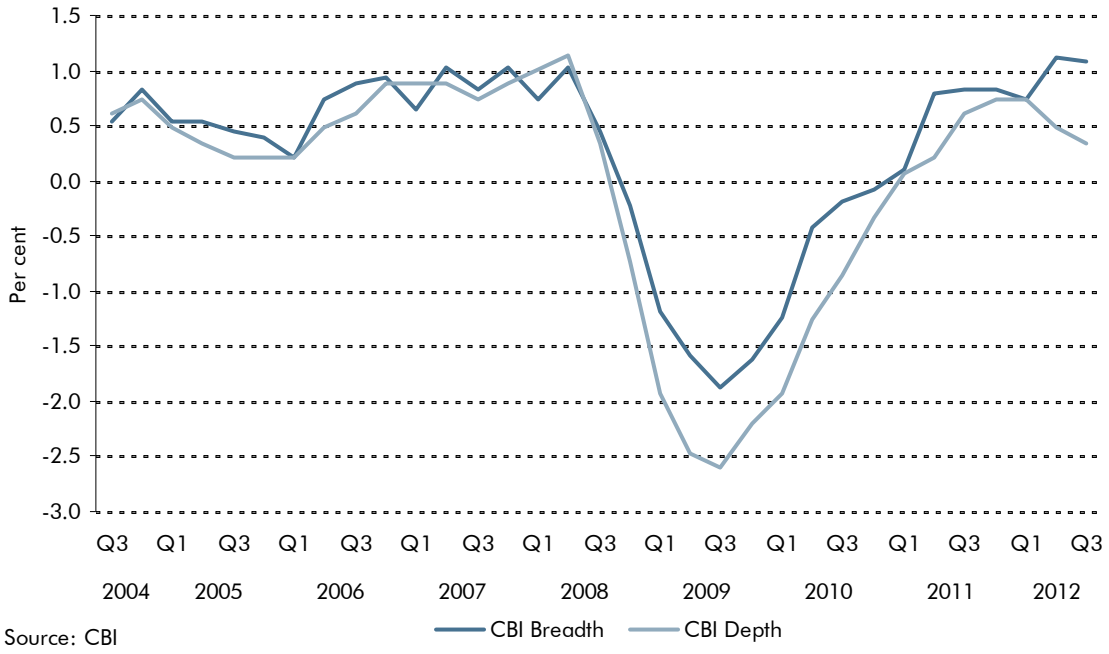


Source: OBR

3.10 Another reason to assume that the output gap might be somewhat wider than our standard cyclical indicators suggest is that those indicators may be better at picking up the breadth of spare capacity in the economy rather than its depth. If the recent dip in output is characterised by already weak firms reducing output further, while stronger firms have unchanged capacity, a widening of the output gap would not necessarily be captured in the normal survey measures.

3.11 The only survey indicator that looks at depth rather than breadth, as far as we are aware, is the CBI indicator which asks manufacturing firms about the degree of spare capacity.[4] In Chart 3.3 we compare this measure to the CBI survey measure in which firms are asked whether or not they are working below capacity.[5] The rolling three-quarter averages of the standardised series track each other relatively well, but there is some divergence in recent quarters. This provides some additional support for the conclusion that there may currently be more spare capacity than the cyclical indicators are suggesting.

Chart 3.3: CBI capacity utilisation (three-quarter rolling average, standardised series)



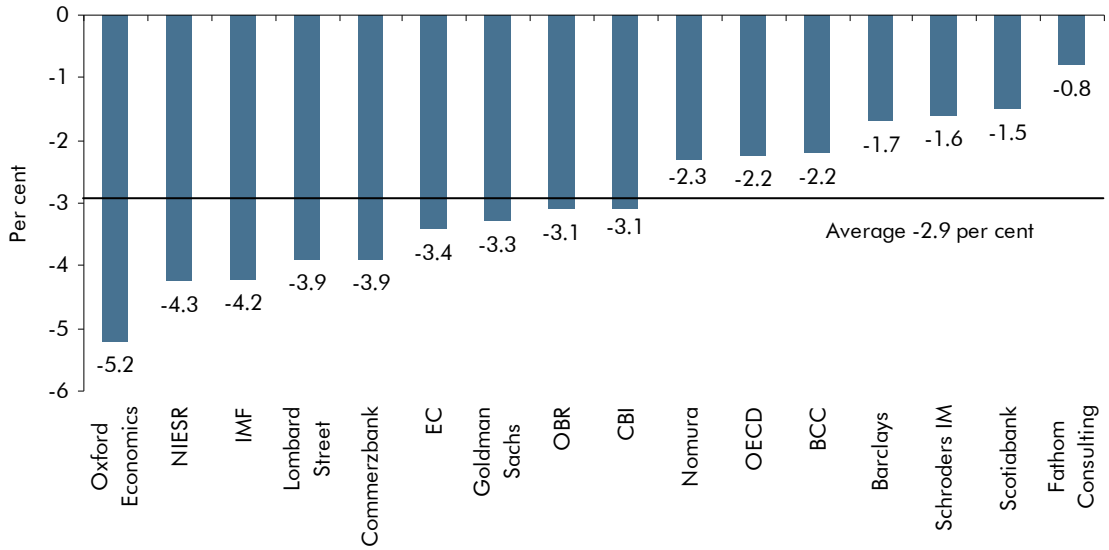
Source: CBI

3.12 Chart 3.4 compares our output gap forecast for 2012 to those produced by other forecasters, including those set out in the Treasury's November *Comparison of Independent Forecasts* and estimates produced by NIESR, the European Commission and OECD. The average estimate is -2.9, very slightly smaller than our central estimate. In Chapter 5 we test the sensitivity of our central fiscal forecast to this key judgement.

[4] The CBI survey question asks: What is your current rate of operation as a percentage of full capacity?

[5] This question asks: Is your present level of output below capacity (i.e. are you working below a satisfactory full rate of operation)?

Chart 3.4: Estimates of the output gap in 2012



*NIESR estimate is 'between 4.0 and 4.5'

Source: HM Treasury, 2012, *Forecasts for the UK economy: a comparison of independent forecasts,* November, plus additions or updates where known. Goldman Sachs estimate refers to the fiscal year 2011-12.

Decomposing the output gap

3.13 We can decompose our output gap estimate into an output per worker gap (comprising an average hours gap and an output per hour gap) and an employment rate gap. Of the -2.7 per cent output gap in the third quarter of 2012 we estimate that:

- output per worker is around 1.2 per cent below its estimated trend. This comprises a positive average hours gap of around 1.4 percentage points and an output per hour gap of 2.6 percentage points;

- around 1.5 percentage points reflects the gap between the employment rate and its estimated potential level. This is consistent with the range of ONS and survey-based indicators that continue to point to spare capacity in the labour market.

Box 3.1: Production function approach

To help inform our output gap estimate we have used a simple Cobb-Douglas production function. This enables us to look more closely at developments in labour productivity and to split it into capital deepening and total factor productivity (TFP).

In the Cobb-Douglas framework, output is represented by a combination of factor inputs, and their elasticity to output (a), multiplied by the level of technology in the economy or TFP (A). The factors we use are labour (L) and capital (K). The equation below (1) shows the function in logs.

$$\log Y_t = \log A_t + a \log L_t + (1-a) \log K_t \quad (1)$$

An estimate of potential (^{p}) output simply uses the structural component of those inputs – equation (2). However, since potential capital is the full utilisation of the capital stock there is no justification to de-trend or smooth the series. The difference between equations (1) and (2) represents the output gap.

$$\log Y_t^p = \log A_t^p + a \log L_t^p + (1-a) K_t \quad (2)$$

We use ONS data on labour supply and the capital stock. The labour input represents total hours worked in the economy while the capital input is the total amount (in £bn) of capital stock in the economy, excluding housing. Capital stock data is currently only available up to 2009, so we derive an estimate of the capital stock from 2009 to the third quarter of 2012 using a simple law of motion formula:

$$K_t = K_{t-1}(1-\partial_t) + I_t \quad (3)$$

where ∂ is the depreciation rate, and I is investment. We assume the depreciation rate is equal to the average from 2000 to 2009. We assume the elasticity of labour input is equal to the historical average labour share of income. An estimate of TFP in the economy is derived by solving for A in equation 1.

$$\log A_t = \log Y_t - a \log L_t - (1-a) \log K_t \quad (4)$$

The production function approach can also be used to produce an alternative estimate for potential output and the output gap. However, like any other approach it depends on the judgements that underpin it, especially the trend level of TFP (A^P). This is particularly difficult to estimate and a common approach is to apply a statistical filter to actual TFP.

As discussed in paragraph 3.9 we have used this framework to produce an implied trend TFP series (equation (5)). To do so we use our output gap (OG) estimate, from the cyclical indicator approach, to produce a trend output series (Y^P) (equation (6)) combined with our assumptions on labour market trend input (L^P) and our estimate of the capital stock (K_t)

$$\log A_t^p = \log Y_t^p - a \log L_t^p - (1-a) \log K_t \quad (5)$$

$$\log Y_t^p = \log Y_t - \log(1 + OG_t) \quad (6)$$

The growth of potential output

3.14 While we judge that the recent weakness in the economy has a more significant cyclical component than the cyclical indicators suggest, we are less optimistic about the medium-term outlook for potential GDP than we were in March. Our latest estimate of the output gap combined with the recent path of actual output continues to imply that potential output growth, on a non-oil GVA basis, has been extremely depressed in the UK since the financial crisis.

3.15 In November 2011, we reduced our forecast for potential growth in the near term, reflecting our assessment that there has been a persistent and significant slowdown in potential output growth following the financial crisis. Our judgement was that the weakness in labour productivity was largely structural, related to impaired financial markets (for more discussion of the productivity puzzle, see Box 3.2.) We judged that it would take until the start of 2014 for potential growth to return to its long-run average of 2.3 per cent. This was consistent with our assumption that credit conditions would start to improve over the course of 2012 and 2013, stabilising at the start of 2014.

3.16 With little evidence of potential output growth picking up significantly, we now expect this transition to take longer. Rather than returning to its long-term rate by 2014, we now assume that growth in potential GDP will still be slightly below its long-term rate at the end of our forecast horizon. This judgement is consistent with the view that uncertainty surrounding the stability of the euro area will continue to undermine the functioning of financial markets and financial systems for some time to come and that a persistently negative output gap will also weigh down on potential GDP growth throughout the forecast. It would also be consistent with the long-term growth rate of the economy being lower in future than it has been on average over the past. This not our central forecast, but we explore the implications it would have for the public finances in Chapter 5.

3.17 The overall reduction in the level of potential output by the start of 2017 compared to our March forecast is 1.3 per cent.[6] Table 3.1 sets out our latest potential growth assumptions. Potential output is expected to grow by 0.5 in 2012 and to recover gradually to 2.2 per cent in 2016. We have made revisions to the components of potential output, which are trend labour productivity, trend employment rate, trend average hours and trend population. The main revision is a downward adjustment to potential productivity growth, on a non-oil GVA basis,

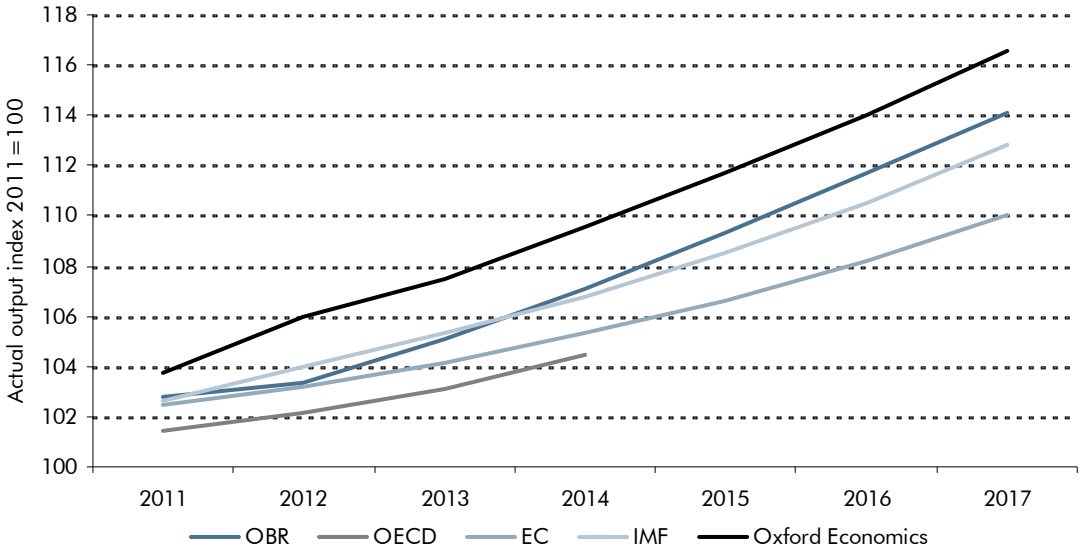
[6] The net impact of the two offsetting judgements we have made – assuming a larger current output gap than the cyclical indicators suggest and assuming lower potential growth in coming years – leaves the level of potential output 0.5 per cent lower at the start of 2017 than if we had used same approach to estimating the current output gap as in our March *EFO* and left our forecast of future potential growth unchanged.

as discussed above. We have also marginally revised up our forecast for trend employment rate, as we now assume the potential activity rate in the economy remains relatively flat throughout the forecast period.

3.18 Our projections for population growth are based on average inward net migration of 140,000 per annum, in line with the long-term assumption underpinning the ONS's low migration variant population projections. We continue to assume that the long-term non-accelerating inflation rate of unemployment (NAIRU) is 5.4 per cent[7], (see paragraph 3.105).

3.19 Chart 3.5 compares our forecast for the level of potential output with other forecasters. Despite the downward revision to potential output growth in our forecast, the level of potential output by 2017 is stronger than in the European Commission's latest forecast. It is slightly higher than the IMF forecast but somewhat lower than that of Oxford Economics. The OECD only publishes a forecast up to 2014 – their level of potential is substantially lower than ours.

Chart 3.5: Potential output comparison with other forecasters



Source: OBR; OECD *November Economic Outlook,* November 2012; European Commission *Autumn Economic Forecast,* November 2012; IMF *World Economic Outlook* , October 2012; Oxford Economics, November 2012.

[7] This is in line with the unemployment rate at the beginning of 2008.

Table 3.1: Potential output growth forecast (annual growth rate, per cent)

	Potential productivity[1]	Potential average hours	Potential employment rate[2]	Potential population[2]	**Potential output**
2012	-0.1	-0.2	0.0	0.7	**0.5**
2013	1.2	-0.2	0.0	0.7	**1.7**
2014	1.6	-0.2	0.0	0.5	**1.9**
2015	1.8	-0.2	0.0	0.5	**2.1**
2016	1.9	-0.2	0.0	0.5	**2.2**
2017	1.9	-0.2	0.0	0.5	**2.2**

[1] Output per hour.

[2] Corresponding to those aged 16 and over.

[3] Components may not sum to total due to rounding.

Box 3.2: The productivity puzzle

Since the start of the financial crisis productivity has fallen considerably and remains significantly below its pre-crisis peak. Output per hour and output per worker, on a non-oil GVA basis, were around 15 per cent below their pre-crisis trend level in the third quarter of 2012. These gap estimates rely on past productivity trends being good indicators of the future. Productivity growth may have been unsustainably strong in the run up to the crisis, in which case extrapolating that performance might slightly overstate the shortfall.

There are a number of possible explanations for the weakness of productivity and most commentators believe no single factor can explain the entire puzzle. Which combination of factors you favour determines how much of the puzzle you believe to be demand related, and likely to reverse, and how much supply related, and therefore representing a fall in the output potential of the economy. This is a key judgement for any medium-term forecast. This box explores some of the possible explanations.

1. Measurement

As discussed in detail in our latest *Forecast evaluation report,* the ONS has made significant revisions to the path of past recessions. So one potential explanation for the recent weakness of productivity is that GDP is being under-measured and/or employment over-measured and that the puzzle will be revised away in future. The latest data, for example, suggest that all the loss of GDP during the 1990s recession had been recouped by the second quarter of 1993, while the National Accounts published at the time suggested that only half had been. But it is impossible to say whether we will see similar revisions to the most recent recession and recovery.

The ONS addressed this issue in a recent paper.[a] It found that so far nothing had come to light which would lead them to have major concerns about the reliability of the statistics for both GDP and the labour market. Future revisions would need to be very large to explain a significant part of the puzzle.

2. Slowdown in investment growth

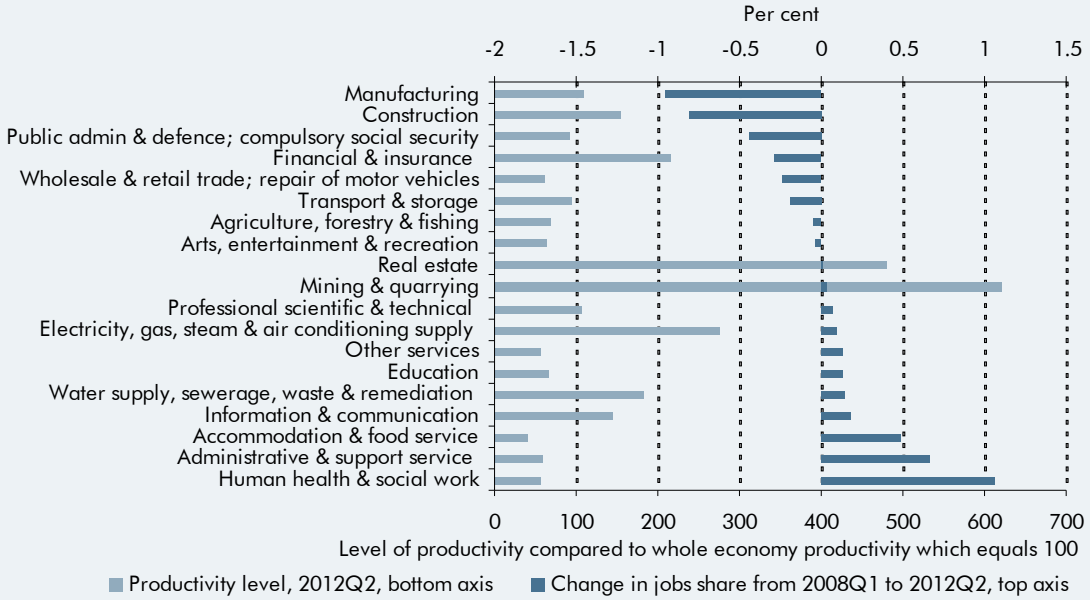
Weak investment growth in the wake of the financial crisis (due, for example, to impaired financial markets and weak demand) could have reduced the amount of capital that workers have to work with. But comparing our current estimate of the capital labour ratio (using capital per hour worked) to a level consistent with pre-crisis growth suggests that this would explain at most around 1.5 percentage points of the 15 per cent gap.

3. Composition

Another explanation could be a sectoral shift from high productivity to low productivity sectors, following the financial crisis. Chart A shows that between the first quarter of 2008 and the second quarter of 2012 there was a shift in jobs from some previously high productivity sectors (for example finance and construction) to less productive

sectors, but overall these changes have been relatively small. On this basis we estimate this effect could explain around 1 percentage point of the shortfall in productivity on a per job basis.

Chart A: Change in sectoral job share and level of productivity



Source: ONS, OBR

4. Labour market explanations

A number of labour market factors have been suggested as explanations for the puzzle. Most of them would fall into the demand-related category, suggesting that there is a large degree of spare capacity within firms and that as demand recovers productivity is likely to increase sharply.

One of the most frequently stated explanations is the idea that firms are **hoarding labour** in anticipation of a bounce back in demand. Weak real wages and the currently high corporate surplus suggest that firms might find keeping staff attractive and would be in a position to do so. There is also a possibility that some firms are unable to cut employment below a certain minimum level of operation.

But private sector hiring has also been strong, especially within struggling productivity sectors. And the strength in employment since 2010 reflects increased flows into employment rather than a drop in outflows. This suggests to us that labour hoarding is only likely to explain a small part of the puzzle. But Martin and Rowthorn (2012)[b] argue that these developments are consistent with the labour hoarding story. They maintain that the recent strength in hiring is concentrated within low productivity sectors, while high productivity sectors (which have more incentive to hoard labour) continue to retain staff and are not hiring.

A move towards more **part-time work** would explain why the initial fall in productivity

was larger on a per worker basis compared to a per hour basis. However, on a productivity per hour basis the gap remains large.[c]

There has also been a large increase in **self employment**, especially the number of self-employed people working part time. HMRC data shows that the median self-employed wage has historically been below that of employees, suggesting lower average productivity. However, based on this difference, and even assuming the recent increase in self employment is all related to the crisis, it could only account for around 1 percentage point of the overall productivity gap on a per worker basis.

5. Credit rationing and impaired financial markets

A number of studies have shown a link between financial crises and weak productivity.[d] As well as affecting capital per worker (see item 2), there are a number other channels through which crises could affect TFP and therefore labour productivity.

Credit rationing and impaired financial markets could, for example, impede the expansion of efficient firms by lowering the supply of working capital traditionally supplied by banks. This would cause misallocation of resources across sectors in the economy or **capital mismatch.** Ben Broadbent[e] has argued that the apparent increase in the dispersion of the rate of return across sectors since the crisis might suggest that some firms that have high rate of returns are capital constrained, while other 'zombie firms' have kept operating despite lower returns. Relatively low levels of insolvencies and liquidations, compared to previous recessions, and a drop in company births also support this theory.

This is likely to hit smaller and medium sized firms (SMEs) more than large firms, which are able to access funds more easily. Although large firms account for the majority of investment in the economy, expansion of SMEs is particularly important for productivity growth. Various studies suggest that new (small) firms can have relatively large contribution to productivity growth possibly because they enter with a more efficient mix of capital and labour and new technology.[f] A NESTA study from 2009 also found that most high growth firms in the UK between 2005 and 2008 had fewer than 50 employees.[g] There is some evidence to support the suggestion that SMEs have seen a bigger hit to productivity than larger firms. In its latest *Inflation Report,* the Bank of England used data from companies' accounts to show that most of the weakness in productivity growth is concentrated among SMEs.

Another way in which tight credit conditions might have an effect on productivity is by limiting the scope for investment in **R&D**. A recent paper by Mehmood[h] finds that access to external finance is an important determinant for innovation and long term growth. The number of patents applications from the UK to the World Intellectual Property Organization (WIPO) has fallen since 2008 suggesting a fall in R&D activity. ONS data also show a fall in real expenditure on R&D in 2008 and 2009 before picking up again in 2011.

Conclusion

It is unlikely that any single factor fully explains the fall in productivity. The balance of the arguments above suggest that a significant proportion of the 15 per cent difference between the current level and a pre-crisis trend level is structural, although there is doubtless also a cyclical element.

[a] ONS, 2012, *The Productivity Conundrum, Explanations and Preliminary Analysis*.

[b] Martin and Rowthorn 2012, *Is the British economy supply constrained II? A renewed critique of productivity pessimism, UK-IRC*.

[c] ONS, 2012, *The productivity conundrum, interpreting the recent behaviour of the economy*.

[d] For example: Estevão and Severo, 2010, *Financial Shocks and TFP Growth*, IMF Working Paper; Caballero, R. J., Hoshi, T. and Kashyap, 2008, *Zombie Lending and Depressed Restructuring in Japan, American Economic Association*, 98, (5); European Commission, 2009, *Impact of the current economic and financial crisis on potential output,* European Economy Occasional Paper No. 49, June; IMF, 2009, *What's the Damage? Medium-term Output Dynamics After Banking Crises in World Economic Outlook, October;* Benito et.al, 2010, *The impact of the financial crisis on supply*, Bank of England Quarterly Bulletin Q2 2010; Millard, S., and A. Nicolae, 2012, *The effect of the financial crisis on TFP growth: A general equilibrium approach*, Bank of England.

[e] Ben Broadbent, 2012, *Productivity and the allocation of resources*, Bank of England Speech.

[f] See for example: Scarpetta et.al. 2002, *The role of policy and institutions for productivity and firm dynamics: Evidence from micro and industry data*. OECD working paper no. 329.

[g] Anyadike-Danes et.al ,2009, *Measuring Business Growth: High growth firms and their contribution to employment in the UK*, Nesta Research report.

[h] Mehmood, 2012, *Access to external finance and innovation: A macroeconomic perspective*, CPB Discussion Paper.

The pace of the recovery

3.20 In this section we set out the expected path of GDP growth over the forecast period. We first consider the short-term outlook using information from recent economic data and forward-looking surveys. We then consider the rate at which GDP will grow over the medium term as spare capacity is taken up and economic activity approaches the potential level identified in the previous section.

The short-term outlook

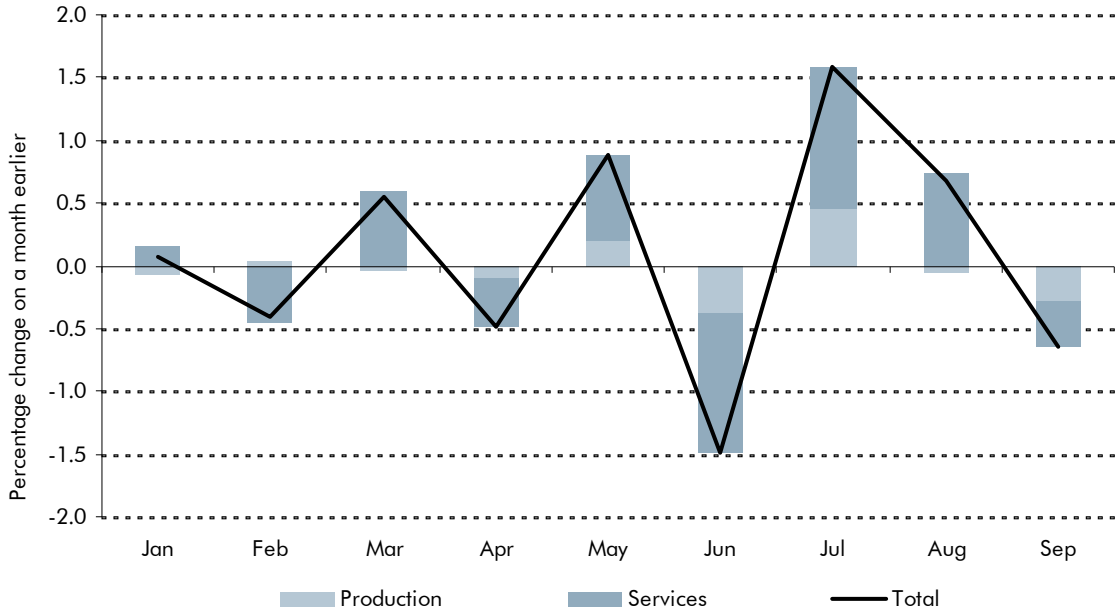
3.21 The economy grew strongly in the third quarter of 2012 after contracting in the first half of the year. The outturn data for the first three quarters of 2012, together with our assumption for growth in the final quarter, reduces our forecast for 2012 annual growth to -0.1 per cent from 0.8 per cent in March.

3.22 The strong growth in the third quarter was in part due to two one-off factors:

- there was an additional bank holiday in June to mark the Queen's Diamond Jubilee. Monthly output data (see Chart 3.6) suggests that the additional bank holiday reduced growth in June and increased it in July. We estimate this reduced growth by around 0.5 percentage points in the second quarter and boosted it by a similar amount in the third; and

- the Olympics also boosted headline growth in the third quarter. The ONS estimate the direct impact of ticket sales to be 0.2 per cent of GDP. The size and direction of other effects associated with the Olympics is less certain – the ONS said that the Olympics appeared to have had an impact on a number of service industries but that the effects are impossible to quantify.[8] As many of these industries report positive effects we assume the total boost to growth in the third quarter from the Olympics was 0.3 percentage points.

Chart 3.6: Monthly output growth in 2012



Source: ONS, OBR

3.23 As shown in Table 3.2 and Chart 3.7, headline GDP growth is likely to be negative in the final quarter of 2012 as the effect from the Olympics reverses. Based on momentum going into the quarter and the latest survey data we expect growth in the fourth quarter to be -0.1 per cent. As Chart 3.7 shows, this reflects underlying growth of around 0.2 per cent which is more than offset by the negative reversal of the Olympics effect. We then expect underlying growth to start picking up more strongly in the second half of 2013.

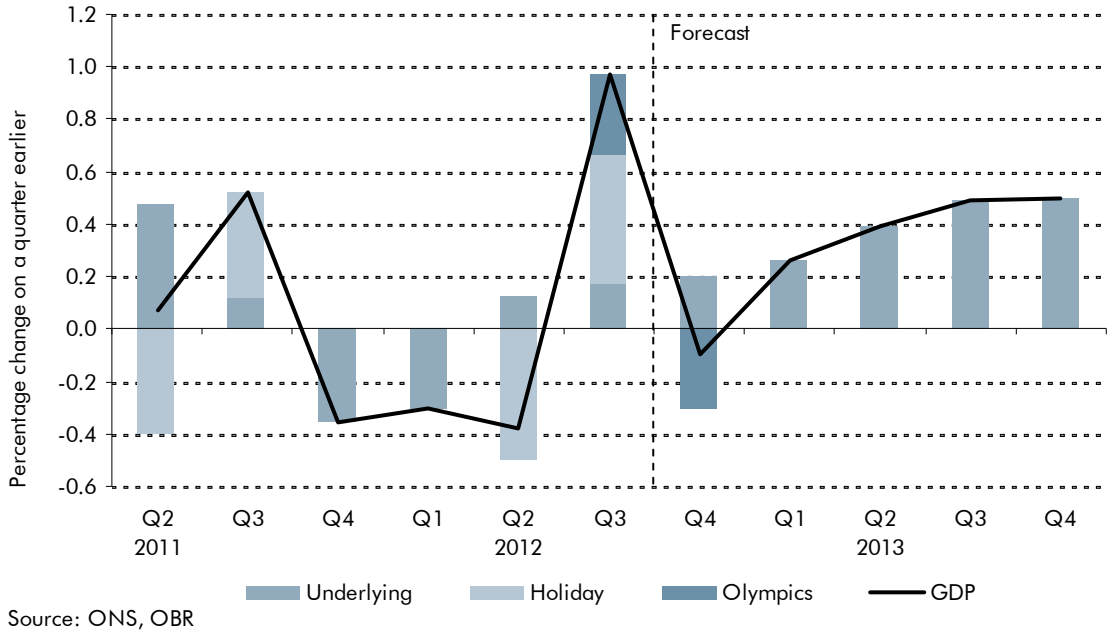
[8] ONS, 2012, *Statistical special events in quarter three 2012- the Olympics & Paralympics.*

Table 3.2: The quarterly GDP profile

	Percentage change on previous quarter											
	2011				2012				2013			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
December forecast[1]	0.5	0.1	0.5	-0.4	-0.3	-0.4	1.0	-0.1	0.3	0.4	0.5	0.5
March forecast[2]	0.3	0.0	0.5	-0.2	0.3	0.0	0.6	0.3	0.5	0.6	0.6	0.7
Change	*0.2*	*0.1*	*0.0*	*-0.1*	*-0.6*	*-0.3*	*0.3*	*-0.4*	*-0.3*	*-0.2*	*-0.1*	*-0.2*

[1]Forecast from fourth quarter of 2012.
[2]Forecast from first quarter of 2012.

Chart 3.7: Underlying and headline growth in GDP



Source: ONS, OBR

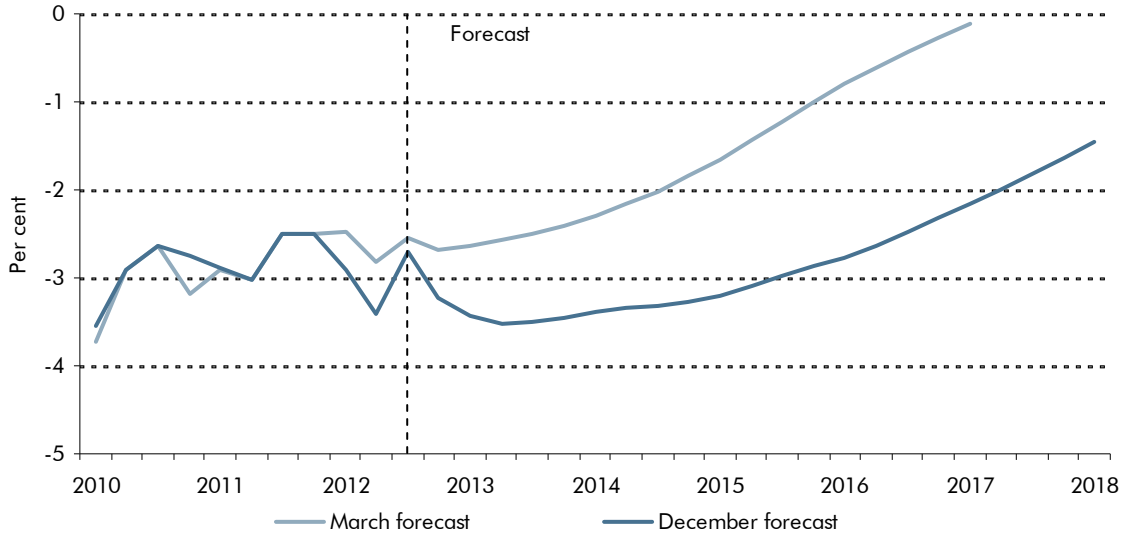
The medium-term outlook

3.24 Our forecasts for medium-term growth are shaped by our view of the amount of spare capacity in the economy, and the speed with which it seems likely to be absorbed. The judgements surrounding the effect of monetary policy and credit conditions, which underpin this growth forecast, are set out in the next section.

3.25 We expect some pick up in growth in 2013 relative to 2012, largely attributable to a rebound in stocks, a small recovery in net trade and the effect of lower price inflation on real consumption. However, we still expect growth to remain below trend rates in the near term, with the output gap widening to -3½ per cent by mid 2013. This cyclical deterioration largely reflects the effect of subdued wage growth on consumption and the relatively weak growth of UK export markets.

3.26 Growth is not forecast to return to above-trend rates until 2015 as credit conditions begin to normalise and financial markets return to a more stable position. The increase in real disposable incomes resulting from higher productivity growth and lower price inflation is expected to support the growth of private consumption over the medium term, allowing GDP growth to move to above-trend rates. Nevertheless, the output gap is assumed to close only gradually, meaning that we now expect a significant margin of spare capacity to remain at the end of the forecast period (Chart 3.8). This in turn reflects the significant constraints on economic growth over the period – in particular, slow growth of productivity and real incomes, continued problems in the euro area and financial markets, and the generally weak outlook for the global economy. Our forecast assumes that these factors limit the extent to which the economy can grow and eliminate the output gap over the forecast period.

Chart 3.8: The output gap

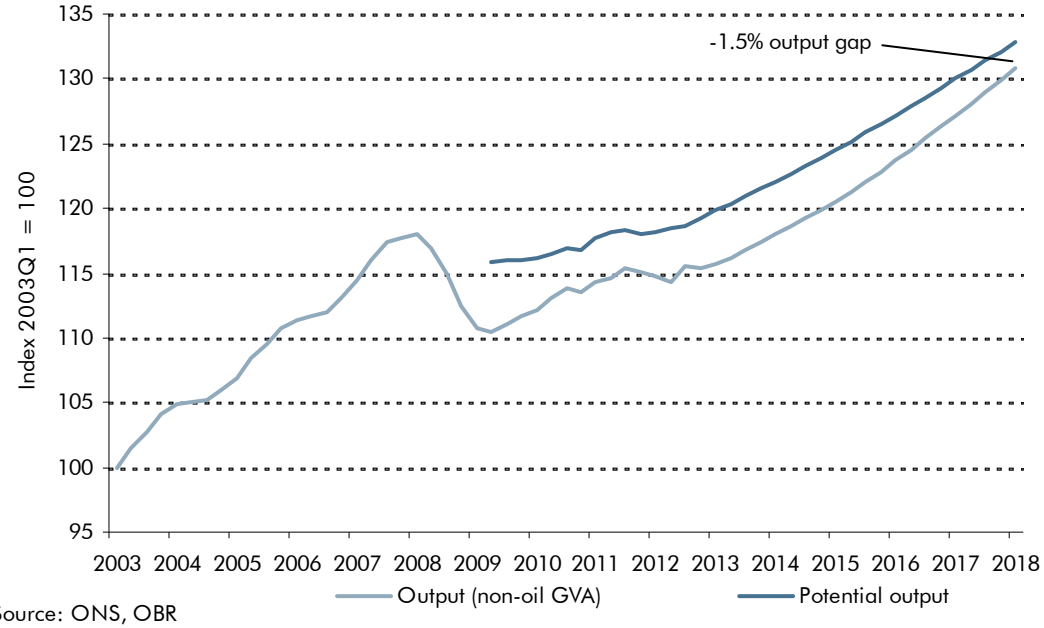


Output gap estimates on a quarterly basis, based on the latest National Accounts data and expressed as actual output less trend output as a percentage of trend output (non-oil basis).

Source: OBR

3.27 Our projection for GDP is significantly weaker than we forecast in March. GDP growth is now expected to be lower in every year of the forecast period, as credit conditions take longer to normalise and global growth remains weaker than previously expected. These revisions leave the level of real GDP in 2016 just over 3 per cent lower than our March forecast. Our forecast is for the recovery to be significantly weaker than those that followed the recessions of the 1980s and 1990s. Our forecast continues to imply a significant permanent adjustment to output (Chart 3.9).

Chart 3.9: Projections of actual and potential output



Source: ONS, OBR

3.28 Our central growth forecast is shown in Chart 3.10. The distribution surrounding it shows the probability of different outcomes if you expected our forecasts to be as accurate as official forecasts have been in the past. The solid black line shows our median forecast, with the successive pairs of lighter shaded areas around it representing 20 per cent probability bands.

3.29 The probability bands are based on the distribution of official forecast errors since 1987. They do not represent a subjective measure of the distribution of risks around the central forecast. It suffices to say that although we believe that the chances of growth being above or below our central forecast are broadly equal, the risk of a disorderly outcome in the euro area means that a much weaker outcome is more likely than a much stronger one.

Box 3.3: The economic effects of policy measures

This box considers the possible effects on the economy of policy measures announced in the 2012 Autumn Statement, and since Budget 2012. More details of each measure are set out in the Treasury's Autumn Statement document and our assessment of the fiscal implications can be found in Chapter 4.

The Government has announced a number of policy measures that are expected to have a broadly neutral fiscal impact overall in the period between 2012-13 and 2016-17, and, in aggregate, have a limited impact on our economic forecast. There is a positive output effect from increased **capital spending** in 2013-14 and 2014-15, and from the reduction in the **main rate of corporation tax** in 2014-15, and a very small impact from the **annual investment allowance** measure. These are partly offset by policies which reduce **welfare payments** and **current departmental spending**. Various tax measures, including an increase in the personal allowance and changes in pension tax reliefs, when taken together, are expected to have a net small positive impact on household disposable income. We assume the receipts from the spectrum auction and the UK-Switzerland tax deal do not have any economic impact.

Taken together these measures are forecast to increase growth in 2013 and 2014 by about 0.1 percentage points in each year. This is partially offset by slightly lower growth in subsequent years, leaving the level of GDP overall 0.1 per cent higher by the end of the forecast period. Given that output is below potential across the forecast period we assume no offset from monetary policy. These estimates are based on the same multipliers that the interim OBR used in June 2010.[a] Given the relatively small size of these measures, using larger multipliers would have little effect on our estimate of the overall change in GDP.

The Government has also decided to continue to reduce public sector spending growth in 2017-18 at the same rate as in 2015-16 and 2016-17, an adjustment of £4.6 billion measured against the Treasury's chosen baseline of spending remaining flat in real terms. This is a relatively small adjustment at this long a time horizon so we have not adjusted our overall GDP growth forecast.

We have adjusted our inflation forecast to take account of measures that directly impact the price level. These include the decision to cancel the January 2013 **fuel duty** increase and to move the April 2013 increase to September. These measures reduce our inflation forecast by around 0.1 percentage points by the end of 2013.

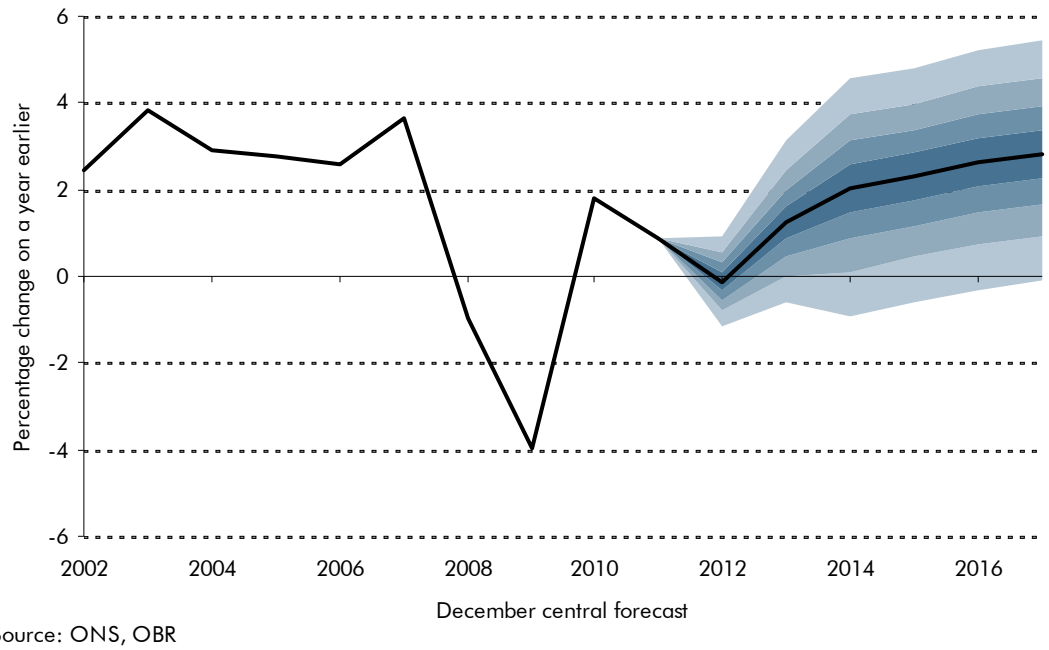
The **Funding for Lending Scheme** (FLS) was launched by the Bank of England and the Government in July 2012, and is discussed further in Box 3.4. It is designed to encourage banks and building societies to expand their lending to households and private non-financial corporates. There has been a fall in banks' funding costs since the summer, to which the FLS is likely to have contributed. However, the precise impact of the FLS is difficult to isolate from wider developments in financial markets over this period. We assume that the overall fall in funding costs persists and estimate

that this will add up to around 0.3 per cent to the level of real GDP by the start of 2014, compared to the position if funding costs remained at their summer level.

Since the March Budget, the Government has also announced various measures aimed at improving supply in the UK housing market, by increasing **house building** and renovation of empty properties. These include the Affordable Homes Guarantee and planning reforms. Given these measures and the FLS and the extension of the FirstBuy schemes, which will improve access to credit, we have increased our property transaction forecast by a total of 120,000 over 2013 and 2014. Our forecast is now for 2.3m total transactions over this period.

[a] As in June 2010, measures relating to the changes in the corporation tax regime and investment allowances are not explicitly incorporated via the multipliers, but by the effect on the cost of capital faced by firms.

Chart 3.10: GDP fan chart



Source: ONS, OBR

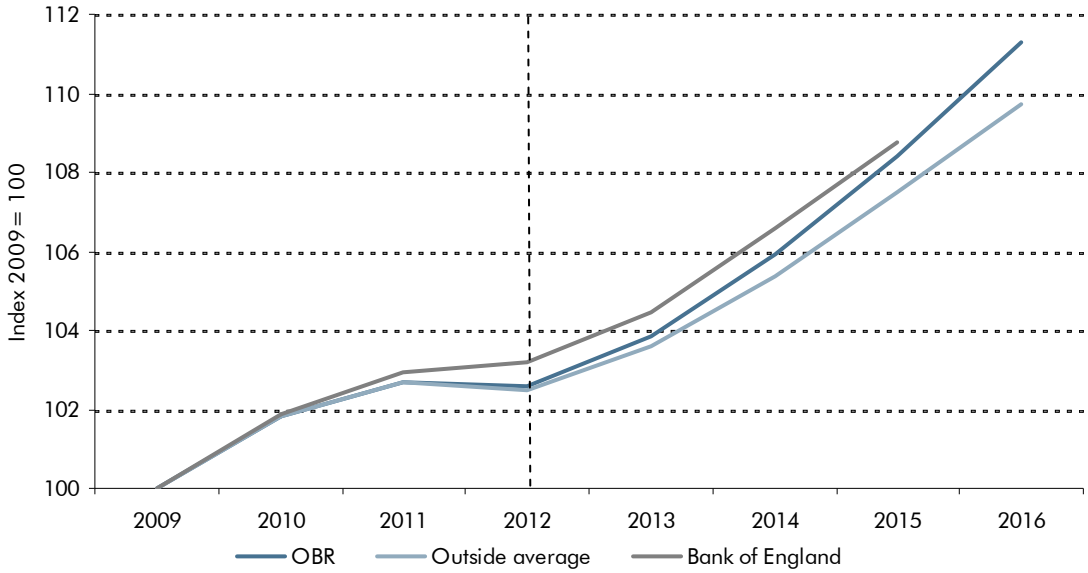
3.30 Chart 3.11 plots our central forecast for the next three years against the forecast implied by the average of outside forecasts and the Bank of England's November *Inflation Report* forecast.[9] For the purposes of comparison we have used the Bank of England's modal forecast – that is, the most likely outcome implied by the forecast distribution. The negative 'skew' in the November *Inflation Report*

[9] HMT, 2012, *Forecasts for the UK economy: a comparison of independent forecasts*, November. Bank of England, 2012, *Inflation Report*, November.

forecast distribution means that the mean forecast is somewhat lower, implying a level of GDP around 1 per cent below the modal forecast by 2015.

3.31 Our forecast for growth in 2012 is slightly weaker than the Bank's forecast, partly reflecting the fact that the Bank's 'backcast' points to stronger growth than the latest ONS data through the first half of 2012.[10] On the other hand, our forecast for growth this year is slightly stronger than the latest outside average, although a number of these forecasts may have been produced prior to the unexpectedly strong ONS first estimate of GDP growth in the third quarter. Forecasts for growth in 2013 are broadly similar, with our forecast for growth in later years slightly stronger than both the outside average and the Bank's modal forecast. It should be emphasised that the differences between these point forecasts are dwarfed by the uncertainties around each of them – as demonstrated by the fan charts in this *EFO* and the Bank of England's *Inflation Report*.

Chart 3.11: Forecasts of the level of GDP



Source: ONS, OBR, Bank of England, November *Inflation Report* , HM Treasury, 2012, *Forecasts for the UK economy: a comparison of independent forecasts*, November.

Monetary policy

3.32 An important anchoring assumption in our forecast is that monetary policy would generally act to bring inflation towards target over the forecast horizon. Coupled

[10] This reflects the Bank's expectation that the level of GDP over the recent past will be revised up, whereas we make no assumption about the likely scale or direction of future revisions.

with a view that domestic price pressures – as represented by the output gap – are important drivers of inflation in the medium term, this implies that monetary policy would generally reduce the size of any negative or positive output gap over time by stimulating or softening aggregate demand respectively.

3.33 However, there are limits to the speed at which the economy can move back towards its potential level over the forecast period at the current time.[11] As set out above, we expect constrained real income growth, ongoing dislocation in financial markets and weak global growth to limit the rate of growth the economy can sustain over the medium term. These constraints mean that we expect the output gap to narrow at a relatively gradual rate, leaving a negative output gap at the end of the forecast period. We expect inflation to fall back to target over the forecast period, with downward pressure on prices from the negative output gap offset to some extent by upward pressure from above trend growth rates and falling unemployment in the later years of the forecast.

3.34 In July, the Bank of England's Monetary Policy Committee voted to expand its quantitative easing program by a further £50bn, bringing the total size of asset purchases to £375bn. The effect of these additional recent purchases on the wider economy is difficult to estimate: previous work of the Bank of England suggests that the initial purchases of £200bn was equivalent to an 150-300 basis point cut in Bank Rate and may have added around 1½ to 2 per cent to the level of GDP.[12] However, it is possible that the marginal effect of subsequent purchases was slightly lower.[13] Since March, the Bank of England and the Government have also launched the Funding for Lending Scheme (FLS), which provides banks with relatively cheap funding from the Bank of England, for up to four years. We discuss this further in Box 3.4.

3.35 Chart 2.6 shows that, relative to March, policy rates are now expected to be just over 100 basis points lower by the end of the forecast period, with Bank rate now not expected to rise until 2015. This has implications for our fiscal forecast, which we discuss in Chapter 4.

[11] For further discussion of the possible limits of monetary policy to stimulate spending at the current time, see King, 2012, *Speech to the South Wales Chamber of Commerce*, October.

[12] Joyce, Tong, and Woods, 2011, *The United Kingdom's quantitative easing policy: design, operation and impact*, Bank of England Quarterly Bulletin Volume 51 No. 3.

[13] Charlie Bean, deputy governor of the Bank of England, noted that "there are reasons to believe that the effect of lower yields may be weaker than usual at the current juncture". See Bean, 2012, *Central banking in boom and slump*. See also Meaning and Zhu, 2011, *The impact of recent central bank asset purchase programmes*, BIS Quarterly Review, December 2011.

Credit conditions

3.36 Since our March forecast credit conditions in the UK have been significantly affected by political and economic developments in the euro area. In the early summer the deteriorating outlook in Spain and Italy was leading to growing concern for the financial stability of the euro area system. Given the exposures of UK banks to euro area counterparts (in both the financial sector and the real economy) this contributed to elevated UK bank funding costs, which spilled over into tighter credit conditions for UK bank customers and rising loan rates on some household and corporate debt.[14]

3.37 In response the European authorities proposed a new set of policy actions. Most significantly, in July the ECB stated that it would do "whatever it takes to preserve the euro"[15] and later announced its new sovereign bond purchase facility: Outright Monetary Transactions (OMTs). As a result the cost of euro area financing fell sharply, for both sovereigns and banks, as the ECB's action was perceived to have significantly reduced the risk of further euro area sovereign crises or of euro area exits.

3.38 Improvements in euro area sentiment helped reduce UK banks' wholesale funding costs in the second half of 2012. Other factors are also likely to have played a part in this, such as the new FLS (see Box 3.4) and, earlier in 2012, significant pre-funding and funds obtained through the ECB's long-term refinancing operations. These lower funding costs, if they persist, should put downward pressure on new lending rates and ease credit availability; and, as set out in the next section, there is some slight evidence of this in the latest data on quoted mortgage rates.

3.39 However, this depends on recent improvements persisting, not least in the euro area. Further shocks are of course possible, from the euro area but also from the US, which faces a prolonged period of political uncertainty over its public finances and which is by far the greatest single foreign exposure (at aggregate, country-level) of our banks.

3.40 Our central forecast now assumes that banks' credit spreads remain elevated and above trend until 2015. Even after 2015 we assume they remain above pre-crisis levels, as regulatory and structural reforms gradually reduce implicit public sector support. Chart 3.12 shows how falling bank credit spreads[16] combine with

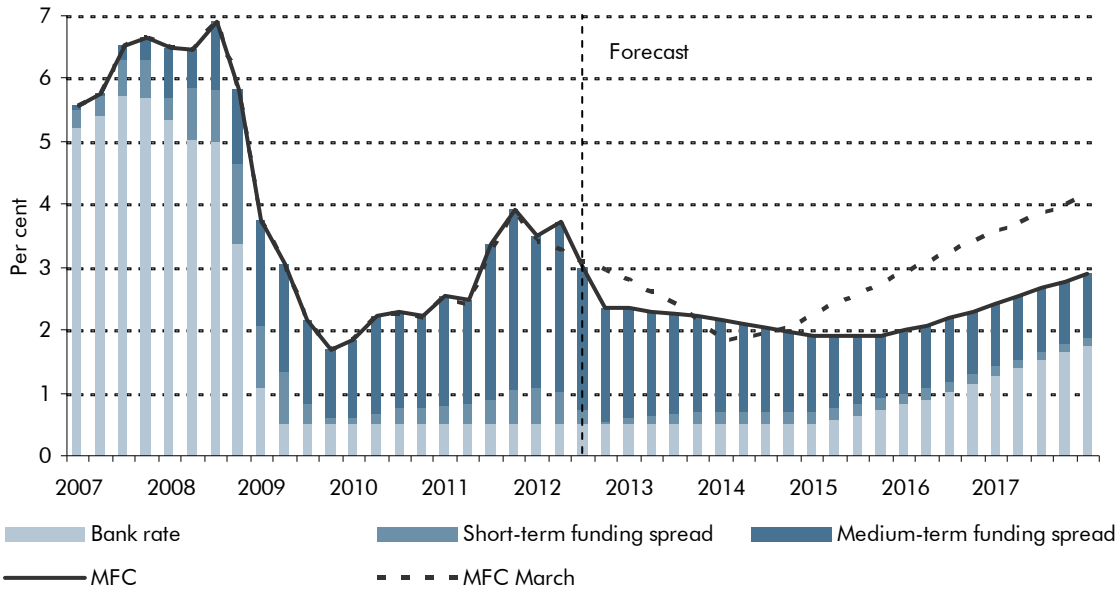
[14] Bank of England, 2012, *Inflation Report*, August.

[15] From remarks made by Mario Draghi, ECB president, on 26th July 2012, as reported on the ECB website.

[16] Proxied by CDS spreads, although other indicators imply even sharper falls.

the continued low Bank rate to put downward pressure on banks' borrowing costs in the first few years of our forecast. Given recent positive market developments, we expect more downward pressure on new lending rates in the immediate term than our March forecast, although this will feed only gradually into whole-economy borrowing costs as loan-terms expire and loans are renegotiated. Also, given downward movement in longer-term interest rate expectations since March, we now expect upward pressure from rising Bank rate from 2015.

Chart 3.12: Indicative marginal funding cost (MFC) of UK banks



Source: Bank of England, OBR

Box 3.4: The Funding for Lending Scheme

The Funding for Lending Scheme (FLS) was launched by the Bank of England and the Government in July 2012. It is designed to encourage banks and building societies to expand their lending to households and private non-financial corporates, by providing funds at cheaper rates than those prevailing in current markets. Both the quantity and the price of these funds are linked to the amount of lending that banks do.[a] The lower cost of FLS funds should then be passed on to real economy customers in lower borrowing costs.

The scale of FLS funding and the lending behaviour of participating banks, as well as the wider economic context, will determine the size of its impact. If loan demand is strong all participants should be able to grow their loan books and take the lowest 25bp[b] fee rate. And even assuming a slightly higher average fee and a cost for additional collateral required under the scheme, FLS funds are likely to be considerably cheaper than other funding sources over the drawdown period.[c] For this reason, we expect the large majority of banks with FLS-qualifying assets to use their full allocation, although timing of drawdown is difficult to predict. Cheaper FLS funding should then feed through to real economy borrowers. However, the speed, scale and form of transmission is uncertain:

- Transmission of past fluctuations in funding costs to headline lending rates appears to have been weak. Banks may previously have used margins on new lending to boost depressed profits, or to fund rising deposit rates. But the stability of FLS funding terms – at an assured rate for a period of up to four years – could lead to a more full and rapid transmission to customers.

- Lower funding costs will affect different markets in different ways: the mortgage market is relatively competitive, with standardised products, and lower costs may feed fairly quickly into lower rates; but corporate lending is more relationship-based and less standardised, and rates may be less responsive.

- FLS could prompt relaxation of non-price, quantity constraints: recent announcements suggest lower loan-to-value (LTV) limits may be one direct consequence. However, given longer-term pressures on capital, banks may be wary of taking on more risk; under the FLS, credit risk stays with the banks. This may particularly constrain new lending to SMEs, compared to relatively low-risk residential mortgages, and we expect most additional, FLS-related lending to go households, primarily as mortgages.

Overall, we assume that the scheme is likely to have contributed to the general fall in banks' credit spreads since June (Chart 3.12) by reducing participating banks' funding needs, although the precise size of the FLS's effect is difficult to isolate from other market developments. This, together with the direct benefit of cheaper FLS

funds, affects our wider economic forecast primarily through lower servicing costs on new borrowing, although even a significant improvement in marginal funding costs will take time to feed through into the whole stock of real economy loans. We assume that the overall fall in funding costs persists and estimate that this will add up to around 0.3 per cent to the level of real GDP by the start of 2014, compared to the position if funding costs remained at their summer level.[d] This excludes other possible effects, such as the impact on asset prices (we expect more property transactions as a result, which could have a positive effect on house prices) and household balance sheets, and productivity gains from improved credit access for the corporate sector.

[a] Each participant's access is limited to 5 per cent of the value of their existing FLS-qualifying loans plus additional net lending over the drawdown period (to end 2013).

[b] The fee charged for FLS funds depends on the performance of participating banks' whole FLS loan book – a shrinking portfolio leads to higher charges.

[c] Up to end 2013.

[d] Based on simulations using our small model of the UK economy, which takes account of credit risk premia. See OBR, Murray, J, 2011, Working paper no.4: *A Small Model of the UK economy*.

Credit supply

3.41 Recent data to October shows very weak growth in bank credit to real economy borrowers, with very modest growth in lending to individuals (primarily secured on property). Lending to private non-financial corporations (PNFCs) grew marginally in October, for the first time since June, although it remains significantly lower compared to October 2011. Recent data on the cost of new borrowing show some small signs of improvement – quoted fixed mortgage rates have fallen, although some variable rates have risen.

3.42 However, we do expect recent improvements in wholesale funding conditions and the benefit of FLS funds to put more downward pressure on new lending rates over coming months. The cost of fixed rate borrowing will also be helped by recent falls in interest rate expectations, which have led to a substantial fall in swap rates (a benchmark for funding fixed-rate lending) over the last year. Recent FSA liquidity guidance will also help reduce the cost of banks' precautionary liquidity reserves. The Bank of England's third quarter Credit Conditions Survey (CCS) showed that banks themselves expect greater credit availability in the fourth quarter, though largely to households.

3.43 However, the degree to which lower lending costs lead to greater borrower demand and more credit supply depends on their confidence and appetite, both of which may be slow to recover after the shock of the financial crisis and subsequent recession. Banks will be careful in their choice of debtors, mindful of tighter future capital requirements, limited sources of capital generation (given

low profits, costs arising from PPI/LIBOR-related compensation and limited opportunity for equity issuance) and ongoing threats to their existing capital. It is notable that lending standards for mortgages remain much tighter than during the boom. Although there is some recent sign of easing, loan-to-value ratios on new lending are unlikely to return to pre-crisis levels. These are likely to be the most binding constraints on new borrowing with household debt servicing costs still at very low levels, primarily due to the very low Bank rate.

Box 3.5: The Financial Policy Committee

The Financial Policy Committee (FPC) was set up after the financial crisis, to oversee the stability of the financial system. It currently operates on an interim basis, but has already made a number of recommendations to financial sector institutions (private or public) with the aim of promoting financial stability – for example on capital and liquidity, and more specifically on the emergence of new, complex financial products. These may have only limited impact on the wider economy, but they do form part of the context for our credit conditions forecast.

When the FPC is fully up and running, with the passing of the Financial Services Act into law, it will also be able to direct the Prudential Regulatory Authority (PRA) to apply specific macro-prudential tools. Proposed tools include: a countercyclical buffer; asset-specific capital requirements; and minimum leverage ratios. These potentially have significant economic effects – for example, the countercyclical buffer would increase capital requirements during the boom-phase of the credit cycle, with consequences for credit provision, demand and output growth. Given the current economic environment, it seems unlikely that such tools would be deployed to significant effect until the later years of our forecast at the earliest. However, we will appraise new tools or policies when they are announced, gathering information and discussing with the relevant authorities, and incorporate our view of their impact into our forecast.

Credit demand

Households

3.44 Growth in lending to households remains subdued, largely because of low levels of new mortgage lending: gross lending remains at around a third of its 2007 peak following a collapse in remortgage activity, while write-off rates are very low and falling. This in turn has meant very weak housing market activity (see paragraphs 3.59 and 3.60) and house price growth. Affordability – as measured by the ratio of house price and debt servicing costs to income – has improved substantially since the peak of the boom, and the FLS should promote some increase in household borrowing for mortgages. But we do not expect a rapid return to pre-crisis rates of debt accumulation, given revised bank and borrower risk appetite.

Private, non-financial corporations (PNFCs)

3.45 PNFCs have continued to repay bank debt in 2012 while raising funds through wholesale markets. Issuance of PNFC debt in 2012 has been particularly strong thanks to very low borrowing costs. Given current, reduced market expectations for the path of Bank rate, these borrowing costs are likely to remain low for some time and the trend of PNFCs substituting bank debt for bonded debt is likely to continue. However, this is only an option for large PNFCs that are able to access wholesale funding and evidence suggests that small firms still struggle to obtain credit.[17] Demand for credit from small businesses also remains weak, according to the latest Bank of England's third quarter Credit Conditions Survey (CCS).

The composition of GDP

3.46 Our forecast for the level of GDP in the medium term is a key driver of our assessment of the outlook for the public finances. But the composition of GDP is also important. This section discusses the broad outlook for the income and expenditure measures of GDP, and our forecasts of the expenditure components in more detail.

Nominal and real GDP

Income

3.47 For a given profile of nominal GDP, the outlook for the public finances will vary with the relative contribution of different types of income flow. This is mainly because the Government receives more revenue from every pound of labour income than from every pound of profits.

3.48 Chart 3.13 shows the pattern of income flows associated with our forecast for nominal GDP growth. The slowdown in nominal GDP growth in 2011 was associated with a reduction in the growth of net taxes, while the contribution from profits and compensation of employees remained largely unchanged. While we expect the contribution from wages and salaries to increase in 2012, this is more than offset by the weaker growth of profits, which are expected to remain flat relative to the previous year. The near-term recovery in nominal GDP growth from 2013 is expected to be accompanied by a pick up in the growth of profits, with wages and salaries growth gradually strengthening over the medium term.

[17] Bank of England, 2012, *Trends in Lending*, October.

Chart 3.13: Income counterparts to nominal GDP growth

Expenditure

3.49 Table 3.3 shows our forecast for the contribution of expenditure components to real GDP growth. The contribution from private consumption is relatively low over the near term, before rising and then stabilising over the medium term. Business investment is forecast to make a relatively significant contribution to the recovery in growth in the medium term. There is also a positive contribution from net trade over the forecast period, though weaker expected growth in UK export markets means that its contribution is smaller than we forecast in March. We discuss our forecast for these expenditure components in more detail in the following sections.

Table 3.3: Expenditure contributions to growth[1]

	Percentage points, unless otherwise stated						
	Outturn	Forecast					
	2011	2012	2013	2014	2015	2016	2017
GDP growth, per cent	0.9	-0.1	1.2	2.0	2.3	2.7	2.8
Main contributions							
Private consumption	-0.6	0.3	0.5	1.0	1.1	1.5	1.8
Business investment	0.2	0.3	0.4	0.7	1.0	1.0	1.0
Dwellings investment[2]	0.0	0.0	-0.1	0.4	0.5	0.5	0.5
Government[3]	-0.5	0.3	-0.2	-0.2	-0.3	-0.5	-0.6
Change in inventories	0.3	-0.6	0.2	0.0	0.0	0.0	0.0
Net trade	1.2	-0.6	0.3	0.2	0.2	0.2	0.1

[1] Components may not sum to total due to rounding and the statistical discrepancy.

[2] The sum of public corporations and private sector investment in new dwellings and improvements to dwellings.

[3] The sum of government consumption and general government investment.

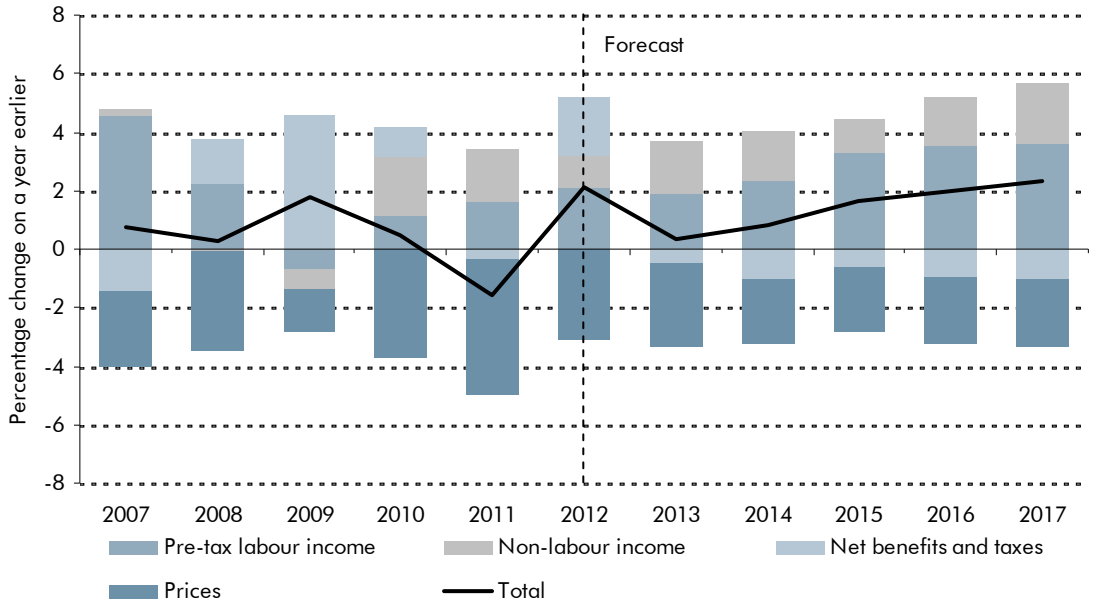
Components of domestic demand

Consumer spending

3.50 Private consumption grew by a cumulative 0.8 per cent in real terms over the first three quarters of 2012, slightly above our March forecast for growth of 0.6 per cent. This coincided with stronger than expected growth of labour income: the latest data indicate that compensation of employees grew by 2.9 per cent over this period, compared with our March forecast for growth of 2.6 per cent.

3.51 Looking forward, weaker price inflation is expected to provide some support for real disposable income and consumption relative to recent years. However, our forecast for real household disposable income growth is still weaker than we forecast in March, reflecting both a weaker outlook for nominal wage growth and somewhat higher price inflation. We now expect real disposable income growth to be weaker than in 2012 and only slightly positive in 2013 and 2014, before picking up from 2015 as productivity and nominal wage growth pick up and price inflation falls back towards 2 per cent (Chart 3.14). The slow recovery in disposable incomes is expected to constrain household spending, with consumption growth remaining subdued over the next few years. However, with weaker price inflation we do expect consumption growth in 2013 to be slightly higher than in 2012 and then to pick-up more strongly from 2014.

Chart 3.14: Contributions to real household disposable income growth



Source: ONS, OBR

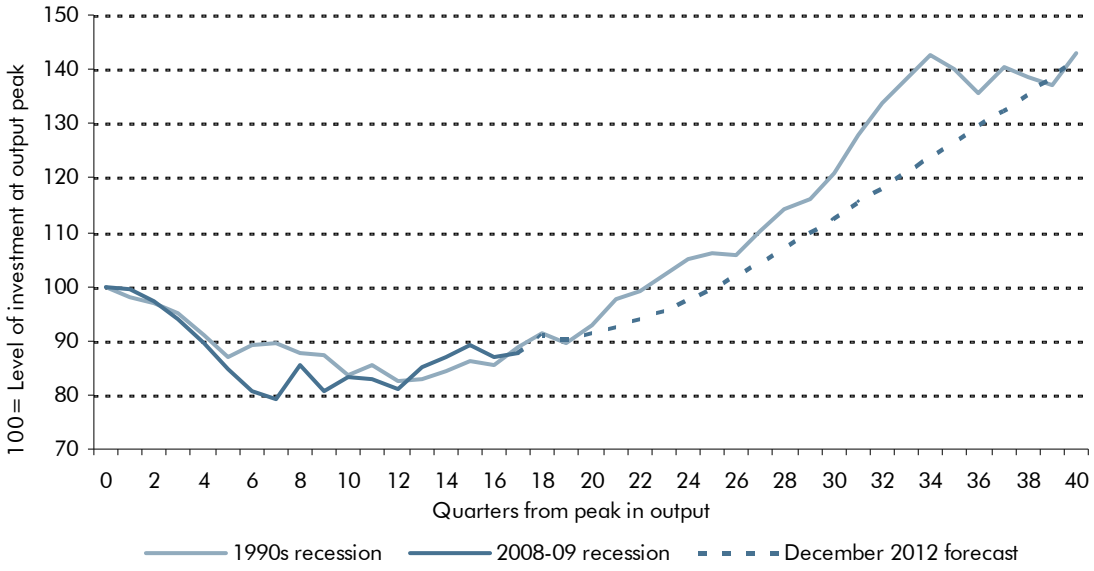
Business investment

3.52 Business investment data can be exceptionally volatile from quarter to quarter, and is often subject to significant revision.[18] That said, the latest data suggest business investment growth has been slightly weaker than we expected in March. It increased by a cumulative 1.9 per cent between the final quarter of 2011 and the third quarter of 2012, set against our March forecast for growth of 2.3 per cent over this period. However, upward revisions to preceding data dwarf this shortfall. They mean that the cumulative increase in business investment since the trough in GDP in 2009 is now estimated at 7.3 per cent compared to the -0.9 per cent implied by our March forecast and the data available at that time.

3.53 Following these revisions, the latest data now suggest that the recovery in business investment since 2009 has been largely in line with that seen following the 1990-91 recession. We expect growth over the next three years to be somewhat weaker than in equivalent years in the mid 1990s (Chart 3.15).

[18] See for example, our 2012 *Forecast evaluation report* (Chart 2.6). The ONS has recently introduced an explicit adjustment to reduce the effects of a possible negative bias in the provisional (month 2) estimates of business investment. See ONS, 2012, *Introduction of Month 2 Bias Adjustment for Business Investment*.

Chart 3.15: Level of business investment



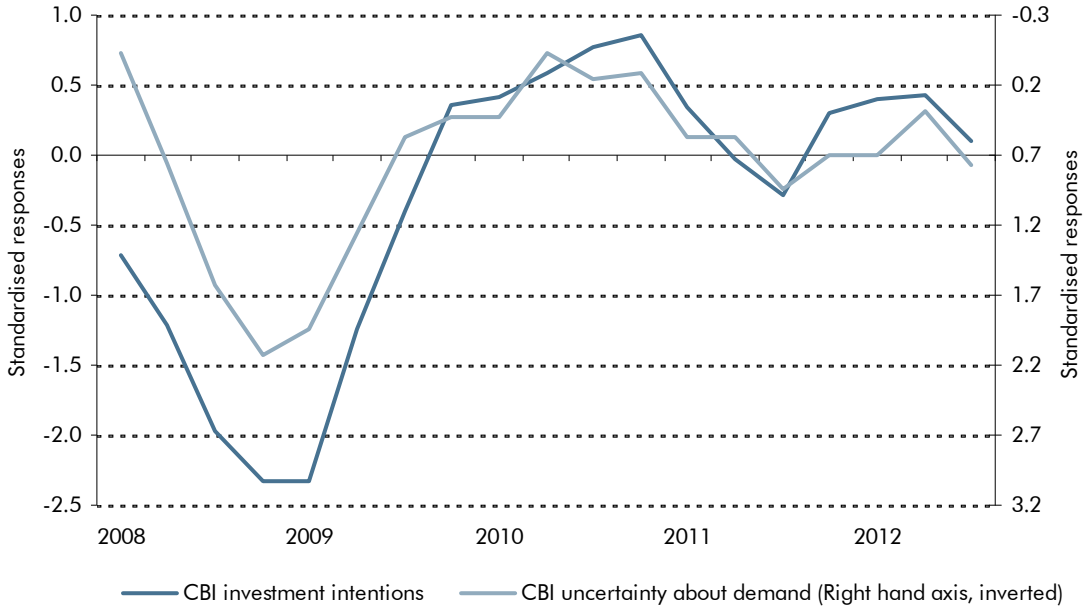
Source: ONS, OBR. Data for 1990s recession constructed using latest available ONS estimates for business investment growth prior to 1997, and latest available business investment levels from 1997.

3.54 Business investment is likely to be subdued in part because tight credit conditions continue to weigh on funding for investment spending. However, this is likely to matter less for large firms, which account for the majority of investment spending, as they rely more on internal sources to finance investment expenditure. The latest data suggest the corporate surplus remains large by historical standards, although it is possible that the strength of corporate assets has been overstated in the National Accounts, as we have previously suggested.[19]

3.55 Lack of confidence regarding the outlook for global and domestic demand is leading firms to postpone investment decisions. Survey evidence suggests that the number of firms citing uncertainty about demand as a constraint on investment picked up slightly in the third quarter, accompanied by a fall in investment intentions (Chart 3.16). That said, uncertainty about demand remains well below the levels seen in 2008 and 2009.

[19] In particular, it may be the case that the assumed proportion of foreign deposits attributed to non-financial corporations rather than financial sector is too high The ONS has established a working group examining issues related to the allocation of foreign deposits. More details are set out in ONS, 2012, Reviewing and *Improving ONS statistics: Measurement of UK Private Non-Financial Corporations' Overseas Deposits and Loans*.

Chart 3.16: Investment intentions and uncertainty about demand



Source: CBI

3.56 Set against weaker global prospects, ongoing uncertainty in the euro area and a tighter outlook for credit conditions, we have revised down our forecast for business investment growth since March. We now expect business investment to grow by just under 5 per cent next year, compared to our March forecast for growth of just over 6 per cent. While we expect business investment to grow at relatively strong rates over the medium term, our forecast is conditioned on the likelihood that firms have less cash to invest than existing data in the National Accounts would suggest, with the level of business investment not expected to return to its pre-crisis level until the final quarter of 2014.

3.57 The 1 per cent reduction in the main rate of corporation tax announced in the Autumn Statement is assumed to reduce the cost of capital faced by firms, and increases the level of business investment by 0.4 per cent by the end of the forecast period.

Residential investment

3.58 The latest data suggest that cumulative residential investment growth has been much stronger over the first half of 2012 than we expected in our March forecast. However, quarterly residential investment growth has displayed significant volatility, with the latest outturns showing growth of around 19 per cent in the first quarter, before falling back by 9 per cent in the second. This, taken together with the fact that this series can be prone to substantial revision, makes it difficult to judge the underlying strength of residential investment growth through 2012.

3.59 Residential property transactions remain weak, at less than half the rate at mid-2007. This mirrors weak mortgage activity (see paragraph 3.44). Gross mortgage lending has fallen to a third of its level in mid 2007 and although loans for moving house have increased their share, these also fell by more than half. A major constraint on transactions has been tightening of credit supply conditions: nearly half of new mortgage lending was at loan-to-value (LTV) ratios of more than 75 per cent in 2007 – this currently stands at around 30 per cent.

3.60 The new FLS (see Box 3.4) should encourage some further relaxation of LTV ratios, allowing more first-time buyers into the market. Our forecast reflects this with a fairly rapid pick-up in transactions over 2013-14, but gradual convergence thereafter to a long-run average rate of turnover, in which owner-occupiers move every 19 years. Our current projection is therefore slightly stronger in 2013 and 2014 than our March forecast, with a weaker outlook for economic growth being offset by better than expected transactions data in the last six months and a small boost from the FLS and other government schemes.

3.61 We expect residential investment to grow by just over 2 per cent this year. This compares to our March forecast of close to zero growth in 2012, with the upward revision largely attributable to the strong pick up in the data in the first quarter of 2012. With the near term outlook for property transactions relatively subdued, we expect residential investment growth to remain sluggish into the first half of 2013, before picking up over the second half of the year as property transactions strengthen. Over the medium term we expect relatively strong growth of residential investment as property transactions move back towards their long-run trend. Despite this, the level of activity in the housing market is forecast to remain weak relative to pre-crisis trends, and the quarterly level of residential investment is not expected to return to its pre-2008 peak until the first quarter of 2018.

Stock building

3.62 In our March forecast we expected stock building to make a small negative contribution of -0.1 per cent to growth in 2012, following a similar contribution in 2011. Data released since March now suggests an acceleration in the rate at which firms added to their stocks in 2011, with stock building contributing around 0.3 percentage points to GDP growth. The latest data also suggest that the rate of stock accumulation fell in 2012, with stocks falling back in the first quarter before recovering slightly in the second. We now expect stock building to make a negative contribution of -0.6 percentage points to GDP growth in 2012. Stocks are expected to recover slightly over the near term, sufficient to allow for a positive contribution of 0.2 per cent to GDP growth in 2013. Thereafter we expect no further contribution from this component, with implied stock adequacy measures close to normal levels.

Government

3.63 Real government consumption has been stronger since the end of 2011 than we expected in March, although the quarterly profile remains volatile. Government consumption is estimated to have risen by just over 3 per cent in the first quarter in real terms, largely mirroring the estimated pick up in nominal government consumption. However, real government consumption fell back by just over 1½ per cent in the second quarter despite continued growth in nominal terms, before picking up slightly in the third quarter.

3.64 Notwithstanding the volatility of recent outturns, real government consumption has held up relatively well over the past two years relative to nominal spending growth. This reflects the way in which measures of real government activity are constructed. In particular, the use of direct measures of real activity means that measured real government consumption holds up despite a reduction in nominal consumption growth – implying significantly weaker growth in the implicit price of government consumption (see Box 3.6). Given this, and the fact that nominal spending growth is forecast to slow further over the forecast period, it seems reasonable to expect the weakness of the government consumption deflator to persist for the foreseeable future.

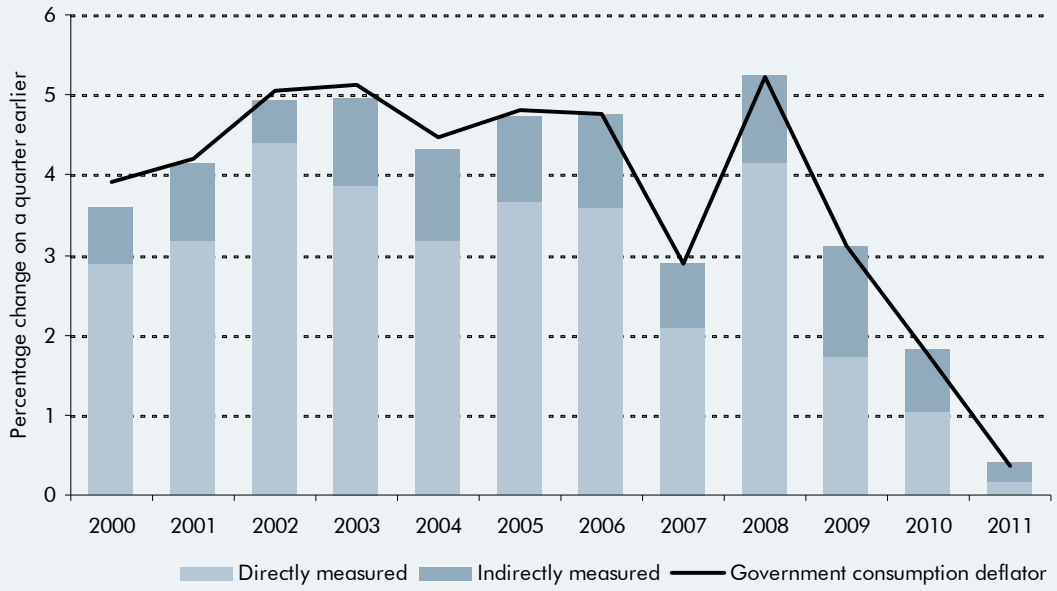
3.65 Accordingly we have revised down our forecast for growth of the government consumption deflator. For a given profile for cash spending, this revision has the effect of increasing real government consumption growth by around 0.4 percentage points in 2014 and around 0.3 percentage points in 2015, relative to our March forecast.

Box 3.6: Government consumption

Over the past two years outturns for real government consumption growth have typically been stronger than forecast. As we set out in our *2012 Forecast evaluation report*, this has been mainly attributable to weaker than expected measured price inflation – in other words, weaker growth of the government consumption deflator. For example, the latest data suggest that real government consumption grew by a cumulative 2.4 per cent between the start of 2010 and the third quarter of 2012. This compares to an expected decline of 3.4 per cent in the forecast we made at the time of the June 2010 Budget. Of this underestimate, around three-quarters is attributable to lower than expected growth of the government consumption deflator. Indeed, since the first quarter of 2010, the government consumption deflator has grown by an average of 1.3 per cent per year, compared to an average rate of 3.5 per cent between 1992 and 2010.

The weakness of the government consumption deflator is likely to reflect the way in which the Office for National Statistics constructs estimates of real government activity. Real estimates for around two-thirds of government consumption are based on 'direct' measures – such as the number of prescriptions, school pupils, or court cases – rather than being 'indirectly' derived by deflating an estimate of nominal spending by a relevant price index.[a] If nominal spending growth falls, but the direct measures of output do not, then real government consumption will hold up relative to nominal spending, and the growth rate of the government consumption deflator will fall.

Chart B: Government consumption deflator (annual growth)



Source: ONS, OBR

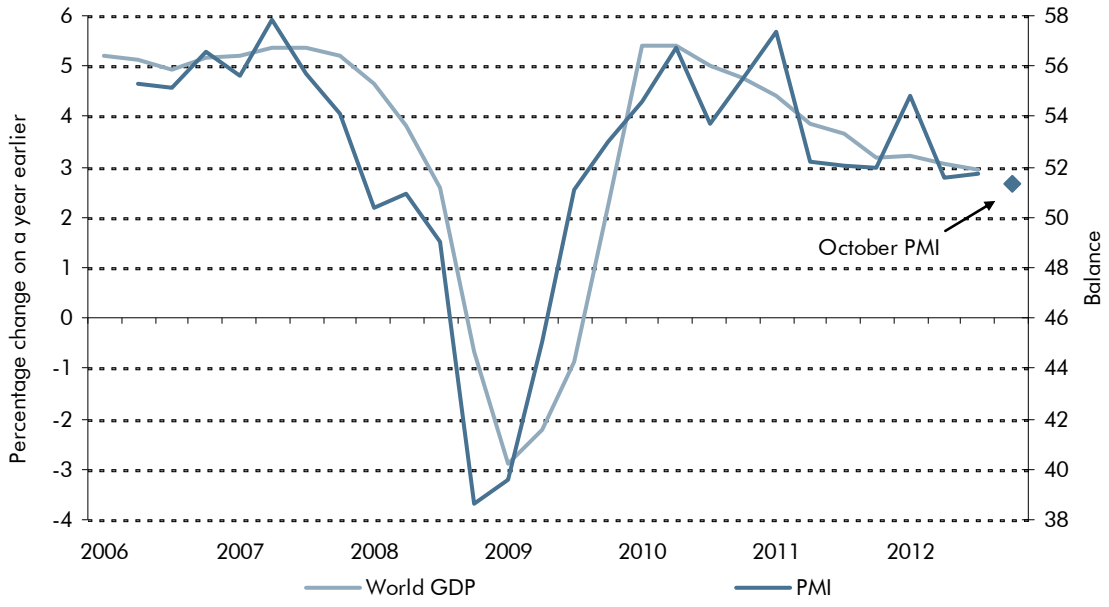
Chart B sets out recent changes in the government consumption deflator, decomposed into the contributions from categories that are directly measured and those that are indirectly derived. Since 2008 the contribution to the deflator from direct measures has fallen significantly, as many of the direct output measures of government activity are likely to have been largely unaffected by slower nominal spending growth. More recently, cost price inflation in the indirectly measured categories of spending has also fallen, acting as a further drag on growth of the deflator and supporting real government consumption relative to nominal spending.

[a] Of the seven main categories of real government activity, four are constructed using direct measures – health, education, social protection and "other direct"; while the remaining three measures (military defence plus other elements of central government and local authority spending not captured in the direct measures) are largely constructed by deflating nominal expenditure by cost price indices.

World economy

3.66 World output growth has slowed this year, although there is tentative survey evidence that it will stabilise in the coming months. For example, the JP Morgan *Global Manufacturing PMI Index* rose to a five-month high in October, with the new orders balance picking up. That said, the overall JP Morgan Global composite PMI remains below its long-run trend and low compared to the start of the year (Chart 3.17).

Chart 3.17: World GDP growth and PMI indicator



Source: IMF, *World Economic Outlook Database*, JP Morgan

3.67 As a result of developments in the euro area and emerging markets we have revised down our world output growth forecast. Compared to our March forecast world output growth for 2012 is lower by 0.1 percentage points and by 0.7 percentage points in 2013.

3.68 The euro area remains a major risk to our forecast. Policy action during the summer, including the ECB's new bond purchase facility (Outright Monetary Transactions), appears to have reduced some of the immediate pressures in euro area financial markets. However, the underlying situation remains very fragile and the feed through to the real economy looks to have been more significant than we assumed in March. The fall in euro area GDP during the first half of 2012 was broadly in line with our forecast. We expected the euro area to start to recover in the second half of the year. Instead, the euro area economy contracted in the third quarter of 2012. Leading indicators, such as the Markit Purchasing Managers' Index (PMI), which fell to a three-year low in October and remained weak in November, suggest the economy will contract again in the final quarter. The difficulties of the euro area will not be resolved quickly and our central assumption is that they are likely to constrain growth for several years to come.

3.69 We have revised down our euro area growth forecast by 0.1 percentage points in 2012 to -0.4 per cent and by 1.1 percentage points in 2013 to 0 per cent. We now expect euro area growth to start recovering, but at a slower pace, only from mid-2013 onwards. In March the reduction in our euro area GDP growth forecast primarily reflected weaker prospects in periphery economies, in particular Spain and Italy. In this forecast we expect lower growth in both the periphery economies and in core economies such as Germany and France, with which the UK has more significant trade links.

3.70 Developments in the US have been less negative, with the economy continuing to grow and labour market data improving over recent months. However, there are significant risks to US growth, most notably in 2013 where a significant tightening of fiscal policy will occur unless the White House and Congress can agree otherwise. The Congressional Budget Office (CBO) estimate fiscal policy would be tightened by 4 per cent of GDP in 2013 under current law. The CBO's alternative fiscal scenario, and the latest IMF forecast, assume that an agreement is reached that limits the tightening to between 1 and 2 per cent of GDP. Our forecast is based on a similar assumption. Analysis by the IMF suggests that if instead the full 4 per cent of fiscal tightening occurs UK economic growth could be between 0.25 and 1.2 percentage points lower in 2013.[20] Even if this risk is avoided in 2013, the long process of reform and consolidation of US public finances is likely to remain a source of ongoing uncertainty.

[20] IMF, 2012, *Spillover Report*. This assumes that there is no offset from monetary policy.

3.71 Growth in emerging markets, most notably China, has slowed since our last forecast. Leading indicators, such as the HSBC China manufacturing PMI, which rose in November to a thirteen-month high, suggest growth may be starting to recover. There are questions over whether the slowdown in growth is a temporary blip or a sign that emerging markets are unable to match the rapid growth rates seen in the decade prior to the financial crisis. Similarly to the IMF, we now expect emerging market growth to be slightly slower throughout our forecast though still significantly above the growth in advanced economies.

World trade

3.72 World trade in 2012 has been weaker than we expected in March, consistent with softer demand. We have revised our trade forecast in line with our global output forecast and now expect trade to grow by 3.0 per cent in 2012 and 4.4 per cent in 2013 before picking up to 5.9 per cent in 2014.

3.73 Our forecast for UK export market growth is also lower. We now expect growth of 2.7 per cent in 2012 and 4.3 per cent in 2013 before picking up to 5.5 per cent in 2014. The significant downward revision to growth in 2012 reflects the fact that while euro area GDP has been broadly in line with our March forecast, euro area import markets have been significantly weaker. In the later years of our forecast the downward revision to world trade is greater than the revision to UK export market growth. This reflects the downward revision to emerging markets growth, which make up a smaller share of UK export markets than their weight in world trade.

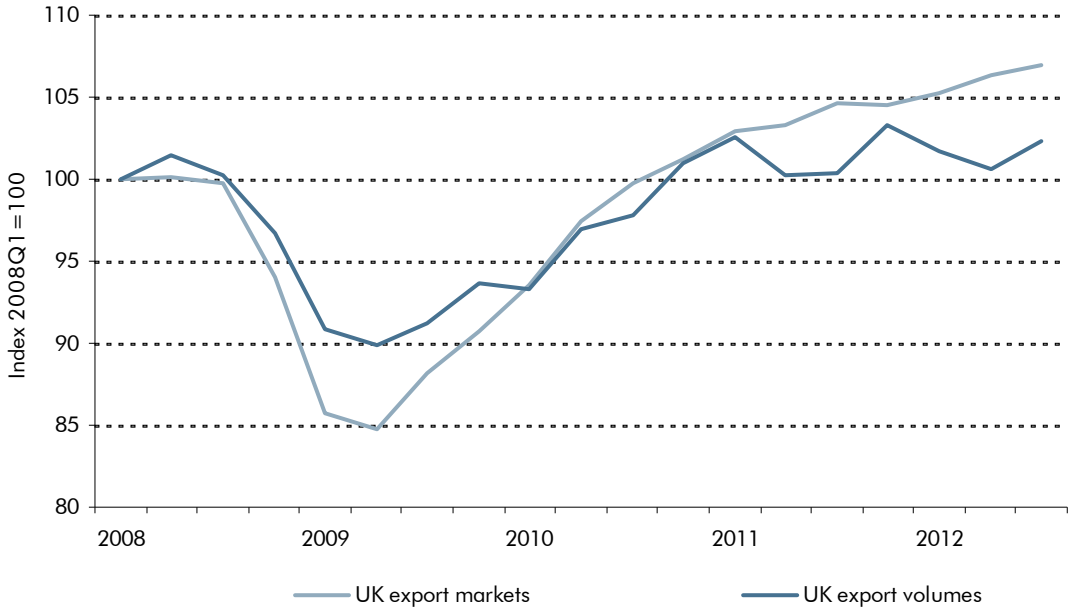
Exports

3.74 UK export growth was significantly weaker than we expected over the first half of 2012. In March we forecast exports to grow by a cumulative 2½ per cent between the final quarter of 2011 and the third quarter of 2012, contributing around 0.8 percentage points to growth over this period. The latest data indicate that export volumes declined by a cumulative 1 per cent over this period, subtracting around 0.3 percentage points from headline GDP growth.

3.75 One possibility is that the weakness in export growth reflects weaker than expected growth of UK export markets. Export market growth is expected to slow this year to 2.7 per cent from around 6 per cent in 2011, largely as a result of the slowdown in euro area growth. However, the weakness of exports over the first half of the year cannot be attributed entirely to slower UK export market growth. While exports declined sharply over the first half of 2012, the latest data suggest that export markets continued to grow, albeit at relatively slow rates. This suggests a deterioration in exporters' market share (Chart 3.18). At least part of this is likely to be attributable to movements in the exchange rate, with the

sterling effective exchange rate – the value of sterling against a weighted basket of currencies – appreciating by just under 5 per cent since the end of 2011. Set against this, there is some evidence that exporters sought to protect volumes at the expense of margins, with the sterling price of goods exports falling by just under 2 per cent over the first half of 2012.

Chart 3.18: UK exports and export markets



Source: ONS, OECD, OBR

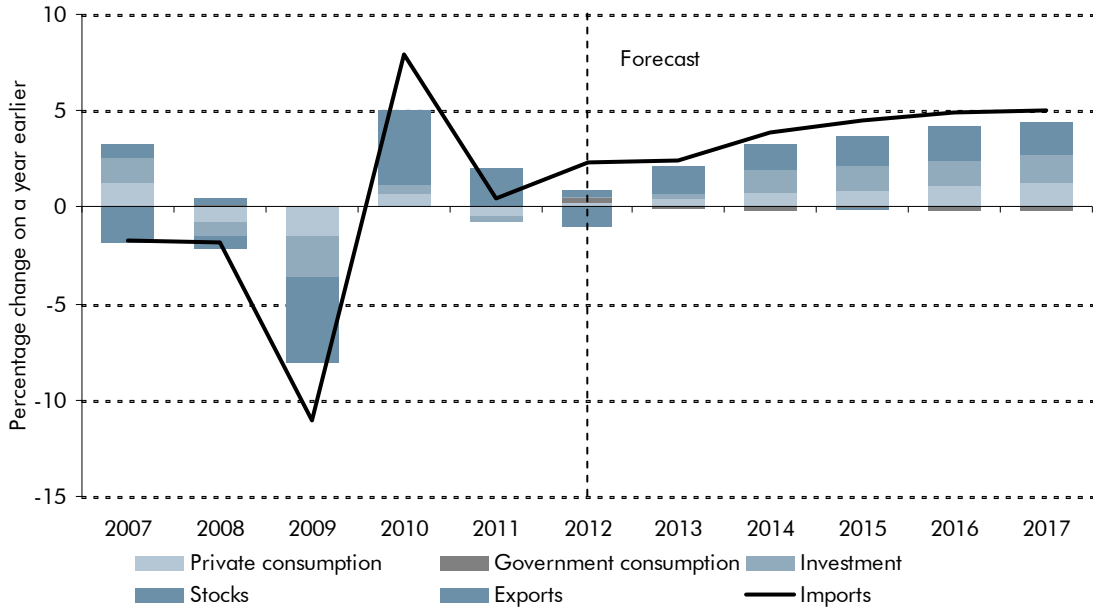
3.76 The weaker outlook for UK export market growth has prompted us to revise down our forecast for the growth of exports. Exports are expected to increase by around 0.1 per cent in 2012, largely reflecting the weakness in volumes over the first half of the year. Growth of export volumes is expected to recover slightly in 2013 as export markets pick up, although growth remains subdued by historical standards. Export growth improves from 2014 as stronger growth in the euro area supports the growth of UK export markets.

Imports

3.77 We have revised down our forecast for import growth, reflecting the downward revision to our forecast for domestic demand. Chart 3.19 sets out the individual contributions to the forecast for import-weighted domestic demand, alongside our forecast for import growth. The relatively weak growth rates of investment, exports and consumption serve to keep growth of import-weighted domestic demand subdued in 2013 and 2014. Import growth strengthens from 2015 as consumption and investment pick up, reflecting the relatively high import intensity of these components. On the other hand, the relatively low import intensity of

government consumption means that the decline in this component has relatively little effect on import growth over the medium term.

Chart 3.19: Contributions to import-weighted domestic demand growth and UK import growth



Source: ONS, OBR

Net trade

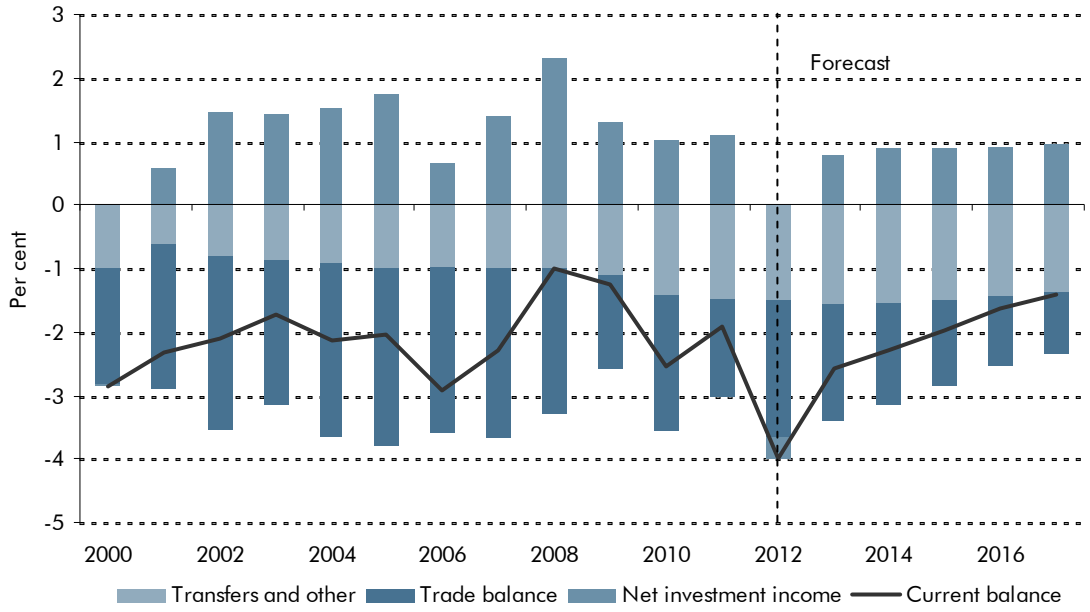
3.78 The downward revision to our forecast for GDP growth in 2012 is largely accounted for by a reduction in the contribution of net trade. With exports contracting sharply through the first half of the year, net trade is now expected to contribute -0.6 percentage points to growth in 2012. Taken together with a larger negative contribution from stock building, this more than offsets small positive contributions from the other components of expenditure. Further out, the weaker outlook for export market growth offsets the downward adjustment we have made to import weighted demand, leaving the contribution of net trade to GDP growth lower over the next two years. We now expect net trade to make only a small positive contribution to growth, adding around 0.3 percentage points in 2013 and 0.2 percentage points in 2014, revised down from our March forecast for contributions of 0.5 and 0.3 percentage points.

Balance of payments

3.79 While the current account deficit narrowed slightly in 2011 to just under 2 per cent of GDP, the sharp widening in the trade deficit over the first half of the year, together with a deterioration in investment income, means that we now expect the

current account deficit to widen to around 4 per cent of GDP this year. Thereafter, the improvement in net exports brings about a narrowing of the trade balance, albeit at a very gradual rate, with the current account deficit remaining at around 1½ per cent by the end of the forecast period (Chart 3.20). We expect net investment income to recover from its negative position in 2012, although as in previous forecasts, we do not expect it to return to its pre-crisis share of GDP.

Chart 3.20: Current account balance as a share of GDP



Source: ONS, OBR

Inflation and the GDP deflator

3.80 In assessing the outlook for the economy and the public finances, we are interested in a number of measures of inflation, including the Consumer Prices Index (CPI) and the Retail Prices Index (RPI) measures. The basic approach to the measurement of inflation using these indices is the same, although there are a number of differences due to coverage, the representative population covered by the indices and the methods used to construct them.[21]

3.81 The RPI and CPI measures of inflation are important because they have different effects on our fiscal forecast. The Government uses CPI for the indexation of most tax rates, allowances and thresholds and for the uprating of benefits and public

[21] For more details on the differences between the RPI and CPI see Miller, R, 2011, OBR Working Paper no. 2: *The long-run difference between RPI and CPI inflation,* available on our website.

sector pensions. The RPI is used for calculating interest payments on index-linked gilts, student loan payments and the revalorisation of excise duties.

CPI inflation

3.82 Since our March forecast, CPI inflation has continued to fall from its peak of 5.2 per cent in September 2011, reaching 2.2 per cent in September this year. However, in October, CPI inflation rose to 2.7 per cent, with education contributing around 0.3 percentage points to the annual CPI inflation rate as a result of higher tuition fees.

3.83 The effect of higher tuition fees on inflation[22] was larger than we expected in our March forecast, mainly due to rises in international, postgraduate and part-time course fees and to the composition of the student population. We expect these effects to continue to be felt over the next few years as new cohorts of students pay the higher fees. However, there remain a number of uncertainties around these estimates, including the size and composition of the student population and changes to the fees for international, postgraduate and part-time courses.

3.84 Looking ahead, we continue to expect CPI inflation to fall gradually over the next few years, but to be higher in 2013 and 2014 than we expected in March. We expect more upward pressure on CPI inflation in the near term than in March, largely due to the higher-than-expected effect of the rise in tuition fees, the announced rises in domestic energy prices and some smaller effects in 2013 from the rises in food commodity prices.

3.85 Most of the UK's major domestic energy suppliers have announced electricity and gas price rises of between 6 and 11 per cent, to be implemented in the final quarter of 2012. We assume in our forecast that the remaining major supplier will also raise prices at the beginning of 2013. This adds around 0.4 percentage points to CPI inflation by the beginning of 2013. Some UK energy suppliers have pointed to increased distribution, network and environmental policy costs as well as wholesale energy cost pressures. These network and environmental policy costs may persist in coming years, suggesting that further rises in retail gas and electricity prices may be likely in future.

3.86 Since mid-2012 there have also been rises in food commodity prices, particularly grains, following droughts in the US and parts of Eastern Europe. These rises may have an effect on other food commodity prices, such as meat, as they are used

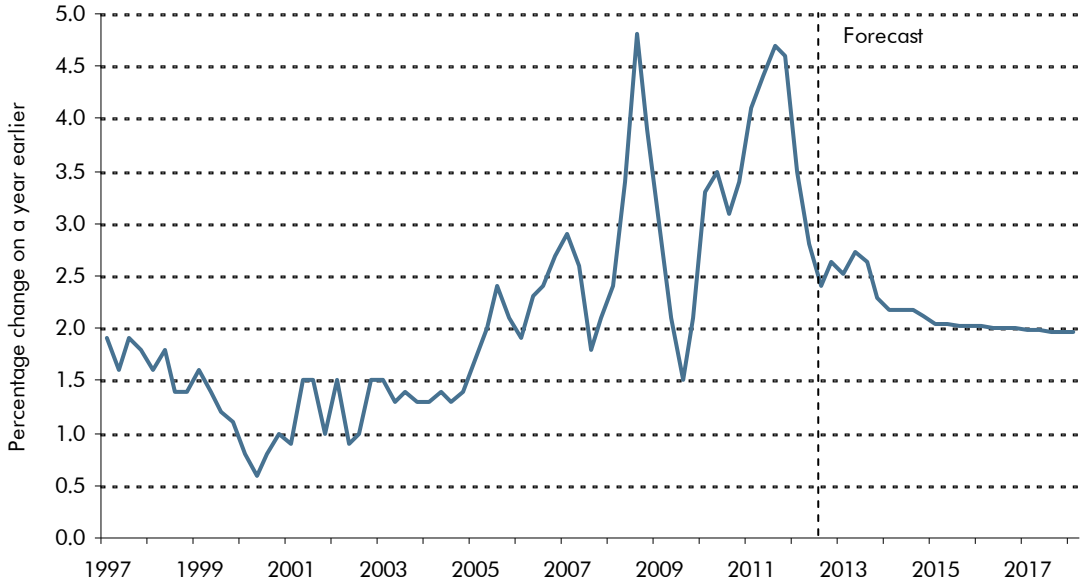
[22]Although tuition fees may not represent an upfront cost paid by students, the ONS typically takes into account the fees at the beginning of the academic year, affecting the October inflation indices. For more details see ONS, 2012, *Consumer Price Indices Technical Manual,* April.

for animal feed. The UN Food and Agriculture Organisation (FAO) world food price indices have risen by 7 per cent between June and October this year, with a sharp rise in the cereals price index of 17 per cent over the same period. We assume that the rises in food commodity prices will feed through to retail food prices, but these effects are likely to be lagged and of a smaller magnitude.

3.87 Oil prices fell over the summer, but rose sharply again in the second half of the year. Recent movements in prices have been affected by political tensions in the Middle East. Our forecast assumes that world oil prices will move in line with the prices implied by futures markets, as of 23 November 2012. This suggests that oil prices will fall back gradually over the forecast period but at a slower rate than in March. The annual rate of petrol price inflation in our forecast is affected by base effects in 2013, due to the movements in oil prices over 2012.

3.88 In the medium term we expect CPI inflation to fall back to target, remaining close to 2 per cent from 2015 onwards (Chart 3.21). We expect downward pressure on prices from the negative output gap over the forecast period to be offset to some extent by upward pressure from above trend growth rates and falling unemployment in the later years.

Chart 3.21: CPI inflation forecast



Source: ONS, OBR

3.89 Policy announcements made by the Government have also been incorporated into our inflation forecast. Cancelling the rise in fuel duty due in January 2013 and delaying the rise due in April 2013 until September 2013 are estimated to

reduce CPI inflation by around 0.1 percentage points by the end of 2013. This impact is relative to a baseline including pre-announced changes to fuel duty.

RPI inflation

3.90 RPI inflation is expected to follow a similar path to CPI inflation, but this measure of inflation also includes mortgage interest payments (MIPs), housing depreciation and council tax.

3.91 We assume that house prices rise in line with the median outside forecast of ONS house prices.[23] House prices have been higher in the second and third quarters of 2012 than we expected in March. We have seen some divergence between this measure of house price inflation and other house price indices, such as Nationwide and Halifax, which are showing more weakness in the recent data.[24]

3.92 The median forecast suggests a stronger annual rate of ONS house price inflation in the fourth quarter of 2012 and the fourth quarter of 2013 than we expected in March. In the medium term, we expect house price inflation to rise broadly in line with the long-term average rate of earnings growth.

3.93 Our forecast for the contribution of MIPs to RPI inflation is lower at the end of the forecast period than in March, largely because of reduced expectations for the path of Bank rate. This feeds directly into our forecast for variable mortgage rates. Falling longer-term interest rate expectations have also contributed to lower rates on fixed-rate mortgages (which make up around a quarter of all UK mortgages) via falling swap rates over the last year. Combined with lower bank credit spreads this leads to a gradual fall in average mortgage rates in the first few years of our forecast. Rising policy rates then feed into higher mortgage rates and put upward pressure on the RPI in the medium term.

3.94 We assume that the long-run difference between RPI and CPI inflation is around 1.3 percentage points, based on a decomposition of the differences between the two measures.[25] Over the long term, we might expect housing components such as housing depreciation and MIPs to grow at a similar rate to the long-term rate

[23] See HM Treasury, 2012, *Forecasts for the UK economy: a comparison of independent forecasts*, November.

[24] This could be due to different weightings used for regional house price data. The point at which house prices are recorded also differs. Halifax and Nationwide house price indices are based on mortgage approvals stage in the transaction process whereas the ONS house prices are recorded on completion of the transaction.

[25] For more information on the methodology used to assess the prospects for the evolution of the wedge between the two measures over the long term see: Miller, R, 2011, OBR Working Paper no. 2: *The long-run difference between RPI and CPI inflation,* which is available on our website.

of average earnings growth of around 4.2 per cent.[26] We assume council tax increases of close to 2 per cent in the medium term (see Chapter 4).

3.95 The Office for National Statistics is considering methodological changes to the RPI based on the use of different formulae to aggregate prices at the lowest level (see Box 3.7). With no firm decision announced, we have not made any changes to our forecasts to reflect this.

The GDP deflator

3.96 GDP deflator growth is a broad measure of general inflation in the domestic economy. It measures the changes in the overall level of prices for goods and services that make up GDP, including price movements in consumption, government spending, investment and trade. In the near term, we expect an increase in the growth of the consumption deflator, reflecting the announced rises in domestic gas and electricity prices and higher education tuition fees in the fourth quarter of 2012.

3.97 We have reassessed the prospects for the growth of the GDP deflator in the medium and long-term based on analysis of its components, in particular the consumption deflator. Based on this analysis, we assume that the GDP deflator will grow by 2 per cent a year in the medium term, compared to 2.5 per cent in March. However, in the long run, we expect growth in the GDP deflator to return to closer to 2.2 per cent as the general government consumption deflator returns to its long-run trend growth rate (Box 3.8).

[26] The long-term rate of average earnings growth is the sum of the growth rates of labour productivity and the GDP deflator.

Box 3.7: ONS methodological developments on consumer prices

The methodological development work on consumer prices carried out by the ONS in 2012 has been focused on two key areas: the inclusion of owner occupiers' housing (OOH) in a new index of consumer prices; and, addressing the increasing impact during 2010 and 2011 of the 'formula effect' on the gap between the CPI and RPI.

Owner occupiers' housing costs are currently excluded from the CPI. The ONS has developed a number of experimental OOH indices, using the net acquisitions (NA) and rental equivalence (RE) approaches. In April 2012, the Consumer Prices Advisory Committee (CPAC)[a] recommended that the RE approach[b] should be used. The National Statistician has recommended that a new index should be published using this approach and this will be done alongside CPI from March 2013.

The 'formula effect' occurs as a result of the use of different formulae to aggregate prices at the basic level in the CPI and RPI. In 2012 it accounted for around 0.9 percentage points of the difference between the two measures, compared to around 0.5 percentage points before 2010. The ONS initiated a work programme to address this issue. This concluded that there is no perfect formula to use at the lowest level of price aggregation, but argued that the use of the 'Carli' formula in the RPI was no longer appropriate because of its susceptibility to 'price bounce'. ONS also concluded that economic theory cannot be used to guide the appropriate choice of formula at the elementary aggregate level.[d]

The National Statistician has now launched a public consultation seeking views on options for change to the methodology used in the RPI.[e] CPAC will meet following the public consultation, after which the National Statistician may put forward a recommendation to the UK Statistics Authority.

The Bank of England would be consulted on whether any proposal would be a fundamental change to the basic calculation of the RPI that would be materially detrimental to the interests of holders of relevant index-linked gilts. If the Bank considers this to be the case, then the agreement of the Chancellor of the Exchequer would be required before the change could be made. Subject to the above, the ONS would introduce any change in March 2013.

An announcement on the recommendation by the UK Statistics Authority is not likely this year. As such, we have not taken into account any possible methodological changes to the RPI formulae in our forecast.

[a] CPAC advises the UK Statistics Authority on RPI and CPI methodological issues.

[b] The RE approach assumes OOH costs are imputed using the rents paid for equivalent rented properties. The value of the services, such as shelter and security of tenure, is assumed to be the same as the rent the house might attract in the rental market.

[c] For more information see ONS, 2012, *Summary of the fourteenth meeting of the Consumer Prices Advisory Committee (CPAC)*, April.

[d] CPAC(12)24, 2012, *The formula effect gap between the Retail Prices Index and the Consumer Prices Index,* September.

[e] See ONS Information Note, 2012, *National Statistician to seek users view on the Retail Price index* and *National Statistician's consultation on options for improving the Retail Prices Index,* October.

3.98 Nominal GDP growth is weaker throughout the forecast than in March, reflecting both weaker real GDP growth and the downward adjustment to the growth of the GDP deflator. These changes to the forecast reduce the level of nominal GDP in 2016 by 5.1 per cent relative to our March forecast.[27] Of this, 3.2 percentage points is accounted for by the downward adjustment to our forecast for real GDP growth, with the remainder due to lower GDP deflator growth.

3.99 There are significant consequences for the fiscal forecast from these changes. The lower deflators will reduce our forecasts for nominal consumption and wages, which other things equal would lead to lower VAT and income tax receipts. The lower GDP deflator implies lower nominal public expenditure totals after the end of the current spending review for a given real growth spending assumption. Nominal GDP is also the denominator for the fiscal aggregates expressed as a share of GDP.

[27] The actual level of nominal GDP in 2016 is just under 4.7 per cent lower than our March forecast. Of this, changes to our forecast for nominal GDP growth from the end of 2011 reduce the level of nominal GDP in 2016 by 5.1 per cent. This is offset slightly by an upward revision to the ONS outturn for the level of nominal GDP at the end of 2011 of just under 0.5 per cent.

Box 3.8: Long run assumptions for National Account deflators

We have reassessed the prospects for the growth of the GDP deflator in the medium and long-term based on analysis of its components, in particular the consumption deflator.

There are a number of methodological differences in the construction of the consumption deflator and the CPI. There are also a number of differences in scope, for example the CPI measures the price of Household Final Monetary Consumption Expenditure (HHFMCE) and excludes imputed rents, FISIM, some aspects of life insurance as well as treating package holidays differently. The consumption deflator estimates the price changes for Household Final Consumption Expenditure (HHFCE).[a] In addition, HHFCE is deflated using other deflators as well as consumer prices, plus some direct volume measures.

Despite these differences, we do not find strong evidence to suggest that the growth rate of the consumption deflator should be substantially different from CPI inflation in the long-run. Consistent National Accounts data for the consumption deflator is now available from 1948 rather than from 1997 only, which shows that the average differences between the two inflation rates since the early 1990s are close to zero. In our current forecast we therefore assume that the consumption deflator will grow at around 2 per cent in the long run, in line with CPI inflation.

Another component of the GDP deflator is the general government consumption deflator. As set out in Box 3.6, real government consumption has held up relatively well over the past two years relative to nominal spending growth. This reflects the way in which measures of real government activity are constructed. In particular, the use of direct measures of real activity may mean that measured real government consumption holds up despite a reduction in nominal consumption growth – implying significantly weaker growth in the implicit price of government consumption. Given this, and the fact that nominal spending growth is forecast to slow further over the forecast period, it seems reasonable to expect the weakness of the government consumption deflator to persist for the foreseeable future. We judge that this could continue to result in below-average growth of the general government consumption deflator over the medium term.

In the medium term, we assume that the remaining components of the GDP deflator are likely to grow at close to their historical rates. Based on this, our medium-term assumption for growth of the GDP deflator is 2 per cent, compared to 2.5 per cent in March. However, in the long run, we expect growth in the GDP deflator to return to closer to 2.2 per cent as the general government consumption deflator returns to its long-run trend growth rate.

[a] ONS, 2012, *Reconciliation of the differences between the Consumer Prices Index and the Implied Price Deflator*, March.

The labour market

Employment, unemployment and inactivity

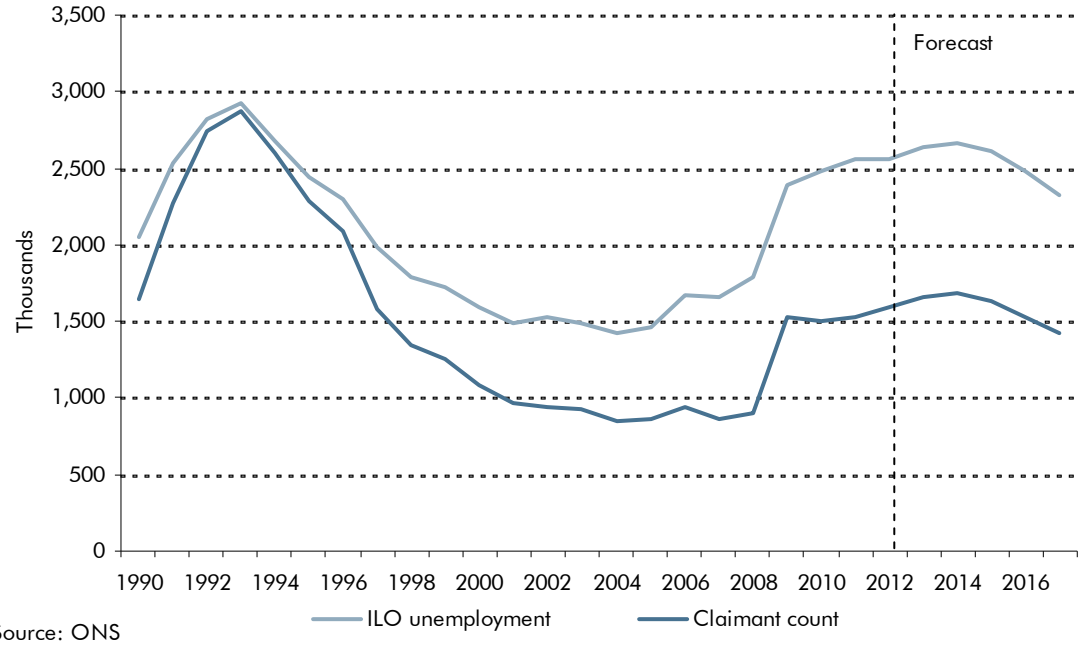
3.100 As set out in Chapter 2, the labour market has performed more strongly than we expected in March. Employment in the third quarter stood at 29.6 million compared to our forecast of 29.1 million. Meanwhile, the unemployment rate has fallen to 7.8 per cent and the activity rate has risen.

3.101 Compared to our March forecast, we have revised down our unemployment rate profile in the near term in line with recent labour market performance. However, we assume an increase in the unemployment rate in the medium term in line with our forecast for a weaker recovery. We expect the unemployment rate to increase slightly in the next two years – peaking at 8.3 per cent at the end of 2013. We then expect the unemployment rate to recover gradually from 2014 reaching 6.9 per cent at the end of 2017 (Chart 3.22).

3.102 Consistent with our unemployment profile, we have revised our forecast for the claimant count down in the near term and up in the medium term. However we now expect the upward impact of policy on the claimant count to be somewhat larger, partly because we now include the effect of the increase in the women's state pension age relative to men.[28] The likelihood of lone parents moving onto Jobseeker's Allowance through the Lone Parent Obligation process has also been higher than previously expected. We expect the claimant count to peak at 1.7 million, compared to 1.67 million in March.

[28] Before April 2010 men over the age of 60 could claim pension credit. Now men aged between 60 and the new increased women's state pension age are not allowed to claim pension credit and are therefore more likely to claim JSA.

Chart 3.22: Unemployment levels



Source: ONS

3.103 Part of the strength in employment in the third quarter of 2012 could be related to the Olympics. London accounted for more than half the increase in total UK employment in the third quarter, despite the region only representing around 13 per cent of the stock of total employment. Temporary employment also increased in the third quarter by 53,000. But the labour market had already outperformed expectations in the previous quarters so it is difficult to judge how much, if any, of the strength in the third quarter will be reversed in the final quarter.

3.104 Between the start of 2011 and the start of 2018 we expect total market sector employment to increase by around 2.4 million offsetting a total reduction in general government employment of around 1.1. More details on our latest projections for general government employment are set out in Box 3.9.

Box 3.9: General government employment

Our projection for general government employment (GGE) is built up from projections of the growth of total government paybill and paybill per head. We use these projections to estimate the total decline in GGE from the start of the spending review period to the end of the forecast and then make a stylised assumption that employment falls at a constant rate from the latest outturn data. We have taken the same approach here as we did in our March *EFO*, the only difference being that we now take on board spending assumptions for 2017-18.

Our latest projections incorporate updated expenditure projections and new data on average earnings and workforce reductions so far in 2012-13:

- In March we projected a 730,000 fall in general government employment between the start of 2011 and the start of 2017.

- Latest data suggest stronger public sector average earnings growth so far this year than we assumed in March, so we have increased our 2012-13 paybill per head growth assumption to 1.9 per cent, up from 0.8 per cent. For the rest of the forecast we have revised our paybill per head growth assumption down marginally, reflecting a number of offsetting factors. First, we assume that wage drift is higher than previously thought, 1.0 per cent compared to 0.4 per cent, based on analysing data on settlement and average weekly earnings in the public sector. Second, we have a lower forecast for domestic inflation, which results in lower settlement assumptions by the end of the forecast. And third, we have marginally lowered our assumption for the level of pay settlements in 2013-14 and 2014-15 after reassessing the impact of the pay restraint policy.[a]

- In June this year the ONS made a reclassification change moving English further education corporations and sixth form college corporations to the private sector from the public sector. This resulted in around 196,000 employees in the educational bodies moving from the public to the private sector.

- Our latest forecast suggests there will be similar amount of departmental spending available to government employees at the start of 2017, compared to the level at the start of 2011, as we thought in March. We have rolled forward our forecast one year, incorporating additional spending cuts in 2017-18 that act to lower the forecast profile. Combining these assumptions with our paybill per head growth assumptions implies a total reduction in GGE of around 986,000 between the start of 2011 and the start of 2017. Of this, around 175,000 reflect the reclassification mentioned above (assuming the share of further education corporations

and sixth form college corporations of GGE is constant). Around 90,000 reflects the fact that we roll the forecast forward one fiscal year. New spending assumptions and changes to pay bill per head growth have a small impact overall, increasing employment by around 6,000. We project a further fall of GGE of around 114,000 from the start of 2017 to the start of 2018, giving a total decline of 1.1million or 929,000 excluding the reclassification change.

All this implies an average fall in GGE of just under 30,000 per quarter over the reminder of the period, compared to an average fall, in the data, of around 42,000 per quarter from the first quarter of 2011 to the second quarter of 2012 excluding the reclassification change.

Anecdotal evidence suggests that a number of public sector employers attempted to frontload their intended workforce reduction; this is consistent with a sharper fall in GGE in the first half of 2011. Recent data points towards this trend subsiding somewhat. Estimating the extent of frontloading is complicated by the fact that the outturn for growth in paybill per head has been significantly faster than growth in average weekly earnings as measured by the ONS over the past two years.

[a] More details on the paybill per head forecast and general government employment projections by year in the latest forecast can be found in the supplementary tables accompanying this *EFO*, available on our website.

3.105 The strong performance of the labour market in recent quarters provides little evidence of a significant structural deterioration since our March forecast. The youth unemployment rate has fallen back to 18.9 per cent in the third quarter, still around 7 percentage points higher than at the start of 2008. However if we adjust for the increase in the number of individuals entering higher education since then the change is smaller. Long-term unemployment, as a share of total unemployment, has risen in recent quarters to a peak level of 35.5 per cent, but this remains low relative to the 1990s recession. While the impact of higher youth and long-term unemployment remains uncertain, we judge that there is insufficient evidence at the stage to adjust our estimate of the long-term non-accelerating inflation rate of unemployment (NAIRU).

Earnings

3.106 Average earnings growth continues to be weak. In the third quarter of 2012, average weekly earnings (AWE) in the private sector grew by 2.0 per cent compared to a year earlier.

3.107 Key determinants of the prospects for average earnings growth include the growth rate of productivity, the extent of labour market slack, and the degree of real wage resistance to changes in price inflation. In line with slower productivity growth, rising unemployment and lower domestic price inflation in the medium term (see Box 3.8), we expect nominal wage growth to be weaker than we forecast in March. Whole economy wages are expected to grow by 2.7 per cent this year, around 2.2 per cent in 2013 rising gradually over the course of 2014 and 2015 before reaching 4.0 per cent in 2016.

3.108 With elevated price inflation, annual real wage growth is forecast to remain weak in 2012 and 2013 before gradually picking up in 2014 and settling at around 2 per cent in 2016. Our downward revision to average earnings means that total wages and salaries – a key determinant of expected tax receipts from labour income – are just over 3 per cent lower by 2016-17 than we expected in March.

Comparison with external forecasts

3.109 In this section, we compare our latest projections with those of key outside forecasters. Different assumptions about how the euro area crisis will evolve and how the economy will be affected, which are hard to assess quantitatively, probably explain much of the difference between different forecasts at the current time. Estimates of the current degree of spare capacity and the potential growth rate of the economy, where available, also differ widely.

3.110 In its October *World Economic Outlook*, the IMF forecast that UK GDP growth would be -0.4 per cent this year, around 0.3 per cent weaker than our central forecast. It also forecasts slightly slower growth next year, with GDP expected to grow by 1.1 per cent relative to our central forecast of 1.2 per cent. The IMF's forecast was published prior to the first estimate of GDP growth in the third quarter, which may go some way to explaining the differences relative to our forecast. Further out, the IMF's forecast for growth is largely in line with our central projection, with growth expected to average 2.5 per cent between 2014 and 2017 in both sets of forecasts.

3.111 The OECD published an updated forecast as part of its November *Economic Outlook*. The OECD forecast growth to be 0.9 per cent in 2013 and 1.6 per cent in 2014. There are some notable differences in the composition of growth: the OECD forecast a stronger contribution from private consumption in 2013, offset by a negative net trade contribution and a steeper decline in government consumption. The OECD's weaker forecast for growth in 2014 is largely attributable to slower consumption and investment growth, offset by a stronger contribution from net trade.

3.112 The European Commission also published its latest forecast in October. They expected weaker growth than our central forecast, with GDP expected to decline by -0.3 per cent in 2012 and to grow by 0.9 per cent in 2013. As with the IMF's forecast, the Commission's forecast did not take on board the ONS's first estimate of GDP growth in the third quarter of 2012, which may help to explain the differences between the forecasts. The Commission forecasts growth of 2 per cent in 2014, in line with our central forecast. However there are some differences in the expected composition of growth in this year, with our forecast assuming a slightly stronger contribution from investment, while the Commission expects net trade to contribute more strongly to growth.

3.113 In its October *Economic Review,* the National Institute for Economic and Social Research (NIESR) set out a slightly lower forecast than us, with forecast growth of 1.1 per cent in 2013 and 1.7 per cent in 2014. Their medium-term forecast is also slightly lower, with growth expected to average around 2.2 per cent between 2015 and 2017, compared to our forecast for average growth of 2.6 per cent. The weaker forecast is mainly attributable to slower growth of investment in NIESR's forecast, which more than offsets a relatively stronger contribution from net trade. NIESR also expect lower inflation through the forecast period. This may well reflect a larger output gap forecast, but we cannot be sure as they choose not to publish this.

3.114 Comparison with the Monetary Policy Committee's economic forecast is not straightforward because the Bank of England only publishes point estimates for two variables, CPI inflation and GDP growth. We assume a similar profile for growth over the near term, although we expect a slightly stronger growth in 2015 than the MPC's mode profile. The MPC's modal forecast for annual CPI inflation in 2013 is broadly in line with our central forecast, although their forecast is slightly lower than our own in subsequent years.

3.115 Oxford Economics' latest forecast, published in November, assumes a similar profile for GDP growth over the near term, although they expect somewhat stronger growth in 2014 and 2015 and slightly weaker growth in 2016 and 2017. Their forecast for CPI inflation is similar to ours in 2013. However, they expect inflation to be weaker over the medium term, which may be partly attributable to the larger negative output gap implied by their forecast.

Table 3.4: Comparison of external forecasts

	Per cent						
	2011	2012	2013	2014	2015	2016	2017
OBR (December 2012)							
GDP growth	0.9	-0.1	1.2	2.0	2.3	2.7	2.8
CPI inflation	4.5	2.8	2.5	2.2	2.0	2.0	2.0
Output gap	-2.7	-3.1	-3.5	-3.3	-3.0	-2.5	-1.9
IMF (October 2012)							
GDP growth	0.8	-0.4	1.1	2.2	2.6	2.6	2.7
CPI inflation	4.5	2.7	1.9	1.7	1.8	1.8	1.9
Output gap	-2.6	-4.2	-4.4	-3.6	-2.7	-2.1	-1.4
OECD (November 2012)							
GDP growth	0.9	-0.1	0.9	1.6			
CPI inflation	4.5	2.6	1.9	1.8			
Output gap	-1.4	-2.2	-2.3	-2.0			
EC (November 2012)							
GDP growth	0.9	-0.3	0.9	2.0			
CPI inflation	4.5	2.7	2.1	1.9			
Output gap							
NIESR (October 2012)							
GDP growth	0.9	-0.1	1.1	1.7	2.1	2.3	2.3
CPI inflation	4.5	2.7	2.0	1.6	1.6	1.7	1.9
Output gap[1]							
Bank of England (November 2012)							
GDP growth (mode)[2]		0.2	1.2	2.0	2.1		
CPI inflation (mode)[2]		2.8	2.5	2.0	1.8		
Oxford Economics (November 2012)							
GDP growth	0.9	-0.1	1.2	2.3	2.4	2.5	2.6
CPI inflation	4.5	2.8	2.4	1.7	1.6	1.6	1.8
Output gap	-3.6	-5.1	-5.3	-4.8	-4.4	-4.0	-3.7

[1]Output gap not published.

[2]Mode forecast based on market interest rates and the Bank of England's 'backcast' for GDP growth.

Table 3.5: Detailed summary of forecast

	Percentage change on a year earlier, unless otherwise stated						
	Outturn	Forecast					
	2011	2012	2013	2014	2015	2016	2017
UK economy							
Gross domestic product (GDP)	0.9	- 0.1	1.2	2.0	2.3	2.7	2.8
GDP Level (2011=100)	100.0	99.9	101.1	103.2	105.6	108.4	111.4
Nominal GDP	3.6	2.2	3.3	4.1	4.4	4.7	4.9
Output Gap (per cent of potential output)	- 2.7	- 3.1	- 3.5	- 3.3	- 3.0	- 2.5	- 1.9
Expenditure components of GDP							
Domestic demand	-0.4	0.5	0.9	1.9	2.1	2.5	2.7
Household consumption[1]	-0.9	0.5	0.9	1.6	1.8	2.4	2.9
General government consumption	0.2	2.4	-0.7	-1.4	-1.2	-2.1	-3.0
Fixed investment	-2.4	1.0	2.1	8.1	8.5	8.7	8.7
Business	2.9	3.8	4.9	8.1	10.2	10.1	9.5
General government[2]	-20.4	-9.2	-2.5	4.8	-3.0	-2.6	0.7
Private dwellings[2]	0.3	2.4	-1.1	9.5	10.0	10.0	9.7
Change in inventories[3]	0.3	-0.6	0.2	0.0	0.0	0.0	0.0
Exports of goods and services	4.5	0.1	3.1	4.5	5.1	5.5	5.4
Imports of goods and services	0.5	2.1	2.1	3.9	4.5	4.9	5.0
Balance of payments current account							
Per cent of GDP	-1.9	-4.0	-2.6	-2.3	-2.0	-1.6	-1.4
Inflation							
CPI	4.5	2.8	2.5	2.2	2.0	2.0	2.0
RPI	5.2	3.2	3.0	2.6	3.1	3.4	3.7
GDP deflator at market prices	2.7	2.3	2.0	2.0	2.0	2.0	2.0
Labour market							
Employment (millions)	29.2	29.5	29.6	29.7	29.9	30.2	30.4
Wages and salaries	2.5	3.3	2.7	3.2	4.5	4.8	4.9
Average earnings[4]	2.2	2.7	2.2	2.8	3.7	4.0	4.0
ILO unemployment (% rate)	8.1	8.0	8.2	8.2	8.0	7.6	7.1
Claimant count (millions)	1.53	1.59	1.66	1.69	1.63	1.53	1.43
Household sector							
Real household disposable income	-1.5	2.1	0.4	0.8	1.6	2.0	2.3
Saving ratio (level, per cent)	6.0	7.1	6.2	5.5	5.5	5.4	5.0
House prices	-1.0	1.4	0.7	2.5	3.8	4.0	4.0
World economy							
World GDP at purchasing power parity	3.9	3.2	3.5	4.2	4.5	4.6	4.7
Euro Area GDP	1.5	-0.4	0.0	1.1	1.4	1.7	1.9
World trade in goods and services	5.8	3.0	4.4	5.9	6.3	6.5	6.6
UK export markets[5]	6.0	2.7	4.3	5.5	5.8	6.0	6.1

[1] Includes households and non-profit institutions serving households

[2] Includes transfer costs of non-produced assets

[3] Contribution to GDP growth, percentage points

[4] Wages and salaries divided by employees

[5] Other countries' imports of goods and services weighted according to the importance of those countries in the UK's total exports

Table 3.6: Detailed summary of changes to forecast

	Percentage change on a year earlier, unless otherwise stated					
	Outturn			Forecast		
	2011	2012	2013	2014	2015	2016
UK economy						
Gross domestic product (GDP)	0.1	-0.9	-0.8	-0.7	-0.7	-0.4
GDP Level (2011=100)	0.0	-0.9	-1.7	-2.4	-3.2	-3.7
Nominal GDP	0.5	-1.1	-1.3	-1.1	-1.2	-0.9
Output Gap (per cent of potential output)	0.0	-0.4	-0.9	-1.2	-1.7	-2.0
Expenditure components of GDP						
Domestic demand	0.3	0.2	-0.6	-0.5	-0.7	-0.4
Household consumption[1]	0.0	0.0	-0.5	-0.8	-1.2	-0.6
General government consumption	-0.1	1.8	0.4	0.7	1.6	0.5
Fixed investment	-0.7	1.3	-4.1	-0.5	-0.4	0.0
Business	2.7	3.1	-1.5	-0.7	-0.1	0.0
General government[2]	-7.3	-4.2	1.1	4.7	-3.3	-1.2
Private dwellings[2]	-2.1	2.2	-11.6	-2.1	0.0	0.3
Change in inventories[3]	0.4	-0.5	0.2	0.0	-0.1	-0.1
Exports of goods and services	-0.3	-2.8	-2.2	-1.2	-0.3	0.2
Imports of goods and services	-0.2	0.6	-1.7	-0.8	-0.3	0.0
Balance of payments current account						
Per cent of GDP	0.6	-2.3	-1.3	-1.1	-1.1	-1.0
Inflation						
CPI	0.0	0.0	0.6	0.2	0.0	0.0
RPI	0.0	0.0	0.6	0.1	-0.5	-0.6
GDP deflator at market prices	0.4	-0.2	-0.5	-0.5	-0.5	-0.5
Labour market						
Employment (millions)	0.0	0.4	0.4	0.3	0.2	0.2
Wages and salaries	1.1	1.3	-0.8	-1.9	-1.1	-0.8
Average earnings[4]	1.0	0.1	-0.9	-1.6	-0.7	-0.6
ILO unemployment (% rate)	0.0	-0.7	-0.4	0.2	0.8	1.3
Claimant count (thousands)	2	-62	22	166	275	340
Household sector						
Real household disposable income	-0.2	1.9	-0.1	-1.1	-0.8	-0.6
Saving ratio (level, per cent)	-0.3	0.6	0.3	-0.1	0.3	0.4
House prices	-0.2	1.9	0.6	-0.1	-0.7	-0.5
World economy						
World GDP at purchasing power parity	0.1	-0.1	-0.7	-0.5	-0.4	-0.3
Euro Area GDP	0.0	-0.1	-1.1	-0.6	-0.4	0.0
World trade in goods and services	-0.5	-1.1	-2.0	-0.9	-0.5	-0.5
UK export markets[5]	-0.2	-1.0	-1.9	-0.8	-0.4	-0.3

[1] Includes households and non-profit institutions serving households

[2] Includes transfer costs of non-produced assets, which were excluded in previous forecasts

[3] Contribution to GDP growth, percentage points

[4] Wages and salaries divided by employees

[5] Other countries' imports of goods and services weighted according to the importance of those countries in the UK's total exports

4 Fiscal outlook

Introduction

4.1 This chapter:

- sets out the key economic and market determinants that drive the fiscal forecast (paragraphs 4.3 to 4.22);
- explains the effects of new policies announced in this Autumn Statement, and since the Budget in March, and reclassifications on the fiscal forecast (paragraphs 4.23 to 4.53);
- describes the outlook for public sector receipts, including a tax-by-tax analysis explaining how the forecasts have changed since March (paragraphs 4.54 to 4.107);
- describes the outlook for public sector expenditure, focusing in particular on the components of annually managed expenditure (paragraphs 4.108 to 4.170);
- describes the outlook for government lending to the private sector and other financial transactions (paragraphs 4.171 to 4.190);
- sets out the outlook for the key fiscal aggregates: public sector net borrowing, the current budget, the cyclically-adjusted current budget and public sector net debt (paragraphs 4.191 to 4.204); and
- provides a comparison with external forecasts (paragraphs 4.205 to 4.206).

4.2 Further breakdowns of receipts and expenditure and other details of our fiscal forecast are provided in the supplementary tables available on our website. The medium-term forecasts for the public finances in this chapter consist of an in-year estimate for 2012-13, which makes use of provisional ONS outturn data for April

to October, and then forecasts to 2017-18.[1] As in previous *Economic and fiscal outlooks*, this fiscal forecast:

- represents our central view of the path of the public finances. We believe that the outturns are as likely to be above the forecast as below it. We illustrate the uncertainties that are inherent in any fiscal forecast by using fan charts, sensitivity analysis and alternative economic scenarios;

- is based on announced Government policy on the indexation of rates, thresholds and allowances for taxes and benefits, and incorporates the impact of certified costings for all new policy measures announced by the Chancellor in his Autumn Statement; and

- focuses on fiscal aggregates that exclude the temporary effects of interventions in the financial sector.[2] The Government's fiscal mandate and supplementary target are defined in terms of these measures.

Economic determinants of the fiscal forecast

4.3 Our forecasts for the public sector finances are based on the economic forecasts presented in Chapter 3. Forecasts of tax receipts are particularly dependent on the path and composition of economic activity. And while much of public sector expenditure is set out in multi-year plans, large elements (such as social security and debt interest payments) are linked to developments in the economy. Table 4.1 sets out some of the key economic determinants of the fiscal forecast and Table 4.2 shows how these have changed since our forecast in March.

GDP and the output gap

4.4 Most economic forecasts focus on the outlook for real GDP, but it is the outlook for nominal GDP that matters most when forecasting the public finances. Nominal GDP is lower than in our March forecast in each year of the forecast period. As explained in Chapter 3, the downward revision to nominal GDP comes as a result of our forecast for lower real GDP growth and a downward adjustment to the GDP deflator. These changes to the forecast reduce the level of nominal GDP in 2016 by 4.7 per cent relative to our March forecast.

[1] Outturn data is consistent with the Public Sector Finances October 2012 Statistical Bulletin published by the Office for National Statistics and HM Treasury.

[2] Office for National Statistics, 2010, *Public sector finances excluding financial sector interventions*.

Table 4.1: Determinants of the fiscal forecast

	Percentage change on previous year unless otherwise specified						
	Outturn	Forecast					
	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
GDP and its components							
Real GDP	0.5	0.1	1.5	2.1	2.4	2.7	2.8
Nominal GDP (£ billion)[1]	1529	1564	1620	1689	1763	1848	1939
Nominal GDP[1]	3.3	2.3	3.6	4.2	4.4	4.8	4.9
Nominal GDP (centred end-March)	2.5	2.7	4.1	4.3	4.6	4.9	4.9
Wages and salaries[2]	2.4	3.7	2.5	3.5	4.6	4.8	4.9
Non-oil PNFC profits[2,3]	7.7	2.0	5.1	7.9	7.8	8.8	7.5
Non-oil PNFC net taxable income[2,3]	9.4	3.6	4.7	6.5	5.8	7.0	5.4
Consumer spending[2,3]	3.7	3.7	3.8	3.7	3.9	4.5	4.9
Prices and earnings							
GDP deflator	2.4	2.5	2.0	2.0	2.0	2.0	2.0
RPI (September)	5.6	2.6	3.1	2.7	3.1	3.4	3.7
CPI (September)	5.2	2.2	2.6	2.2	2.0	2.0	2.0
Whole economy earnings growth	2.6	2.6	2.2	3.0	3.9	4.0	4.0
Key fiscal determinants							
Claimant count (millions)[4]	1.57	1.60	1.68	1.68	1.61	1.50	1.40
Employment (millions)	29.2	29.6	29.6	29.8	30.0	30.2	30.5
VAT gap (per cent)	9.7	10.5	10.6	10.6	10.6	10.6	10.6
Financial and property sectors							
Equity prices (FTSE All-share index)	2903	2979	3102	3231	3376	3538	3711
HMRC financial sector profits[1,3,5]	-5.0	2.0	2.5	2.5	2.5	4.1	4.9
Financial sector net taxable income[1,3]	3.2	-2.4	6.7	5.6	3.6	6.0	5.6
Residential property prices[6]	-0.9	1.7	0.7	3.0	3.8	4.0	4.0
Residential property transactions (thousands)	914	945	1116	1225	1311	1388	1456
Commercial property prices[7]	4.4	-2.1	1.0	3.1	3.6	3.9	3.5
Commercial property transactions[7]	-2.8	-2.1	-4.4	1.2	2.8	4.4	5.2
Volume of share transactions	-10.2	-9.9	1.4	0.0	0.0	0.0	0.0
Oil and gas							
Oil prices ($ per barrel)[3]	111	112	106	102	98	95	92
Oil prices (£ per barrel)[3]	69.2	70.7	66.9	63.7	61.0	59.1	57.4
Gas prices (p/therm)	60.6	57.8	55.9	53.2	50.8	48.9	47.4
Oil production (million tonnes)[3,8]	51.9	45.6	45.1	44.7	44.4	44.1	43.8
Gas production (billion therms)[3,8]	16.1	14.2	14.2	14.0	13.9	13.8	13.7
Interest rates and exchange rates							
Market short-term interest rates (per cent)[9]	1.0	0.7	0.7	0.7	0.9	1.2	1.7
Market gilt rates (per cent)[10]	2.2	1.7	2.3	2.6	2.9	3.1	3.4
Euro/Sterling exchange rate	1.16	1.25	1.25	1.25	1.26	1.25	1.25

[1] Not seasonally adjusted
[2] Nominal
[3] Calendar year
[4] UK seasonally-adjusted claimant count
[5] HMRC Gross Case 1 trading profits
[6] Outturn data from Department for Communities and Local Government (CLG) property prices index
[7] Outturn data from HMRC information on stamp duty land tax
[8] Department for Energy and Climate Change (DECC) forecasts from 2012 available at www.og.decc.gov.uk
[9] 3-month sterling interbank rate (LIBOR)
[10] Weighted average interest rate on conventional gilts

Table 4.2: Changes to determinants since the March forecast

	Percentage change on previous year unless otherwise specified					
	Outturn			Forecast		
	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
GDP and its components						
Real GDP	0.0	-0.9	-0.8	-0.7	-0.7	-0.3
Nominal GDP (£ billion)[1]	8	-12	-32	-52	-75	-93
Nominal GDP[1]	0.4	-1.3	-1.2	-1.1	-1.2	-0.7
Nominal GDP (centred end-March)	-0.8	-1.6	-1.0	-1.2	-1.0	-0.5
Wages and salaries[2]	0.7	1.5	-1.6	-1.6	-1.0	-0.8
Non-oil PNFC profits[2,3]	-4.2	-2.7	-1.7	-1.6	-1.6	-0.5
Non-oil PNFC net taxable income[2,3]	-5.5	-3.2	-2.5	-0.8	-1.0	0.5
Consumer spending[2,3]	0.5	-0.1	-0.2	-1.0	-1.7	-1.1
Prices and earnings						
GDP deflator	0.1	-0.2	-0.5	-0.5	-0.5	-0.5
RPI (September)	0.0	-0.4	0.7	0.0	-0.6	-0.6
CPI (September)	0.0	-0.4	0.7	0.3	0.0	0.0
Whole economy earnings growth	0.5	0.2	-1.3	-1.3	-0.6	-0.6
Key fiscal determinants						
Claimant count (millions)[4]	-0.01	-0.07	0.07	0.19	0.30	0.34
Employment (millions)	0.0	0.5	0.4	0.3	0.2	0.2
VAT gap (per cent)	0.0	1.2	1.3	1.3	1.3	1.3
Financial and property sectors						
Equity prices (FTSE All-share index)	-14	-159	-188	-234	-285	-328
HMRC financial sector profits[1,3,5]	5.0	-1.7	-4.3	-2.9	-1.5	0.7
Financial sector net taxable income[1,3]	9.2	-4.8	-1.5	-1.5	-3.4	-0.5
Residential property prices[6]	-0.2	2.4	0.2	-0.4	-0.7	-0.5
Residential property transactions (thousands)	22	66	71	18	15	12
Commercial property prices[7]	1.5	-3.0	-3.5	-2.4	-1.5	-0.2
Commercial property transactions[7]	0.5	-1.3	-6.2	-3.5	-3.0	-1.5
Volume of share transactions	5.8	-12.3	-0.9	-2.8	-3.1	-3.0
Oil and gas						
Oil prices ($ per barrel)[3]	0.0	-5.9	-5.3	-3.3	-1.9	-0.8
Oil prices (£ per barrel)[3]	0.0	-3.7	-3.3	-2.2	-1.5	-0.8
Gas prices (p/therm)	0.0	-5.6	-7.7	-6.4	-5.4	-4.7
Oil production (million tonnes)[3,8]	0.0	-2.7	-2.6	-2.5	-2.2	-0.6
Gas production (billion therms)[3,8]	0.0	-1.9	-1.7	-1.6	-1.7	-1.1
Interest rates and exchange rates						
Market short-term interest rates (per cent)[9]	0.0	-0.3	-0.2	-0.3	-0.8	-1.1
Market gilt rates (per cent)[10]	0.0	-0.5	-0.6	-0.6	-0.6	-0.6
Euro/Sterling exchange rate	0.00	0.07	0.07	0.07	0.09	0.08

[1] Not seasonally adjusted
[2] Nominal
[3] Calendar year
[4] UK seasonally-adjusted claimant count
[5] HMRC Gross Case 1 trading profits
[6] Outturn data from Department for Communities and Local Government (CLG) property prices index
[7] Outturn data from HMRC information on stamp duty land tax
[8] Department for Energy and Climate Change (DECC) forecasts available at www.og.decc.gov.uk
[9] 3-month sterling interbank rate (LIBOR)
[10] Weighted average interest rate on conventional gilts

4.5 The 'structural', or cyclically-adjusted, component of net borrowing and the current budget balance is determined by the size of the output gap. A negative output gap implies that the economy is operating below capacity and we would therefore expect tax revenues to increase and spending to shrink automatically as the economy returns to its potential level. Our latest estimate of the output gap is significantly wider than we thought in March in each year of the forecast. We assume that the output gap is -2.7 per cent in the third quarter of 2012 and is expected to widen to -3.5 per cent in 2013, before narrowing to -1.9 per cent in 2017.

Income and expenditure

4.6 The composition of GDP growth is also very important for the fiscal forecast. For example: labour income is generally taxed at higher effective rates than company profits; indirect tax receipts, such as VAT, are driven by movements in household consumption; and, stronger business investment will increase capital allowances, reducing corporation tax receipts.

4.7 The most important element of labour income is wages and salaries, which are determined by employment and earnings. We now expect growth in wages and salaries to be significantly lower than in our March forecast. Lower earnings growth is the main cause of the deterioration, reflecting the slower pace of recovery in the wider economy than previously assumed and lower growth of the GDP deflator over the medium term. This is slightly offset by higher expected employment levels, reflecting the recent resilience of the labour market. Wages and salaries are expected to be around £27 billion lower in total in 2016-17 than we forecast in March.

4.8 Nominal consumer spending, the main driver of VAT and other indirect receipts, is also expected to grow at a slower pace than expected in March. Consumer spending is now expected to grow at an average rate of 4.2 per cent between 2012-13 and 2017-18.

4.9 Company profits are an important determinant of corporation tax receipts. Profits are expected to grow at a slower pace than we forecast in March, again reflecting the revision to the pace of the overall recovery. Non-financial company profits are expected to grow at a moderate pace in the early years of the forecast period, before accelerating to growth of around 8 per cent per year from 2014-15 as GDP growth picks up. Financial company profits are expected to remain subdued for longer than non-financial company profits, as we assume that regulatory and structural reforms in the sector continue to constrain profits in the later years of the forecast.

4.10 Net taxable income is calculated by adjusting our company profits forecast for estimates of other sources of corporate income and deductions relating to losses, allowances and reliefs. Reflecting the changes to our profits forecast, net taxable income is considerably lower across both financial and non-financial companies than in our March forecast. For financial companies net taxable income grows more quickly than profits from 2013-14, reflecting higher income from increases in interest rates assumed in the later years of the forecast. For industrial and commercial companies, net taxable income grows more slowly than profits from 2013-14 onwards as companies offset profits with losses carried forward and increasingly make use of capital allowances.

Inflation

4.11 The CPI measure of inflation is used to index most tax rates, allowances and thresholds and to uprate benefits and public sector pensions. Our forecast is for CPI inflation to fall back to target over the medium term, remaining close to 2 per cent from 2015-16 onwards. Our forecast of CPI inflation for the current financial year is slightly lower than in our March forecast, but is slightly higher next year due to a bigger-than-expected contribution from tuition fee increases, announced rises in domestic energy prices and some smaller effects from the rises in food commodity prices.

4.12 RPI inflation determines the interest paid on index-linked gilts and is used to revalorise excise duties. RPI inflation is expected to follow a similar path to CPI inflation over the forecast period, although the effect of lower mortgage interest payments implied by movements in the yield curve since March, mean that RPI is also lower in the later years of the forecast.

4.13 Our forecast for the growth of the GDP deflator has been revised down as a result of our medium and long-term analysis of the components of the measure. We now assume the GDP deflator will grow by 2 per cent a year in the medium-term, 0.5 per cent lower than we assumed in March.

Equity markets

4.14 Equity prices are a significant determinant of capital gains tax, inheritance tax and stamp duty receipts. Equity prices are assumed to rise from their present level in line with nominal GDP. The present level is determined by the average of the closing price of the FTSE All-Share index over the ten working days ending 23 November 2012. Equity prices are expected to be lower than in our March forecast, reflecting the lower starting point and slower growth in nominal GDP.

4.15 The volume of taxable share transactions is an important determinant of receipts from stamp duty on shares. The path for the volume of share transactions is

expected to be lower in the near term, reflecting much lower volumes of trades reported to HMRC within the current financial year. Thereafter, we assume these are flat through the forecast period.

Property market

4.16 The residential property market is a key driver of receipts from stamp duty land tax and inheritance tax. Residential property prices in 2013 are assumed to grow in line with the median of independent forecasts, which is currently higher than our March forecast. House prices are then expected to rise in line with average earnings, which have resulted in a slightly lower profile in later years of the forecast.

4.17 The level of residential property transactions remains much lower than its pre-crisis peak, but has held up slightly better in recent months than we expected in our March forecast. The Funding for Lending Scheme should help more first-time buyers into the market and other new government schemes aim to improve supply of residential property. Our current forecast reflects these measures. We forecast a pick-up in transactions in 2013-14 and 2014-15 and slightly higher levels than we forecast in March. Thereafter as in March we assume transactions converge gradually to a long-run average rate of turnover.

4.18 Our outlook for the commercial property market is weaker than in our March forecast. Commercial property prices are forecast to decline slightly over 2012-13 before showing modest growth over the remainder of the forecast period, in line with our forecast for wider economic growth. Commercial property transactions are expected to be weak in the near term, in line with the declines seen in recent outturn data. Transactions are expected to continue to decline through to the end of 2013-14, before increasing in each year thereafter.

Oil and gas sector

4.19 Oil prices are assumed to move in line with the prices implied by futures markets. For our forecast we take an average of the futures curve over the ten working days ending 23 November 2012. Oil prices fall to lower levels than assumed in March in the short term, but are at similar levels to the March forecast by the end of the forecast period. Gas prices are assumed to follow the trend in oil prices, with a six month lag, and are therefore also assumed to be lower across the forecast period.

4.20 Oil and gas production forecasts are based on the central projection published by the Department for Energy and Climate Change (DECC). In 2012 oil and gas production is expected to fall by 12 per cent due in part to the Elgin gas leak and high levels of maintenance. Oil production is then expected to decline by around

1 per cent a year across the remainder of the forecast. Our gas production growth rate assumptions are similar to those for oil.

Interest rates

4.21 We use the 3-month sterling interbank rate as a benchmark for our short-term interest rate determinant. Our forecast incorporates the average forward rates for the ten working days to 23 November 2012. The futures curve is lower than in March in all years across the forecast period.

4.22 Our forecast assumes gilt rates move in line with market expectations based on the average of the rates prevailing over the ten days up to and including 23 November 2012. Relative to our March assumptions, gilt rates are lower in every year of the forecast period.

Policy announcements, reclassifications and risks

4.23 The Government publishes estimates of the direct impact of tax and spending policy decisions on the public finances in its Autumn Statement policy decisions table. We provide independent scrutiny and certification of these costings and explain if we agree with them. If we disagree, we use our own estimate of costings in our forecast. We are also responsible for assessing any indirect effects of policy measures on the economic forecast. These are discussed in Box 3.3 in Chapter 3. We also note any significant policy commitments that are not quantifiable at the current time as risks to the fiscal forecast.

4.24 In this section we also explain the impact of any statistical reclassifications by the ONS that have a significant effect on our forecasts. Box 4.1 sets out the impact of ONS's decision to reclassify Bradford & Bingley plc (B&B) and Northern Rock (Asset Management) (NRAM) to central government.

Direct effect of new policy announcements on the public finances

4.25 Annex A reproduces the Treasury's table of the direct effect on PSNB of policy decisions in the Autumn Statement or announced since the Budget in March 2012. The OBR has endorsed all of the tax and AME expenditure costings in the Treasury's table as being reasonable central estimates of the measures themselves. As we explain in more detail in our annex to the Treasury's *Autumn Statement 2012 policy costings* document, a number of these costings are highly uncertain, in particular the announcements on CGT relief: employee shareholder status, those measures which interact with universal credit, and the estimated proceeds from the spectrum auction.

Table 4.3: Summary of the impact of policy measures

	Forecast					
	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Effect of receipts measures	-0.9	0.2	-2.4	-0.9	0.3	0.3
of which:						
Income tax and NICs	0.1	-0.6	-0.5	1.2	1.9	1.9
Onshore corporation tax	-0.3	-0.6	-0.9	-0.9	-0.7	-0.6
Fuel duty	-0.9	-1.6	-1.6	-1.7	-1.4	-1.5
Bank levy	0.0	0.5	0.5	0.5	0.5	0.5
UK-Swiss Tax	0.3	3.1	0.6	0.9	0.2	0.2
Other	-0.1	-0.7	-0.6	-0.9	-0.2	-0.2
Effect of expenditure measures[1]	4.8	-1.1	1.5	0.0	0.0	4.6
of which:						
Current DEL	1.4	0.7	2.6	-3.6	-4.2	0.1
Current AME	0.0	0.4	1.8	3.6	4.2	4.6
Capital DEL	3.5	-2.2	-2.9	0.1	0.3	0.4
Capital AME	0.0	0.0	0.0	-0.1	-0.3	-0.4
Total direct effect of policy measures on PSNB	**4.0**	**-0.9**	**-0.9**	**-0.9**	**0.3**	**4.9**
Total direct effect of policy measures on current balance	**0.5**	**1.3**	**2.0**	**-0.9**	**0.3**	**4.9**
Inclusion of APF transfers[2]	11.5	12.3	10.6	8.0	6.6	-0.3
Financial transactions	0.0	-0.5	-0.9	-0.6	-0.1	0.0
of which:						
Lending by UK Export Finance	0.0	-0.3	-0.3	-0.3	0.1	0.1
Business Bank	0.0	-0.1	-0.3	-0.3	-0.3	-0.2

[1]Expenditure categories are equivalent to PSCE in RDEL, PSCE in AME, PSGI in CDEL and PSGI in AME in Table 4.18

[2] This is not shown in the Treasury's policy decisions table

Note: This uses the Treasury scorecard convention that a positive figure means an improvement in the PSNB, CGNCR and PSND

4.26 The top section of Table 4.3 summarises the Treasury's policy costings table. A positive figure means an improvement in PSNB, i.e. higher receipts or lower expenditure. The Autumn Statement measures are broadly neutral in their impact on the public finances across the first four years of the forecast horizon, with the revenue raised from the spectrum auction in 2012-13 slightly greater than the sum of the small fiscal loosenings in the following three years. In 2017-18, the current fiscal mandate year, the decision to roll forward the total spending assumption for a further year is shown as a fiscal tightening of £4.6 billion against the Treasury's chosen baseline of spending remaining flat in real terms.

4.27 The policy measures lead to changes to both expenditure and receipts. Where significant the effects are discussed in the tax and expenditure sections of this chapter. The key changes are:

- in total the measures reduce tax receipts in 2014-15 and 2015-16 but increase revenues by small amounts at the end of the forecast period. The key tax measures which raise revenue are: the restriction in the pensions lifetime allowance to £1.25 million; the increases to the Bank Levy; slower growth in the higher rate threshold of income tax than would be implied by indexation; and the yield from the UK-Swiss tax agreement. The main measures which reduce revenue are: the increase in the personal allowance to £9,440 in 2013-14; the cut in the corporation tax rate and the temporary increase in the additional investment allowance; and the cancellation of the January 2013 fuel duty increase and the move of future increases from April to September. Apart from the UK-Swiss agreement, the revenue raisers take longer to come into full effect than the tax giveaways; and

- spending is lower in 2012-13 primarily because the spectrum auction proceeds reduce capital spending. Measures increase spending by £1.1 billion in 2013-14 as higher capital spending is only partially offset by reductions to social security payments, tax credits and departmental resource expenditure plans. In 2014-15, these reductions are larger so the measures overall reduce spending by £1.5bn. In 2015-16 and 2016-17, because the Treasury's overall spending assumption is unchanged the reductions in AME spending are balanced by increases in implied DEL. In 2017-18, the decision to roll forward the spending assumption for a further year reduces overall expenditure by £4.6 billion against the Treasury's chosen baseline of a real terms freeze.

4.28 The UK-Swiss Agreement, concluded in 2011, has been included in the policy decision table on the basis that it has passed through the Swiss and UK Parliaments and is due to come into force on 1 January 2013. The final stage of the ratification process is expected to be concluded shortly, but there remains a possibility that the Swiss government will have to hold a referendum on the agreement. There is therefore a risk that the revenues included in this forecast will not be realised.

4.29 We have certified a number of costings included in the Treasury's policy decisions table that relate to HMRC operational measures. However, there have been, and will continue to be, wider operational changes within HMRC and across government that are likely to affect the public finances. For example, reductions in administrative spending in other areas of HMRC could lead to less tax revenue being collected. We have not been presented with costings for such broader changes. Therefore, taken in isolation the costings for the specific operational changes in the Treasury's policy decision table are potentially unrepresentative of the impact of wider operational changes across government.

4.30 Table 4.3 also shows the impact of lending through the Business Bank and UK Export Finance, which are classified as financial transactions and so do not affect PSNB but do affect the Central Government Net Cash Requirement (CGNCR) and PSND.

4.31 Table 4.3 also shows our estimate of the effect on PSNB of the Chancellor's decision to change the treatment of the proceeds of the Asset Purchase Facility. This is not shown on the Treasury's policy decisions table but has significant fiscal consequences described in the next section.

Asset purchase facility

4.32 On 9 November the Chancellor announced that the excess cash held at the Bank of England's Asset Purchase Facility (APF) will be transferred to the Exchequer. This decision means that the cash surpluses and deficits generated by the Bank of England's quantitative easing (QE) facility will be reflected in the public finances on an ongoing basis, rather than as a one-off profit or loss to the Exchequer when QE has been fully unwound and the facility closed.

4.33 Capturing the impact quarter by quarter, rather than at some indeterminate date in the future, is more transparent than the current approach. The decision will not have a significant impact on the eventual net profit or loss to the Exchequer from QE, but it will mean that net borrowing will be lower than it otherwise would have been in the near term and then higher as and when monetary policy tightens.

4.34 To quantify the impact of this decision we first have to judge how the ONS is likely to treat the various financial flows in the National Accounts and public finance statistics. For the purposes of this forecast we assume that:

- the £23.8 billion that had accumulated in the APF by the end of 2011-12 (which will be transferred to the Exchequer through 2013-14) will be treated as a financial transaction rather than revenue. So this would reduce public sector net debt, but neither net borrowing nor the current budget deficit;

- all other net annual transfers from the APF to the Exchequer will be treated as central government receipts, thereby reducing the current budget deficit, net borrowing and net debt. (Alternatively, the ONS could treat these transfers as financial transactions, in which case they would reduce the government's cash requirement and net debt, but would not reduce either the current budget deficit or net borrowing); and

- net annual transfers from the Exchequer to the APF to cover losses will be treated as capital grants (and therefore capital expenditure). So they will increase net borrowing and net debt, but not the current budget deficit.

(Alternatively, the ONS could treat these payments as financial transactions, or as subsidies, in which case they would count as current expenditure and would increase the current budget deficit as well as net borrowing and net debt.)

4.35 The ONS will make a definitive judgement on the treatment of these flows in January. If its chosen treatment differs from the assumptions that we have made here then we will update our analysis accordingly in our next forecast.

4.36 Overall, as a result of these transfers, the current budget deficit, net borrowing and net debt will be lower in the near term than they otherwise would have been, as the Treasury receives the stock of cash and the future flow of coupon payments on the gilts held by the APF, minus the interest that the APF has to pay the Bank for the loan that allowed it to purchase them.

4.37 But as monetary policy tightens, rises in Bank rate will reduce this stream of transfers to the Exchequer. And as gilts redeem, or are sold as QE is unwound, the APF will also face capital losses as the gilts are sold for less than their purchase price. This will raise net borrowing and net debt over this period, as the APF moves into deficit and the Exchequer covers these losses.

4.38 To estimate the size of these flows we have to make some assumption about when QE will be unwound and how quickly. Our central forecast traditionally assumes that Bank rate follows market expectations, but there is no equivalent guide to expectations for the path of QE.

4.39 The most recent Treasury poll suggested that forecasters expected QE purchases to rise by another £40 billion to £415 billion by the end of 2013. But as the APF decision will itself have an effect on monetary conditions similar to additional QE, it is not clear that these forecasters will still expect a significant further increase once all of them have had chance to take the APF decision on board. And even if we could be confident of the amount of additional QE that forecasters expect, there are no comparable polls asking their expectations of the time and pace of unwinding. We therefore assume that:

- QE purchases do not rise above their current level and that QE begins to be unwound once Bank Rate has risen to 1 per cent, with sales evenly paced thereafter;[3]

[3] This seems broadly consistent with the Governor's statement in his Mansion House speech in June 2010 that monetary policy tightening: *"When it comes…is most likely to be through a rise in Bank Rate with asset sales being conducted later in an orderly programme over a period of time, leaving Bank Rate as the active instrument"*.

- for redemptions prior to winding down, the Bank reinvests sums equal to the original purchase price. Redemptions would not be reinvested once sales begin (so the actual drawdown of QE will be larger in any given period when redemptions occur);

- as QE begins to be unwound, monetary policy is tightened broadly equally between Bank Rate rises and QE withdrawal over the remainder of the forecast period. Consistent with Bank of England analysis, this implies that roughly £100 billion of QE is unwound for each 100 basis point rise in Bank Rate;[4] and

- that this path is consistent with market expectations and has therefore been priced into the gilt yield curve.

4.40 We also assume that the effective interest rate on the purchased gilts exceeds Bank Rate throughout this extended forecast horizon.

4.41 Given the latest Bank Rate and redemption profiles, our assumptions imply sales of £10 billion per quarter from the middle of 2016. Losses at the point of sale only arise towards the back-end of the current five-year *EFO* forecast horizon. Gilts were typically bought at a premium, so will necessarily incur a capital loss if they are held to redemption. More generally, the longer the gilts are held the bigger the capital losses as more of the premium unwinds.

4.42 Table 4.4 sets out the implications for our central fiscal forecast. The net flow of income from the APF to the Treasury peaks at around £12.3 billion next year, falling gradually thereafter and turning negative from 2017-18. This pattern of net flows translates directly into changes in net borrowing, reducing borrowing between 2012-13 and 2016-17, but increasing it from 2017-18 to 2022-23. Because we assume that the flows from the Treasury to the APF will be classified as capital grants rather than current spending, the APF surpluses will reduce the current budget deficit through to 2016-17 but the subsequent APF deficits will have no impact.

4.43 In total, under this set of assumptions, the Exchequer is projected to receive around £73 billion up to 2016-17, but then pay out around £18 billion over the following years. In the counterfactual where the Government had not decided to change the treatment of these flows, there would have been no transfers until the end of the scheme in 2022-23 at which point a single payment of around £55 billion would have been made to the Exchequer – presumably treated as a

[4] Joyce et al, Bank of England (2012), estimated that the initial £200 billion of QE may roughly have been on a par with a 150 to 300 basis point cut in Bank Rate.

financial transaction. Under either scenario, the eventual net direct impact of QE would be to reduce PSND by roughly 2 per cent of GDP in 2022-23 – a small amount relative to the uncertainty surrounding any projections of PSND over this 10 year horizon.

Table 4.4: Projected APF flows and the impact on the fiscal forecast

	£ billion										
	up to12-13	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23
Income		14.0	14.4	14.5	14.6	14.0	11.7	9.0	6.5	4.2	2.2	0.3
Interest payments		-2.0	-1.9	-1.9	-2.6	-3.9	-4.7	-4.6	-4.0	-2.9	-1.6	-0.2
Redemptions		-0.5	-0.3	-2.0	-4.0	-1.6	-4.2	-2.1	-2.0	-0.3	-2.6	0.0
Sales		0.0	0.0	0.0	0.0	-1.8	-3.2	-3.8	-4.4	-4.9	-4.6	-2.0
Net flow	23.8	11.5	12.3	10.6	8.0	6.6	-0.3	-1.6	-3.8	-3.9	-6.6	-2.0
Cumulative flow	23.8	35.3	47.5	58.2	66.2	72.8	72.5	70.9	67.1	63.2	56.6	54.7
Receipts		11.5	12.3	10.6	8.0	6.6	0.0	0.0	0.0	0.0	0.0	0.0
Capital spending		0.0	0.0	0.0	0.0	0.0	0.3	1.6	3.8	3.9	6.6	2.0
Net borrowing		-11.5	-12.3	-10.6	-8.0	-6.6	0.3	1.6	3.8	3.9	6.6	2.0
Current budget		11.5	12.3	10.6	8.0	6.6	0.0	0.0	0.0	0.0	0.0	0.0
Net cash requirement[1]		-11.5	-32.0	-11.1	-8.6	-8.1	-2.7	0.8	4.1	4.5	6.2	3.6
Public sector net debt[1]		-11	-43	-55	-63	-71	-74	-73	-69	-64	-58	-55
Memo: Illustrative effect on debt interest payments		*0.0*	*-0.5*	*-1.2*	*-1.6*	*-1.9*	*-2.3*	*-2.3*	*-2.3*	*-2.1*	*-1.9*	*-0.6*
Memo: Per cent of GDP:												
Net borrowing		*-0.7*	*-0.8*	*-0.6*	*-0.5*	*-0.4*	*0.0*	*0.1*	*0.2*	*0.2*	*0.3*	*0.1*
Current budget		*0.7*	*0.8*	*0.6*	*0.5*	*0.4*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Net debt		*-0.7*	*-2.6*	*-3.2*	*-3.5*	*-3.8*	*-3.7*	*-3.5*	*-3.1*	*-2.8*	*-2.4*	*-2.2*
Memo: Fiscal aggregates excluding APF (per cent of GDP):												
Net borrowing		*5.9*	*6.9*	*5.8*	*4.6*	*3.0*	*1.6*					
Current budget		*-6.4*	*-5.3*	*-4.3*	*-3.3*	*-1.8*	*-0.4*					
Net debt		*75.4*	*79.4*	*82.1*	*83.4*	*82.9*	*81.0*					

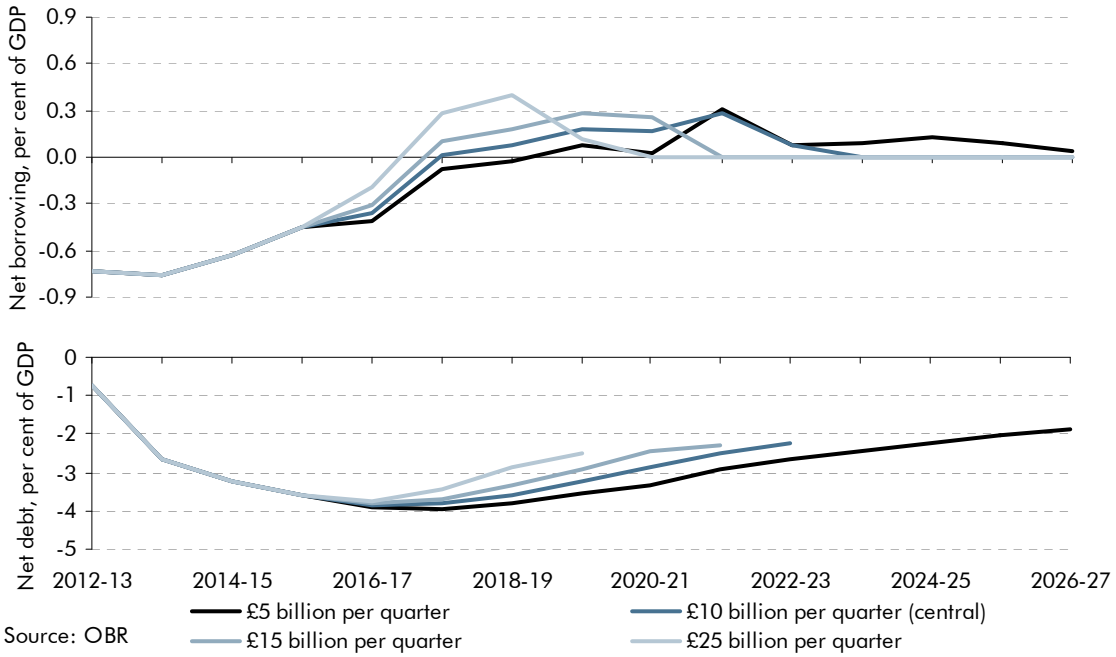
[1] As payments will usually be made in the following quarter to the one they relate to, the effects on the net cash requirement and net debt will occur with a small lag.

4.44 As the overall transfer to the Exchequer is expected to be positive, debt interest costs will be lower over this projection period. But the Government is now likely to issue fewer gilts in the near term and more in the longer term than it otherwise would have done, leaving it more exposed to future yield curve movements. As gilt rates are expected to rise, debt interest payments will be higher beyond the horizon presented in this projection, possibly outweighing lower costs in the preceding years.

4.45 It is important to emphasise that there is huge uncertainty about the timing and pace of QE unwinding and our assumptions should be regarded as a way of illustrating the potential fiscal impact of the APF decision rather than as a firm prediction of how the Bank of England is likely to behave. It is certainly not based on any guidance from the Bank regarding its plans.

4.46 Chart 4.1 shows that unwinding QE faster than in our central projection would mean that losses were recognised earlier and that the resulting negative impact on net borrowing would be earlier and more concentrated. But this would have only a relatively small effect on the overall gross transfers between the Exchequer and the APF and the eventual impact on net debt.

Chart 4.1: APF flows assuming alternative sales levels per quarter

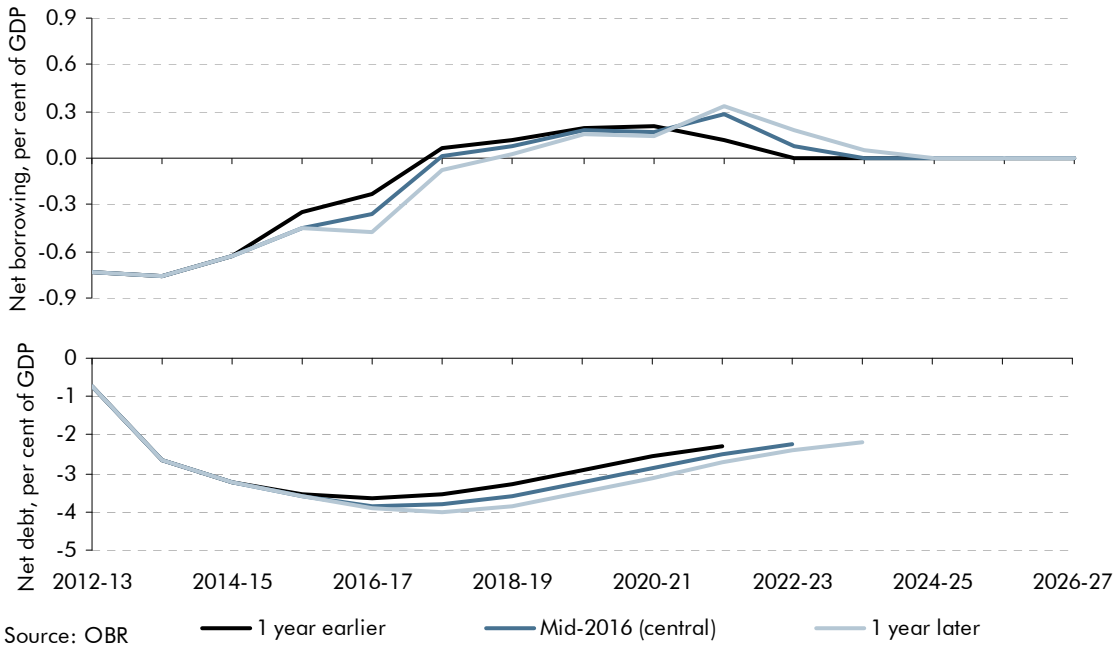


Source: OBR

4.47 If the unwinding of QE was to begin earlier than in our central projection, gross transfers both to and from the Exchequer would be smaller than in the central projection. Conversely, unwinding later would result in larger flows in both directions and a larger net flow to the Exchequer in total (Chart 4.2). Again the eventual overall impact on net debt would be little affected.

4.48 Our central projection assumes that gilt rates move in line with current market expectations. However, gilt prices would be lower at the point of sale, and therefore capital losses greater, if gilt rates were to turn out higher than current market expectations. This may be the case if, for example, the withdrawal of QE has not been fully priced into the markets, or if demand for safe assets falls as economic uncertainty recedes.

Chart 4.2: APF flows assuming QE begins to unwind over different periods

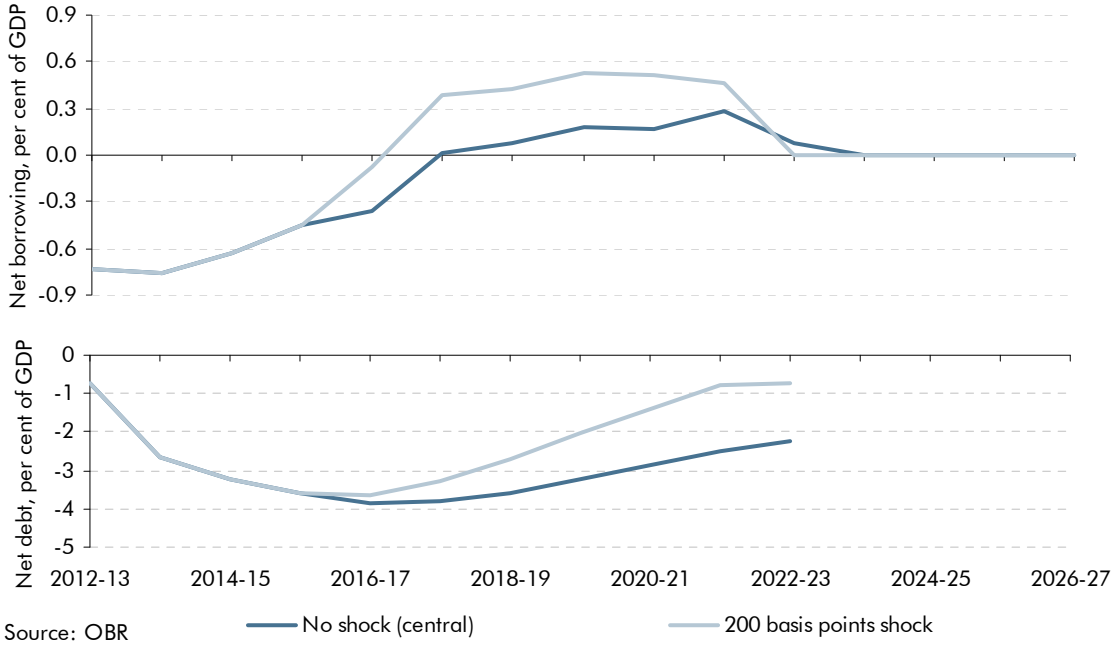


Source: OBR

4.49 Chart 4.3 shows the impact on net borrowing and net debt if gilt rates rise by 200 basis points when the unwinding of QE commences. An earlier shock would have broadly the same impact, as the effects only become apparent as gilts are sold. As sales commence, payments from the Exchequer to the APF would be significantly larger than in our central case.

4.50 In the scenario where gilt rates rise by 200 basis points, the Exchequer would receive £68 billion up to the end of 2016-17, only to pay back more than £50 billion over the following five years. This would reduce the eventual net direct reduction in PSND arising from QE from 2.2 per cent of GDP in 2022-23 in our central forecast to 0.7 per cent of GDP. Needless to say, this difference is dwarfed by the uncertainty surrounding any projections of PSND over this time horizon.

Chart 4.3: Flows assuming alternative gilt rate paths



Source: OBR

Currently unquantifiable policy commitments

4.51 Consistent with the *Charter for Budget Responsibility*, our projections do not include the impact of policies where there is insufficient detail or certainty of implementation to quantify the impact and allocate it to particular years. Where significant, these are noted as fiscal risks:

- the Government has made proposals on **minimum alcohol pricing** which are now subject to a period of consultation. As no final decisions have been taken we have not included an estimate of the impact in our central forecast. If the policy is confirmed there is likely to be an impact on our forecast of inflation, alcohol duties and VAT; and

- we only include the impact of **asset sales** in our medium-term forecasts once sufficiently firm details are available of the nature, size and timing of the transactions for the effects to be quantified with reasonable accuracy. In this forecast the details of the auction of spectrum are now sufficiently firm to allow us to include an estimate of the proceeds in our central forecast. No other substantive announcements have been made since the March *EFO* that would allow us to quantify the effects of other proposed sales with reasonable accuracy.

4.52 There are both upside and downside risks to the forecast from these policies. If the government was to sell some more of its financial assets, this would reduce

PSND initially, but the impact on net borrowing would depend on the future income flows associated with the assets. At current market prices, as set out in Box 4.4, the sale of the public sector banks would lead to a significant loss to the taxpayer.

4.53 In previous *EFO*s we have identified the Coalition Agreement's long-term objective to raise the personal allowance to £10,000 as a specific fiscal risk, on the grounds that additional policy action would be required to achieve it within our forecast horizon. Following the Autumn Statement announcement of an additional increase in the allowance to £9,440 in 2013-14, the conventional assumption that the allowance will thereafter be uprated in line with inflation would on our current forecast take it to £10,000 in 2015-16. These figures would change if our inflation forecast changes in future *EFO*s and the Government could, of course, make further policy announcements to reach £10,000 more quickly or slowly.

Box 4.1: Reclassification of Bradford & Bingley plc and Northern Rock

During the financial crisis, both Bradford & Bingley (B&B) and Northern Rock (Asset Management) (NRAM) were transferred to public ownership (in the case of NRAM, originally as part of Northern Rock). To date, neither bank has been included by the ONS in the fiscal aggregates that exclude the temporary effects of the recent financial interventions, which we are required to forecast.

Following revised international guidance, the ONS has announced that it will reclassify both bodies into the central government sector, as they are closed to new business and will be unwound over time. The reclassification will take effect from January 2010 and July 2010 respectively, and is expected to be implemented in the monthly public sector finance statistics in early 2013. The decision has two effects on our forecasts.

First, flows between the banks and the Exchequer will now net off within the central government sector. Public sector net debt (ex) will rise, because government loans to these entities will no longer count as liquid assets of the public sector and be netted off against gross debt. Similarly, interest paid to the government on these loans will no longer count as revenue and repayments of principal will not reduce the government's cash requirement. These effects are shown in Table A. The figures are consistent with the banks' latest business plans, based on their own economic forecasts.

Table A: The effect of cancelling intra-sector flows

	£ billion					
	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Receipts	-0.7	-0.6	-0.5	-0.6	-0.8	-0.6
Current expenditure	0.1	0.0	0.0	0.0	0.0	0.0
Net investment	0.0	0.0	0.0	0.0	0.0	0.0
Public sector net borrowing	0.7	0.6	0.5	0.6	0.8	0.6
Current budget	-0.7	-0.6	-0.5	-0.6	-0.8	-0.6
Public sector net cash requirement	3.8	3.6	4.0	3.9	3.3	5.2
Public sector net debt	43	40	37	33	31	26
Memo: PSND as a per cent of GDP	*2.7*	*2.4*	*2.1*	*1.8*	*1.6*	*1.3*

Second, the banks' external borrowings and debt will now also be included in the public sector net borrowing ex and net debt ex measures. Table B illustrates these additional effects. The treatment of particular income and spending streams is yet to be decided by the ONS. We assume for the purposes of this forecast that:

- receipts will increase as the banks accrue income, mainly through mortgage interest payments;
- current expenditure will be higher as the banks' running costs are included;

- capital expenditure will be higher due to loan write-offs;
- public sector net borrowing will be lower over the forecast period, as the additional receipts outweigh these costs; and
- public sector net debt will be higher throughout the forecast period, with the impact declining over time. PSND captures total liabilities, but only subtracts liquid assets – which do not include long-term assets like mortgages. The mortgage books are now closed and being run down over time, so the liabilities will fall as principal repayments are made.

Table B: Additional effects on the forecast

	£ billion					
	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Receipts	2.8	2.5	2.4	3.0	3.5	3.3
Current expenditure	1.1	0.7	0.8	1.1	1.2	1.1
Net investment	0.6	0.7	0.6	0.5	0.4	0.4
Public sector net borrowing	-1.1	-1.1	-1.0	-1.4	-1.9	-1.8
Current budget	1.7	1.8	1.6	1.9	2.3	2.2
Public sector net cash requirement	-1.2	-1.1	-1.0	-1.4	-1.9	-1.8
Public sector net debt	25	22	20	16	11	8
Memo: PSND as a per cent of GDP	*1.6*	*1.3*	*1.1*	*0.9*	*0.6*	*0.4*

Table C illustrates the overall impact on the forecast. In Box 4.4 we consider the total cost of the financial sector interventions, including those in support of B&B and NRAM.

Table C: Overall effect on the fiscal forecast

	£ billion					
	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Receipts	2.1	1.9	1.9	2.4	2.8	2.8
Current expenditure	1.1	0.7	0.8	1.1	1.2	1.1
Net investment	0.6	0.7	0.6	0.5	0.4	0.4
Public sector net borrowing	-0.4	-0.5	-0.4	-0.8	-1.1	-1.3
Current budget	1.0	1.2	1.1	1.3	1.5	1.6
Public sector net cash requirement	2.6	2.5	3.0	2.5	1.5	3.3
Public sector net debt	68	62	56	50	42	34
Memo: PSND as a per cent of GDP	*4.3*	*3.8*	*3.3*	*2.7*	*2.2*	*1.7*

Public sector receipts

4.54 Table 4.5 summarises our central forecast for the major taxes as a per cent of GDP. Table 4.6 shows our detailed forecast for individual taxes and other receipts, and Table 4.7 shows how our forecast has changed since March.

4.55 Public sector current receipts rise sharply as a proportion of GDP in 2012-13 and are then broadly flat until 2016-17, before dropping back in 2017-18. This fall in 2017-18 largely reflects changes in the level of non-tax receipts mainly due to the impact of the APF proceeds on interest and dividend receipts. National Accounts taxes follow a broadly flat profile from 2013-14 onwards, only varying between 35.8 and 36.0 per cent of GDP.

4.56 Within this overall profile the following receipts are expected to rise as a share of GDP over the forecast period:

- income tax and NICs, reflecting policy changes and the effects of fiscal drag in the later years of the forecast. Once earnings start to rise faster than tax thresholds and allowances, people will find more of their income taxed at higher rates;
- capital taxes, mainly reflecting increases in equity prices and residential property transactions; and
- other taxes, particularly in 2013-14. This reflects tax from the UK-Swiss agreement, the introduction of the carbon price floor and the rise in bank levy rates.

4.57 The following receipts are expected to fall as a share of GDP:

- oil and gas revenues, due to a trend decline in production, continued high levels of capital and operating expenditures that offset tax liabilities and a decline in oil prices;
- fuel duties, reflecting policy changes, improvements in vehicle efficiency and because duty rates are revalorised in line with RPI which grows at a slower rate than GDP;
- VAT, due to a slight fall in the share of consumer spending in GDP and the effects of fiscal consolidation on government procurement spending;
- onshore corporation tax, reflecting the staggered reduction in the corporation tax rate to 21 per cent from 2014-15; and

- business rates, council tax and excise duties, where annual increase in tax rates are generally lower than the growth rate of nominal GDP.

Table 4.5: Major taxes as a percentage of GDP

	Per cent of GDP						
	Outturn	Forecast					
	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Income tax and NICs	16.6	16.5	16.6	16.8	16.9	17.2	17.4
Value added tax	6.4	6.5	6.4	6.4	6.4	6.3	6.3
Onshore corporation tax	2.2	2.2	2.1	2.0	2.0	2.1	2.0
UK oil and gas receipts	0.7	0.5	0.4	0.4	0.3	0.3	0.2
Fuel duties	1.8	1.7	1.6	1.6	1.6	1.6	1.5
Business rates	1.6	1.6	1.7	1.7	1.7	1.7	1.6
Council tax	1.7	1.7	1.7	1.7	1.6	1.6	1.6
Excise duties	1.3	1.3	1.2	1.2	1.2	1.2	1.2
Capital taxes	1.1	1.0	1.1	1.2	1.3	1.3	1.4
Other taxes	2.5	2.7	3.0	2.8	2.9	2.9	2.8
National Accounts taxes	35.9	35.6	35.9	35.8	35.9	36.0	36.0
Interest and dividend receipts	0.2	1.1	1.2	1.1	1.0	1.0	0.7
Other receipts	1.1	1.2	1.2	1.2	1.2	1.2	1.2
Current receipts	37.3	38.0	38.3	38.1	38.1	38.2	37.9

Table 4.6: Current receipts

	£ billion						
	Outturn	Forecast					
	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Income tax (gross of tax credits)[1]	152.7	154.0	161.6	172.0	181.5	193.9	206.5
of which: Pay as you earn	*132.1*	*132.2*	*137.1*	*142.2*	*152.5*	*162.9*	*173.8*
Self assessment	*20.3*	*22.6*	*23.8*	*29.4*	*28.9*	*30.6*	*32.2*
Tax credits (negative income tax)	-4.7	-3.9	-3.8	-3.2	-1.8	-0.8	-0.1
National insurance contributions	101.6	104.1	107.8	111.1	117.0	123.5	130.3
Value added tax	98.1	101.1	104.1	108.3	112.5	116.8	121.5
Corporation tax[2]	43.1	39.8	38.9	38.7	38.7	41.2	42.8
of which: Onshore	*33.8*	*34.7*	*34.3*	*34.5*	*35.6*	*38.0*	*39.7*
Offshore	*9.2*	*5.2*	*4.6*	*4.3*	*3.2*	*3.1*	*3.1*
Corporation tax credits[3]	-0.9	-0.9	-0.9	-0.8	-0.7	-0.7	-0.8
Petroleum revenue tax	2.0	2.2	2.1	1.7	1.7	1.5	1.4
Fuel duties	26.8	26.2	26.5	27.1	27.8	29.0	29.9
Business rates	25.0	25.7	26.8	28.2	29.6	30.6	31.2
Council tax	26.0	26.3	27.2	28.0	28.8	29.8	30.7
VAT refunds	14.0	14.0	14.6	14.6	14.6	14.4	14.2
Capital gains tax	4.3	3.7	4.6	5.4	6.0	6.7	7.4
Inheritance tax	2.9	3.1	3.3	3.5	3.6	3.8	4.0
Stamp duty land tax	6.1	6.5	7.5	8.6	9.7	10.9	12.2
Stamp taxes on shares	2.8	2.4	2.7	2.8	2.9	3.0	3.2
Tobacco duties	9.9	9.8	9.9	10.0	10.2	10.3	10.6
Spirits duties	2.9	2.8	2.8	3.0	3.2	3.3	3.5
Wine duties	3.4	3.5	3.6	3.9	4.3	4.6	5.0
Beer and cider duties	3.8	3.8	3.7	3.8	3.9	3.9	3.9
Air passenger duty	2.6	2.9	2.9	3.1	3.3	3.6	3.9
Insurance premium tax	3.0	3.1	3.2	3.2	3.3	3.3	3.4
Climate Change Levy	0.7	0.7	1.4	1.8	2.4	2.4	2.4
Other HMRC taxes[4]	5.9	6.0	6.4	6.7	7.1	7.3	7.5
Vehicle excise duties	5.9	5.9	5.9	5.8	5.8	5.7	5.6
Bank levy	1.8	1.8	2.8	2.9	2.8	2.8	2.8
Licence fee receipts	3.1	3.1	3.2	3.2	3.2	3.2	3.3
Environmental levies	0.5	2.0	2.3	2.8	3.3	3.8	4.2
Swiss capital tax	0.0	0.3	2.9	0.0	0.0	0.0	0.0
EU ETS Auction Receipts	0.0	0.4	0.9	0.9	0.9	1.0	1.0
Other taxes	5.9	6.7	6.9	7.1	6.9	6.8	6.7
National Accounts taxes	**549.3**	**557.2**	**581.6**	**604.2**	**632.6**	**665.7**	**698.3**
Less own resources contribution to	-5.2	-5.3	-5.2	-5.5	-5.7	-5.9	-6.1
Interest and dividends	2.9	17.6	18.9	17.9	17.1	18.0	13.1
Gross operating surplus	23.5	25.2	26.2	27.4	28.4	29.4	30.0
Other receipts	-0.9	-0.8	-0.9	-0.9	-1.0	-1.1	-1.1
Current receipts	**569.5**	**593.8**	**620.6**	**643.0**	**671.4**	**706.1**	**734.2**
Memo:							
UK oil and gas revenues[5]	*11.3*	*7.3*	*6.7*	*6.0*	*4.9*	*4.6*	*4.4*

[1] Income tax includes PAYE and Self Assessment and also includes tax on savings income and other minor components

[2] National Accounts measure, gross of enhanced and payable tax credits

[3] Includes enhanced company tax credits

[4] Consists of landfill tax, aggregates levy, betting and gaming duties and customs duties and levies

[5] Consists of offshore corporation tax and petroleum revenue tax

Note: Table is on accruals basis in line with national accounts definitions

Table 2.8 in the supplementary table presents receipts on a cash basis

Table 4.7: Changes to current receipts since March

	£ billion					
	Outturn	Forecast				
	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Income tax (gross of tax credits)[1]	0.1	-0.8	-3.5	-7.3	-9.0	-11.5
of which: Pay as you earn	*0.4*	*-0.4*	*-4.1*	*-7.8*	*-9.5*	*-11.2*
Self assessment	*0.2*	*0.3*	*0.9*	*0.9*	*1.2*	*0.4*
Tax credits (negative income tax)	0.0	0.3	0.4	1.1	2.4	3.4
National insurance contributions	-0.4	-1.4	-3.5	-6.3	-7.9	-9.4
Value added tax	0.1	-0.9	-2.0	-2.8	-3.7	-4.6
Corporation tax[2]	-0.3	-4.9	-6.0	-7.0	-7.4	-8.2
of which: Onshore	*-0.2*	*-2.1*	*-3.0*	*-4.5*	*-5.7*	*-6.8*
Offshore	*-0.2*	*-2.8*	*-2.9*	*-2.6*	*-1.7*	*-1.3*
Corporation tax credits[3]	0.0	0.1	0.1	0.1	0.1	0.1
Petroleum revenue tax	0.3	0.6	0.6	0.3	0.6	0.7
Fuel duties	-0.1	-1.1	-1.6	-1.8	-2.3	-2.3
Business rates	0.5	-0.4	-1.1	-0.6	0.6	-0.2
Council tax	0.0	-0.1	-0.7	-1.0	-1.3	-1.6
VAT refunds	-0.3	-0.7	-0.1	0.1	0.6	0.6
Capital gains tax	0.1	-0.1	-0.3	-0.3	-0.5	-0.8
Inheritance tax	0.0	0.2	0.3	0.3	0.3	0.3
Stamp duty land tax	0.0	0.1	0.1	-0.1	-0.1	-0.1
Stamp taxes on shares	0.0	-0.6	-0.5	-0.7	-0.9	-1.0
Tobacco duties	0.4	0.1	0.1	0.1	0.0	0.0
Spirits duties	0.1	-0.1	-0.2	-0.2	-0.2	-0.3
Wine duties	0.0	-0.2	-0.3	-0.3	-0.4	-0.4
Beer and cider duties	0.1	-0.1	-0.2	-0.1	-0.1	-0.2
Air passenger duty	0.0	-0.1	-0.1	-0.2	-0.2	-0.3
Insurance premium tax	0.0	0.1	0.2	0.2	0.2	0.1
Climate Change levy	0.0	-0.1	0.0	0.1	0.4	0.2
Other HMRC taxes[4]	-0.1	-0.2	-0.5	-0.5	-0.5	-0.6
Vehicle excise duties	0.1	0.0	0.0	0.0	0.0	-0.1
Bank levy	0.0	-0.5	0.1	0.1	0.1	0.1
Licence fee receipts	0.0	0.0	0.0	0.0	0.0	0.0
Environmental levies	-1.2	-0.4	-0.4	-0.5	-0.4	-0.4
Swiss capital tax	0.0	0.3	2.9	0.0	0.0	0.0
EU ETS Auction Receipts	-0.3	-0.3	-0.7	-0.7	-0.7	-0.8
Other taxes	-0.3	-0.4	-0.3	-0.5	-0.6	-0.6
National Accounts taxes	**-1.3**	**-11.6**	**-17.1**	**-28.8**	**-31.0**	**-37.9**
Less own resources contribution to	0.0	0.0	0.5	0.5	0.6	0.6
Interest and dividends	0.1	13.0	13.9	11.7	8.8	7.2
Gross operating surplus	0.3	0.8	0.8	1.1	1.1	1.1
Other receipts	0.0	0.0	0.0	0.0	-0.1	-0.1
Current receipts	**-0.9**	**2.3**	**-1.9**	**-15.4**	**-20.6**	**-29.1**
Memo:						
UK oil and gas revenues[5]	*0.1*	*-2.2*	*-2.4*	*-2.3*	*-1.1*	*-0.6*

[1] Income tax includes PAYE and Self Assessment receipts, and also includes tax on savings income and other minor income tax

[2] National Accounts measure, gross of enhanced and payable tax credits

[3] Includes enhanced company tax credits

[4] Consists of landfill tax, aggregates levy, betting and gaming duties and customs duties and levies.

[5] Consists of offshore corporation tax and petroleum revenue tax.

Changes in the receipts forecast since March

4.58 In 2012-13 we expect receipts to be £2.3 billion higher than we forecast in March. The £11.5 billion transfer from the APF and £2.1 billion interest receipts from the reclassification of Bradford and Bingley plc and Northern Rock (Asset Management) have increased the forecast. These offset £11 billion lower receipts elsewhere in the forecast.

4.59 Current receipts are then expected to be lower in every year of the forecast, with the difference reaching £29.1 billion by 2016-17. Table 4.7 shows the changes by receipts stream and Table 4.8 shows the changes split by economic factors, market determinants and other factors. In the next section we explain these changes in more detail on a tax-by-tax basis. In summary, there are downward revisions since March to most of the main receipts streams:

- PAYE income tax and NICs are lower with the difference reaching £20.6 billion by 2016-17, primarily reflecting lower wages and salaries growth from 2013-14 onwards;
- onshore corporation tax is lower due to the weakness of receipts from industrial and commercial companies this year, a weaker outlook for corporate profits, a greater use of losses and the Autumn Statement announcement of a further 1 per cent reduction in the corporation tax rate from 2014-15;
- offshore corporation tax receipts are reduced largely due to lower profiles for production, oil and gas prices;
- VAT receipts are weaker reflecting lower-than-expected receipts this year and our lower nominal consumer spending forecast;
- stamp and capital taxes are lower primarily due to the weaker outlook for both equity prices and volumes;
- fuel duty receipts are lower due to lower growth reducing the demand for fuel and the policy announcements made in the summer and at the Autumn Statement; and
- council tax receipts are expected to be weaker reflecting the October announcement for 2013-14 and a downwards revision to our assumption for future years.

4.60 As is the case for 2012-13, interest and dividend receipts are significantly higher than forecast in March. This is largely due to the reclassification of Bradford and

Bingley and Northern Rock (Asset Management) (see Box 4.1) and the expected income from the new treatment of the proceeds from the APF (see paragraph 4.32 onwards).

Table 4.8: Changes to the receipts forecast since March

	£ billion				
	Forecast				
	2012-13	2013-14	2014-15	2015-16	2016-17
March forecast	591.5	622.5	658.4	692.0	735.3
December forecast	593.8	620.6	643.0	671.4	706.1
Total Change in Receipts	**2.3**	**-1.9**	**-15.4**	**-20.6**	**-29.1**
of which:					
Income and expenditure	**3.4**	**-2.5**	**-9.3**	**-14.7**	**-19.3**
Wages and salaries	3.5	-1.4	-6.8	-10.2	-13.5
Non-financial company profits	-0.1	-0.8	-1.2	-1.7	-2.0
Financial company profits	0.0	-0.3	-0.5	-0.6	-0.7
Consumer expenditure	0.0	-0.1	-0.9	-2.2	-3.1
North Sea	**-2.7**	**-3.2**	**-2.6**	**-2.5**	**-1.9**
Production and expenditure	-1.4	-2.0	-1.7	-1.7	-1.5
Oil and gas prices	-1.3	-1.2	-0.9	-0.8	-0.4
Market assumptions	**0.0**	**-0.5**	**-1.7**	**-2.8**	**-3.9**
Commercial property market	0.0	-0.2	-0.4	-0.5	-0.6
Residential property market	0.4	0.5	0.2	0.2	0.1
Equity prices	-0.3	-0.8	-1.0	-1.3	-1.6
Volume of share transactions	-0.3	-0.3	-0.4	-0.5	-0.6
Interest rates	0.3	0.3	-0.2	-0.7	-1.2
Prices	**0.3**	**0.7**	**0.0**	**-0.5**	**-0.8**
Other economic determinants	**0.6**	**0.2**	**-0.3**	**-1.4**	**-2.4**
Other assumptions	**1.6**	**3.2**	**0.9**	**2.3**	**-1.1**
NRAM and B&B	2.1	1.9	1.9	2.4	2.8
APF flows	11.5	12.3	10.6	8.0	6.6
Corporation tax receipts and modelling	-1.8	-2.0	-2.8	-3.5	-4.6
Latest income tax and NICs receipts	-4.9	-5.1	-5.4	-5.5	-5.6
Income tax repayments	-1.4	-0.9	-0.8	-0.8	-0.9
Council tax assumptions	-0.1	-0.7	-1.0	-1.3	-1.6
Tax credits (Universal Credit switch)	0.0	0.0	0.6	2.0	3.1
Public sector gross operating surplus	0.8	0.8	1.1	1.1	1.1
Other judgments and modelling	-4.6	-3.1	-3.3	-0.1	-2.1
Autumn Statement measures	**-0.9**	**0.2**	**-2.4**	**-0.9**	**0.3**

Receipts in 2012-13

4.61 Growth in National Accounts taxes in the first seven months of 2012-13 was 0.4 per cent. We expect that growth in National Accounts taxes for the whole of the financial year will be around 1.4 per cent. We expect corporation tax receipts to show modest growth over the rest of the financial year, although this is largely because we are not expecting the large repayments made towards the end of the

last financial year to be repeated this year. VAT receipts are also expected to be stronger over the remainder of the year, in part because nominal consumer spending growth is slightly stronger than a year ago. Self assessment receipts are expected to record stronger growth, but this effect will be offset by weaker receipts of PAYE and NICs given the expected drop in bonuses and forestalling effects. Growth rates will also be boosted by an initial payment relating to the UK-Swiss tax agreement.

Table 4.9: Receipts in 2012-13

	£ billion			Percentage change on 2011-12		
	Outturn	Forecast		Outturn	Forecast	
	Apr-Oct	Nov-Mar	Full Year	Apr-Oct	Nov-Mar	Full Year
Income tax, NIC and capital gains tax	137.5	120.4	257.9	2.5	1.4	2.0
Value added tax	58.4	42.8	101.1	2.0	4.7	3.1
Corporation tax	24.9	14.9	39.8	-9.8	2.6	-5.5
Petroleum revenue tax	1.2	1.0	2.2	6.0	8.9	7.3
Fuel duties	15.7	10.5	26.2	-1.2	-3.9	-2.3
Inheritance tax	1.9	1.2	3.1	7.6	8.7	8.0
Stamp duties	5.3	3.6	8.9	-1.2	2.2	0.1
Tobacco duties	5.0	4.9	9.8	-6.1	6.1	-0.4
Alcohol duties	5.7	4.4	10.1	0.0	-2.6	-1.1
Business rates	14.8	11.0	25.7	1.3	5.2	2.9
Council tax	15.4	10.9	26.3	1.5	0.8	1.2
Other	25.8	20.1	46.0	-2.3	11.3	3.2
National Accounts taxes	311.5	245.7	557.2	0.4	2.8	1.4

Tax by tax analysis

Income tax and NICs

4.62 Our forecast for receipts from income tax and NICs for the current financial year is £2.3 billion lower than our March forecast. This is primarily due to £1.8 billion weaker PAYE and NIC1 receipts and £1.4 billion higher repayments (primarily repayments relating to PAYE overpayments in previous years). This is partly offset by higher receipts from other elements of income tax, such as self assessment and tax on savings income.

4.63 The announcements in Budget 2012 and the Autumn Statement mean that the personal allowance will rise by £1,335 in 2013-14. This will constrain income tax growth in 2013-14. However, with earnings growth expected to accelerate to around 4 per cent a year from 2015-16, and finally outpacing inflation, we expect the income tax and NICs to GDP ratio to start rising towards the end of the forecast period.

4.64 PAYE receipts so far in 2012-13 are only modestly weaker than we assumed in the March *EFO*, helped by the resilience of the labour market and in particular the stronger employment outturns than expected. Indeed, higher employment would have been expected to increase receipts relative to the March *EFO* forecast. However, it is likely that this has been offset by a lower effective tax rate. Around two-thirds of the rise in LFS employee numbers in the past year has been in part-time jobs. The effective tax rate on part-time earnings is usually much lower than that on full-time earnings.

4.65 There are considerable uncertainties surrounding PAYE and NIC receipts over the remainder of 2012-13. These include the level of financial sector bonuses and the extent of 'reverse forestalling' ahead of the reduction in the additional rate of income tax to 45 per cent in April 2013. Some taxpayers are expected to shift taxable income from 2012-13 into 2013-14 to take advantage of the lower rate.

4.66 Our latest forecast assumes a 10 per cent fall in financial sector bonuses in 2012-13, rather than the small rise assumed in the March *EFO* forecast. But the eventual outcome is highly uncertain. Given the trend away from paying bonuses, we have assumed further 5 per cent falls in bonuses in 2013-14 and 2014-15 and that they remain below last year's level throughout the forecast.

4.67 From 2013-14 onwards, we expect PAYE and NIC receipts to be substantially lower than we assumed in the March *EFO* forecast, with the shortfall rising from £1.8 billion in 2012-13 to £20.6 billion by 2016-17. This is primarily due to our lower projection for earnings growth throughout the forecast. As noted earlier, earnings growth is expected to remain subdued for longer given the weaker pick up in the real economy and our lower assumption for growth in the GDP deflator.

4.68 After a sharp drop in self assessment (SA) receipts last year, we are expecting SA receipts to rebound by around 11 per cent in 2012-13. The final payments for 2011-12 SA liabilities are due to be paid at the end of January 2013. While we expect some further unwinding of the forestalling which took place ahead of the introduction of the 50 per cent additional rate, this is likely to be substantially smaller than last year, boosting the annual growth rate for SA receipts. SA receipts will also be buoyed by measures, in particular previous announcements restricting pension tax relief. SA receipts are then expected to pick up through the forecast, although the 'reverse forestalling' mentioned earlier will depress 2012-13 liabilities (paid in 2013-14) and boost 2013-14 liabilities (paid in 2014-15).

4.69 Repayments of non-SA income tax (primarily those related to PAYE) during 2012-13 have been around £1.4 billion higher than assumed in the March forecast. The high level of repayments in 2012-13 reflects not only HMRC's new PAYE system, which identifies more repayments relating to the previous year than the previous system, but also the backlog of open case repayments relating to

overpayments for the tax years 2003-04 to 2007-08. In October 2012 HMRC completed this programme to review legacy open cases, which remained from the old PAYE computer system. We expect a higher underlying level of repayments to persist throughout the forecast.

4.70 Spending Review 2010 introduced a measure to remove child benefit from families with a higher rate taxpayer. This policy was subsequently adjusted in Budget 2012 to taper away child benefit eligibility for families with a taxpayer earning between £50,000 and £60,000. At previous forecasts, we scored this as savings on the child benefit bill. However, the ONS have now classified the child benefit that is recovered from the income tax system as an income tax charge. Relative to the March *EFO* forecast, this boosts income tax by around £1.3 billion in the medium term. There is an offsetting increase in spending.

Table 4.10: Key changes to income tax and NICs receipts since March

	£ billion				
	Forecast				
	2012-13	2013-14	2014-15	2015-16	2016-17
March forecast	260.4	276.4	296.7	315.4	338.3
December forecast	258.1	269.4	283.1	298.5	317.4
Change	**-2.3**	**-7.0**	**-13.6**	**-16.9**	**-20.9**
of which:					
(by economic determinant)					
Average earnings	0.5	-3.9	-8.8	-11.6	-14.5
Employee numbers	3.0	2.5	2.0	1.4	1.0
SA determinants	1.2	1.7	1.4	0.4	-0.3
Other determinants	0.2	-0.2	-1.4	-2.1	-2.3
(by other category)					
Latest receipts data	-4.9	-5.1	-5.4	-5.5	-5.6
Income tax repayments	-1.4	-0.9	-0.8	-0.8	-0.9
High income child benefit charge	0.0	0.7	1.1	1.3	1.3
Other (including modelling changes)	-0.8	-1.2	-1.2	-1.1	-1.6
Autumn Statement measures	0.1	-0.6	-0.5	1.2	1.9

Value added tax

4.71 VAT receipts in 2012-13 are expected to be around £0.9 billion lower than we assumed in March. Our forecast for 2012-13 is based on recent receipts data, with the shortfall relative to the March forecast reflecting both weaker growth in the tax base and a higher VAT gap – the difference between the theoretical level of VAT payments and the actual receipts received by HMRC. This split between the tax base and the VAT gap remains very provisional at this stage of the year and may change with further information. One element of the VAT gap, namely VAT debt, is a little lower than we expected in March.

4.72 By 2016-17, we expect VAT receipts to be around £4.6 billion below the March *EFO* forecast. Lower growth in nominal consumer spending explains around £2.9 billion of the fall. This partly reflects lower real consumer spending as a result of more subdued rises in real disposable income, and partly the downward revision of our long-run assumption for the consumption deflator from 2.5 per cent to 2 per cent. The weaker economic outlook also means that other elements of the tax base such as the exempt and housing sectors show weaker growth than previously assumed.

4.73 VAT receipts are expected to fall from 6.5 per cent of GDP in 2012-13 to 6.3 per cent by 2017-18. From 2013-14 to 2016-17, nominal consumer spending grows at a slightly lower rate than nominal GDP. In addition, the government element of the VAT tax base will be reduced by its spending cuts.

4.74 Our VAT forecast incorporates the effect of the introduction in 2015 of new EU rules, which mean that VAT will be charged on some consumer telecoms, broadcasting and electronic services according to the location of the purchasing customer rather than the supplier. In our last *EFO* we highlighted this as an unquantifiable commitment, but we now have sufficient information to incorporate it into the baseline forecast. The introduction of the policy increases the VAT forecast by £0.3 billion a year from 2015-16 onwards.

Table 4.11: Key changes to VAT receipts since March

	£ billion				
	Forecast				
	2012-13	2013-14	2014-15	2015-16	2016-17
March forecast	102.0	106.1	111.1	116.2	121.4
December forecast	101.1	104.1	108.3	112.5	116.8
Change	**-0.9**	**-2.0**	**-2.8**	**-3.7**	**-4.6**
of which:					
Outturn VAT receipts	-0.7	-0.7	-0.7	-0.7	-0.8
VAT debt	0.0	-0.3	-0.3	-0.3	-0.3
SRS of consumer spending	0.1	-0.3	-0.5	-0.1	0.3
Consumer spending	0.2	0.1	-0.7	-1.9	-2.9
Other spending	-0.5	-0.7	-0.7	-0.8	-1.2
Other (including modelling)	0.0	-0.1	0.0	0.0	0.0
Place of supply policy	0.0	0.0	0.1	0.3	0.3
Measures	0.0	-0.1	-0.1	-0.1	-0.1

Onshore corporation tax

4.75 We expect overall corporation tax to be around £4.9 billion lower in 2012-13 than in the March *EFO*. More than half of this shortfall relates to North Sea companies, leaving a £2.1 billion shortfall from onshore corporation tax, primarily from lower receipts from industrial and commercial companies. Despite this shortfall we still expect onshore corporation tax receipts to grow 2.4 per cent

in 2012-13. This is more than explained by a £1.8 billion fall in repayments compared to 2011-12, relating to liabilities from past years. This more than offsets the effect of the reduction in the main corporation tax rate from 26 per cent in 2011-12 to 24 per cent in 2012-13. Recent instalment payments from large industrial and commercial companies have been substantially weaker than we would have expected from the latest ONS outturns for non-oil, non-financial profits.

4.76 The staggered reductions in corporation tax rates announced at recent Budgets and in this Autumn Statement will bring the main rate of corporation tax down to 21 per cent from 2014-15. This, along with other measures (such as the temporary increase in the annual investment allowance, also announced in this Autumn Statement, and the Patent Box) mean that we expect onshore corporation tax receipts to fall from 2.2 per cent of GDP in 2012-13 to 2.0 per cent of GDP by 2014-15. We then expect receipts growth to pick up in the latter years of the forecast, helped by stronger growth in non-oil, non-financial profits.

4.77 The shortfall relative to the March *EFO* in onshore corporation tax increases from £2.1 billion in 2012-13 to £6.8 billion by 2016-17. Around £0.9 billion of the 2016-17 shortfall is due to the further cut in the corporation tax rate announced in the Autumn Statement. A substantial element of the remaining shortfall comes from industrial and commercial companies, which in part reflects a lower forecast path for profit growth. We have also revised up our assumption for losses in the sector. These are likely to be set against future profits, reducing receipts.

4.78 Corporation tax receipts from the financial sector in 2012-13 are expected to be close to our March EFO forecast. With credit conditions likely to remain restrictive for longer, we have revised down financial company profit growth. Low profit growth, big losses from the financial downturn being set against future profits, and the tax rate reductions all mean that by 2017-18 financial sector corporation tax receipts are still likely to be only around half the peak received in 2006-07.

Table 4.12: Key changes to onshore corporation tax receipts since March

	£ billion				
	Forecast				
	2012-13	2013-14	2014-15	2015-16	2016-17
March forecast	36.8	37.3	38.9	41.3	44.9
December forecast	34.7	34.3	34.5	35.6	38.0
Change	**-2.1**	**-3.0**	**-4.5**	**-5.7**	**-6.8**
of which:					
Industrial and commercial profits	-0.1	-0.8	-1.2	-1.7	-2.0
Financial company profits	0.0	-0.2	-0.3	-0.4	-0.5
Investment	0.1	0.2	0.4	0.7	0.9
Other economic determinants	0.0	0.2	0.2	0.1	0.0
Industrial and commercial losses assumption	-0.3	-0.4	-0.4	-0.5	-0.8
Receipts outturns and other modelling changes	-1.5	-1.5	-2.3	-2.9	-3.8
Autumn Statement measures	-0.3	-0.6	-0.9	-0.9	-0.7

UK oil and gas revenues

4.79 UK oil and gas revenues are expected to fall by 35 per cent in 2012-13 from the previous year. This is despite an average US dollar oil price in 2012 of $112 a barrel, very close to the 2011 average of $111 a barrel. The sharp fall in receipts primarily reflects a 12 per cent drop in oil and gas production and a rise of almost 50 per cent in capital expenditure. Oil and gas production has been affected by the Elgin gas leak and by high levels of maintenance (e.g. the closure of the large Buzzard field throughout September and October). Capital expenditure has now doubled since 2010, thanks to higher maintenance expenditure, cost pressures and spending on a group of new, large-scale projects. With 100 per cent first year allowances available to oil and gas firms, rising investment leads to a significant and immediate reduction in receipts.

4.80 Relative to our March *EFO* forecast, UK oil and gas revenues are expected to be £2.2 billion lower in 2012-13. This is more than explained by £2.8 billion lower offshore corporation tax receipts. Petroleum revenue tax (PRT) receipts are expected to be £0.6 billion higher in 2012-13 than we assumed in March, as we underestimated the proportion of net revenues that would arise in fields liable to PRT. Lower production and higher expenditure explain around £1.4 billion of the shortfall relative to our March forecast, with lower oil and gas prices accounting for a similar amount. We had expected oil and gas prices to be $3.7 a barrel and 5.6p a therm higher in 2012 in our March forecast.

4.81 Oil and gas revenues are expected to decline over the remainder of the forecast period from £7.3 billion in 2012-13 to £4.4 billion in 2017-18. The main driver of this decline in receipts is a fall in oil and gas prices. We assume, based on futures prices, that the oil price will fall from $112 a barrel in 2012 to $92 a barrel by 2017. And gas prices are assumed to follow a similar path to oil prices. According to DECC forecasts, after double-digit falls over the past two years,

production is expected to fall by up to 1 per cent a year, with the current high levels of capital expenditure preventing a steeper decline.

Table 4.13: Key changes to oil and gas revenues since March

	£ billion				
	Forecast				
	2012-13	2013-14	2014-15	2015-16	2016-17
March forecast	9.6	9.0	8.3	6.0	5.3
December forecast	7.3	6.7	6.0	4.9	4.6
Change	**-2.2**	**-2.4**	**-2.3**	**-1.1**	**-0.6**
of which:					
Oil and gas production	-1.1	-1.7	-1.5	-1.5	-1.3
Expenditure	-0.3	-0.3	-0.2	-0.2	-0.2
Sterling oil price	-0.8	-0.7	-0.5	-0.4	-0.2
Gas price	-0.6	-0.7	-0.5	-0.6	-0.3
Outturn data and modelling changes	0.6	1.0	0.6	1.7	1.6
Measures	0.0	-0.1	-0.1	-0.2	-0.1

Fuel duties

4.82 The fuel duties forecast incorporates the announcement in the summer that the increase in fuel duty scheduled for August 2012 would be delayed until January 2013, and the Autumn Statement announcement of the cancellation of the January 2013 rise and the delay in April rises in duty to September. These announcements reduce the forecast for fuel duty by £0.9 billion in 2012-13 and by between £1.4 billion and £1.7 billion in subsequent years.

4.83 We expect revenue from fuel duties to fall by over 2 per cent in 2012-13 reflecting the absence of duty rises and a further fall in duty-paid road fuel consumption. Consumption has fallen each year since its peak in 2007-08, reflecting the impact of the recession and subdued recovery, the effects of the rise in pump prices on demand, and the greater fuel efficiency of cars.

4.84 Fuel duty receipts are forecast to rise from £26.2 billion to £29.9 billion between 2012-13 and 2017-18. This entirely reflects the RPI-related increases in duty assumed in the forecast for each year from September 2013 onwards. Duty-paid consumption is expected to fall each year, with the weaker outlook for economic growth and higher fuel efficiency pushing down consumption and hence receipts.

Taxes on capital

4.85 Capital gains tax (CGT) is paid in the final quarter of the financial year following the year in which the gains from the sale of the asset were realised. This means that CGT receipts in 2012-13 reflect asset disposals in 2011-12. CGT receipts are expected to drop from £4.3 billion in 2011-12 to £3.7 billion in 2012-13. We are assuming that forestalling ahead of the mid-year increase in CGT rates in

June 2010 boosted the amount of disposals in 2010-11 partly at the expense of lower disposals in 2011-12.

4.86 Thereafter, we expect CGT receipts to increase from £3.7 billion in 2012-13 to £7.4 billion in 2017-18, reflecting the rise in equity prices assumed over the forecast period. The CGT forecast is very sensitive to equity prices, since around three-quarters of CGT chargeable gains are on financial assets and CGT is charged on the gain rather than the overall price. Relative to March, lower equity prices reduce receipts by £1.0 billion in 2016-17.

4.87 Inheritance tax receipts are determined by the value of estates, which in turn are driven mainly by residential property prices and to a lesser extent equity prices and the stock of household assets. Inheritance tax is expected to be up by around £0.3 billion in each year from 2013-14 onwards compared to the March *EFO* forecast, despite lower equity prices over the forecast period. Receipts outturns so far in 2012-13 have been higher than expected and this has been pushed through the forecast.

Stamp duties

4.88 Receipts from stamp duty land tax (SDLT) are expected to be around £0.1 billion higher in 2012-13 than assumed in the March *EFO* forecast. SDLT receipts in 2012-13 have been buoyed by continuing house price rises in London which accounts for almost 40 per cent of SDLT receipts from residential property. This helps offset weakness in receipts from commercial property resulting from falls in both prices and transactions in 2012-13.

4.89 A weaker commercial property market is assumed throughout the forecast and more than explains the deterioration of £0.1 billion in SDLT receipts by 2016-17, compared with the March *EFO* forecast. Despite this downward revision to the forecast, we do expect SDLT receipts to rise sharply from £6.5 billion in 2012-13 to £12.2 billion by 2017-18. This primarily reflects a rise in residential property transactions over the forecast period back to a level consistent with a long-run average rate of turnover, where owner-occupiers move every 19 years.

4.90 Stamp duty on shares is expected to be around £0.6 billion lower in 2012-13 than assumed in the March *EFO* forecast. This reflects lower equity prices and taxable transactions as well as repayments relating to a recent First-Tier Tax Tribunal decision, which affects 2012-13 receipts.[5] However, the lower path for equity prices and transactions means the shortfall rises to around £1 billion by 2016-17. Receipts from stamp duty on shares of between £2.4 billion and £3.2

[5] HSBC Holdings PLC and the Bank of New York Mellon Corporation V HMRC: First-Tier Tax Tribunal decision

billion over the forecast period remain well below the pre-crisis peak of £4.2 billion in 2007-08. In particular, the volume of taxable share transactions has fallen around 30 per cent over the past three years. We assume they remain broadly flat over the rest of the forecast.

Alcohol and tobacco duties

4.91 Alcohol duty is expected to fall marginally from £10.2 billion in 2011-12 to £10.1 billion in 2012-13. Receipts from wine are likely to rise slightly but beer and spirits receipts are expected to be down. A drop in alcohol consumption has offset the rise in duty of 2 per cent above RPI inflation in the March Budget.

4.92 Alcohol duties are then expected to rise to around £12.4 billion by 2017-18. This reflects the pre-announced duty rises of 2 per cent above RPI inflation to 2014-15 and the rise by RPI in subsequent years. It also reflects expected rises in wine consumption. Relative to the March *EFO* forecast, alcohol duties are £0.4 billion lower in 2012-13 and £0.9 billion lower by 2017-18. This partly reflects the weaker profile for overall consumer spending in our latest forecast. As explained in paragraph 4.51, we have not yet included any effects of minimum alcohol pricing in the forecast.

4.93 Tobacco duty receipts rise modestly over the forecast from around £9.8 billion this year to £10.6 billion in 2017-18 as increases in duty rates are expected to more than offset the drop in cigarette consumption. The projection for tobacco duties from 2012-13 is close to the March *EFO* forecast. The appreciation of sterling against the euro since our last forecast is expected to encourage cross-border shopping and reduce receipts. The forecast now uses an updated model which takes account of the recent upward trend in receipts from non-cigarette tobacco, and this increases receipts slightly.

Other taxes

4.94 Receipts from **business rates** are expected to be around £0.4 billion lower in 2012-13 than expected in March, reflecting updated information on liabilities. We have incorporated the effect from the Autumn Statement announcements on the extension of small business rate relief through 2013-14 and empty property relief on newly built commercial property. We have also taken into account the delay in revaluation in England from 2015 to 2017.

4.95 The **council tax** forecast incorporates the recent announcement on 2013-14 and a revised stylised assumption that council tax beyond 2013-14 will rise in line with our forecast for CPI. Further details of our council tax assumptions are in paragraph 4.144. The revised assumptions take around £0.7 billion off council tax receipts in 2012-13, rising to £1.6 billion by 2016-17. Changes to council

tax are offset by changes within locally financed expenditure, so are fiscally neutral.

4.96 For households claiming **tax credits**, the amount of credits that notionally offsets their income tax payments is treated as a negative tax in the National Accounts. We expect these to total around £4 billion in 2012-13. The new universal credit, which will replace tax credits and other benefits, is expected to be treated entirely as spending. So as tax credit claimants move across to the new system, the amount of negative income tax will fall and spending to rise. The transfer to universal credit is assumed to be almost complete by 2017-18.

4.97 **VAT refunds** to central and local government are fiscally neutral as receipts are offset within AME. VAT refunds increased in 2011-12, reflecting the rise in the standard rate of VAT. Refunds over the period largely reflect the path of government procurement and investment plans.

4.98 The **air passenger duty** (APD) forecast is primarily driven by real GDP, disposable income and duty rate rises. We forecast APD receipts to rise from £2.9 billion in 2012-13 to £3.9 billion in 2017-18. The forecast is lower than our March forecast in each year as a result of lower outturn passenger numbers, lower RPI inflation than previously assumed, as well as the weaker GDP and disposable income forecasts.

4.99 **Vehicle excise duty** (VED) revenues are expected to fall from a peak of £5.9 billion in 2011-12 to £5.6 billion in 2017-18. Receipts are slightly lower at the end of the forecast than in our March forecast, primarily because of lower inflation and real GDP.

4.100 **Environmental levies** include receipts from DECC levy-funded spending policies such as the Renewables Obligation (RO), Feed-in tariffs, Warm Homes Discount and receipts from the Carbon Reduction Commitment. Apart from the RO, these receipts streams are not yet included in ONS data, which explains the big difference in 2011-12 since our March forecast. Receipts from these levies grow strongly through the forecast largely due to the expected rise in electricity generation from renewables and greater payments under the feed-in-tariffs scheme.

4.101 Combined receipts from the four **environmental taxes** – climate change levy, aggregates levy, landfill tax and the Emissions Trading Scheme – are expected to increase from £2.4 billion to £5.0 billion over the forecast period. This is around £1 billion a year lower, on average, than our March forecast. Much lower carbon futures prices since our March *EFO* have lead to lower receipts from the Emissions Trading Scheme, while weaker landfill tax reflects revisions to the forecast for the volumes of waste subject to the levy.

4.102 In this forecast we have included expected receipts from the **UK-Swiss agreement**. For the purposes of this forecast we have assumed that the one-off levy applied to existing Swiss assets owned by UK residents is scored as a capital tax and is identified as Swiss capital tax in Table 4.6. The ONS will make a definitive judgement in due course. Receipts are boosted by a £0.3 billion pre-payment in 2012-13 and by £2.9 billion in 2013-14. Other revenues from the agreement are scored in the income tax, capital gains tax and inheritance tax totals.

4.103 We have revised down the **bank levy** forecast for the current financial year by £0.5 billion since March as a result of latest receipts data and information on likely full-year liabilities. From 2013-14, bank levy receipts are around £0.1 billion higher than March *EFO* levels. The weakness in outturn receipts is pushed through the forecast but is offset by the Autumn Statement announcement of a rise in the bank levy rate. We continue to assume that future regulation changes will constrain growth in banks' balance sheets.

4.104 We incorporate a provision for losses related to **tax litigation** cases in our receipts forecast. Once cases are settled, and their effects in particular years can be quantified, they are included within forecasts for specific taxes.

4.105 The magnitude and timing of actual losses is difficult to forecast as it depends on the legal process and final judgement. Even when a case is lost the impact on receipts depends on the nature of the judgement and the response from Government, and some cases represent an upside risk for Government. We assume that future tax litigation losses across all taxes will amount to £3.8 billion over the forecast period, which is unchanged since our March forecast. However, the profile of payments has been altered so that more of the losses fall later in the forecast period.

Other receipts

4.106 **Interest and dividend** receipts are significantly higher than in the March forecast. This largely reflects the reclassification of B&B and NRAM and the expected proceeds from the APF. The effects of these changes are explained in more detail earlier in this chapter. Without these significant changes the interest and dividends receipts forecast would have been lower in the later years, primarily as a result of the lower path for interest rates.

4.107 The **gross operating surplus** (GOS) forecast is around £1 billion a year higher than in our March forecast. We have now included an estimate of the Bank of England's income from the fees associated with the Funding for Lending Scheme. We expect the Bank's GOS to be about £2 billion higher over the four year period of the operation of the scheme. This is partly offset by lower outturn data for 2011-12 for some public corporations, which affects every subsequent year of the forecast.

Public sector expenditure

4.108 This section explains our central projections for public sector expenditure, which are based on the National Accounts aggregates for public sector current expenditure (PSCE), public sector gross investment (PSGI), and Total Managed Expenditure (TME), which is the sum of PSCE and PSGI. The Treasury plans public spending using two further administrative aggregates:

- departmental expenditure limits (DELs)[6] – mostly spending on public services and administration, which can be planned some years in advance. Our forecast is based on the Government's latest plans for DELs, which have been set out up to 2014-15, plus our view of the extent to which departments might underspend against these limits; and

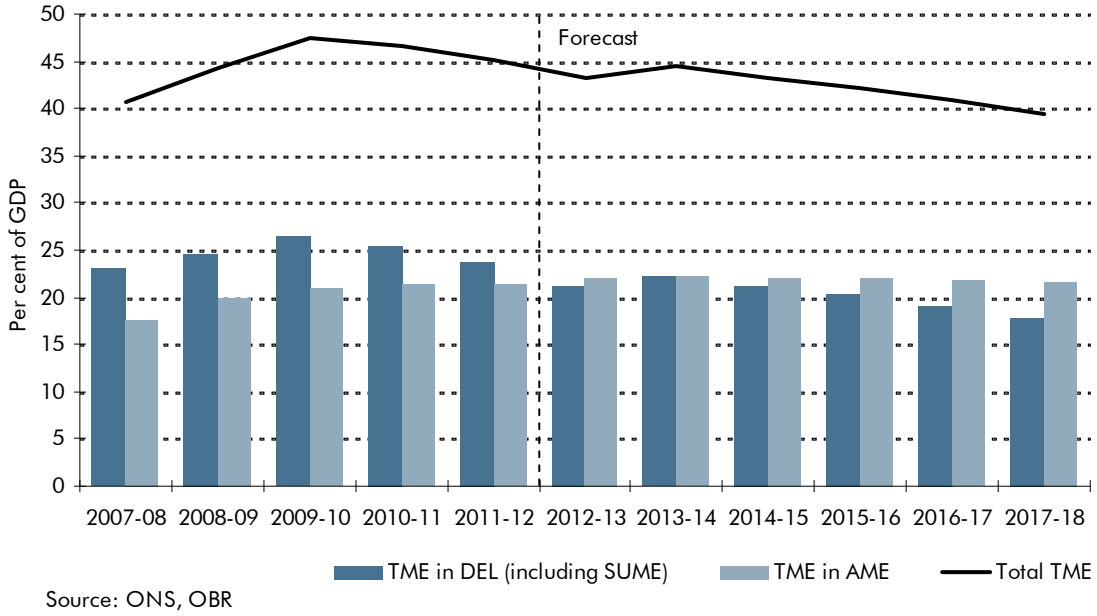
- annually managed expenditure (AME) – categories of spending less amenable to multi-year planning, such as social security spending and debt interest. We forecast these categories of spending directly, using determinants derived from our economic forecast.

4.109 Beyond the current Spending Review period, our spending projections for total spending in the period 2015-16 to 2017-18 are based on the Government's stated policy assumption, which is set out in paragraph 4.114. We continue to forecast AME components for these years and then subtract them from the Government's overall spending assumption to derive implied DELs. This top-down approach means that higher AME spending beyond 2014-15 on, for example, debt interest or APF transfers, is offset by cuts in the residual implied DEL totals.

4.110 Chart 4.4 shows TME as a percentage of GDP since 2007-08, and how this splits between DEL and AME. TME as a share of GDP increased sharply through the recession of 2008-09 and 2009-10, reaching a peak of 47 per cent of GDP in 2009-10. With DELs fixed in cash terms through to 2010-11 in the 2007 Comprehensive Spending Review, this increase mainly reflected the sharp fall in nominal GDP in 2008-09 and 2009-10. However AME spending on social security and debt interest also increased over this period, as a result of the recession.

[6] Our presentation of expenditure only shows those components of RDEL and CDEL and AME that are included in the fiscal aggregates of PSCE and PSGI. For budgeting purposes HM Treasury also includes other components in DEL such as non-cash items. A reconciliation between HM Treasury's DEL figures and ours is published in the supplementary fiscal tables on our website.

Chart 4.4: DEL and AME components of TME



Source: ONS, OBR

Summary of the expenditure forecast

4.111 Table 4.14 summarises our latest forecast for public expenditure. TME is expressed as a share of the economy, but not all of TME contributes directly to the calculation of GDP, as it comprises benefit payments, debt interest and other cash transfers rather than the production or consumption of goods and services. Table 4.15 shows how TME is split between DEL and AME over the forecast period, and the main components of AME.

4.112 TME is expected to fall as a share of GDP over the forecast to reach 39.5 per cent of GDP in 2017-18, largely as a result of the reductions in DEL spending set out as part of the Government's fiscal consolidation plan. This would be the first time that TME has fallen below 40 per cent of GDP since 2003-04.

4.113 AME is also forecast to fall as a share of GDP by 2017-18, but less sharply than DEL. Within AME, social security payments are forecast to fall as a share of GDP as the economy recovers, while debt interest payments rise due to high levels of borrowing. Local authority expenditure in AME is forecast to increase in 2013-14, to reflect the business rates that local authorities will retain, and then remain stable as a share of GDP. From 2012-13, total AME spending is expected to exceed DEL for the first time. Public sector gross investment falls sharply in 2012-13 due to the transfer of the Royal Mail pension assets and the spectrum auction receipts, which are classified as negative capital expenditure. Thereafter PSGI falls steadily to reach 2.5 per cent of GDP in 2017-18.

Table 4.14: Expenditure as a percentage of GDP

	Per cent of GDP						
	Outturn	Forecast					
	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Total managed expenditure	45.2	43.1	44.4	43.3	42.2	40.9	39.5
of which:							
Public sector current expenditure	42.1	42.3	41.5	40.4	39.5	38.2	36.9
Public sector gross investment	3.1	0.9	3.0	2.9	2.7	2.6	2.5
Total public sector expenditure that contributes directly to GDP [1]	24.6	24.3	23.9	23.0	22.1	21.1	19.9
of which:							
General government consumption	22.1	21.9	21.6	20.8	20.1	19.0	18.0
General government gross fixed capital formation	2.0	1.9	1.8	1.9	1.7	1.7	1.6
Public corporations gross fixed capital formation	0.4	0.5	0.5	0.4	0.4	0.4	0.4

[1] GDP at market prices

Table 4.15: TME split between DEL and AME

	Per cent of GDP						
	Outturn	Forecast					
	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
TME in DEL [1,2,3]	23.7	21.1	22.2	21.2	20.3	19.1	17.9
TME in AME	21.5	22.0	22.2	22.1	22.0	21.8	21.6
of which:							
Social security [2]	11.4	11.7	11.1	10.9	10.7	10.4	10.1
Debt interest	3.1	3.0	3.0	3.1	3.2	3.3	3.5
Locally-financed current expenditure [3]	1.4	1.5	2.2	2.2	2.2	2.2	2.2
Other PSCE in AME	4.7	5.1	5.0	5.1	5.1	5.1	5.1
PSGI in AME	0.9	0.7	0.8	0.8	0.8	0.8	0.7

[1] In relation to table 4.18, TME in DEL is defined as PSCE in RDEL plus PSGI in CDEL plus SUME, and TME in AME is defined as PSCE in AME plus PSGI in AME minus SUME. SUME is single use military equipment and is explained in detail in paragraph 4.165.

[2] From 2013-14, TME in RDEL contains grants to local authorities to finance the localised council tax reduction scheme, which replaces grants to local authorities to finance council tax benefits previously contained within social security, explained in Box 4.2.

[3] From 2013-14, locally-financed current expenditure contains the business rates that local authorities will retain, and there is an offsetting reduction in the grant in RDEL which distributes business rates to local authorities, explained in Box 4.2.

4.114 Beyond the current Spending Review period, our spending projections for the period 2015-16 to 2017-18 are based on the Government's stated policy assumption that TME should continue to fall at the same average real rate as over the Spending Review period, with PSGI flat in real terms. The Government

has specified a number of exclusions when making these calculations.[7] The Government has decided in this Autumn Statement to roll this assumption forward to 2017-18.

4.115 Applying the Government's assumption the average real growth in the Spending Review period is now a fall of 0.6 per cent a year, compared with the 0.8 per cent fall implied by the Government's policy assumption in our March forecast. It is lower than March partly due to the reduction in our forecast of GDP deflator inflation over the Spending Review period. A lower deflator implies higher real spending growth over the Spending Review period for a given set of nominal spending totals. Our GDP deflator forecast is also lower after 2014-15, which reduces nominal expenditure in 2016-17 and 2017-18 compared to the March forecast.

4.116 Table 4.16 shows that as a result of these assumptions, against a baseline that includes all spending in 2014-15:

- in 2015-16, TME now declines in real terms by 0.2 per cent, PSGI declines by 6.3 per cent and PSCE increases by 0.3 per cent;
- in 2016-17, TME now declines in real terms by 0.6 per cent, PSGI is flat and PSCE declines by 0.6 per cent; and
- in 2017-18, TME now declines in real terms by 0.6 per cent, PSGI is flat and PSCE declines by 0.6 per cent.

4.117 On the basis of current policy, including the policy measures announced in this Autumn Statement, we expect total AME to rise in real terms by 1.9 per cent in 2015-16, 1.8 per cent in 2016-17, and 2.0 per cent in 2017-18. For these years, we have derived implied levels for our definitions of RDEL and CDEL by subtracting the forecasts for AME from the forecasts for total PSCE and total PSGI. On the basis of our latest forecast for TME in DEL, including our estimates of departments' shortfall in spending against DEL plans in 2014-15:

- implied PSCE in RDEL falls in real terms by 1.6 per cent in 2015-16, 3.5 per cent in 2016-17, and 4.1 per cent in 2017-18. In the March forecast the

[7] The Government has stated that the growth rate should be projected forward using a baseline that excludes our forecast underspends in DEL, the spending measures announced in this Autumn Statement, and the capital measures announced in last year's Autumn Statement. It includes our estimates of the effects on the forecast from the ONS's decisions to classify Bradford and Bingley and Northern Rock (Asset Management) within central government. The TME baseline in 2010-11 reflects ONS's published outturn statistics which have not been revised yet to include these effects. This discontinuity temporarily increases the real growth rate for this forecast.

equivalent fall in PSCE in RDEL was a fall of 4.1 per cent in 2015-16, and 3.3 per cent in 2016-17; and

- implied PSGI in CDEL falls in real terms by 8.6 per cent in 2015-16, 0.3 per cent in 2016-17, and then grows in real terms by 0.4 per cent in 2017-18. In the March forecast the equivalent fall was 5.0 per cent in 2015-16, and a fall of 0.3 per cent in 2016-17.

Table 4.16: Spending real growth rates and as a share of GDP

	Spending Review years 2011-12 to 2014-15		Post Spending Review years			Total change between 2010-11 and 2017-18
	Total change (%)	Average annual change (%)	Change in 2015-16	Change in 2016-17	Change in 2017-18	
Real terms						
Total managed expenditure	**-3.0**	**-0.8**	**-0.2**	**-0.6**	**-0.6**	**-4.4**
of which:						
PSCE	-1.3	-0.3	0.3	-0.6	-0.6	-2.3
PSGI	-22.1	-6.0	-6.3	0.0	0.0	-26.9
TME in AME	8.1	2.0	1.9	1.8	2.0	12.1
TME in DEL	-12.4	-3.3	-2.3	-3.2	-3.6	-17.2
of which:						
PSCE in RDEL	-10.8	-2.8	-1.6	-3.5	-4.1	-18.8
PSGI in CDEL	-23.5	-6.5	-8.6	-0.3	0.4	-30.1
Percentage of GDP						
Total managed expenditure	**-3.4**	**-0.8**	**-1.1**	**-1.4**	**-1.4**	**-7.2**
of which:						
PSCE	-2.4	-0.6	-0.8	-1.3	-1.3	-5.8
PSGI	-1.0	-0.2	-0.2	-0.1	-0.1	-1.4
TME in AME	0.7	0.2	-0.1	-0.2	-0.2	0.4
TME in DEL	-4.1	-1.0	-1.0	-1.2	-1.2	-6.2
of which:						
PSCE in RDEL	-3.2	-0.8	-0.7	-1.1	-1.1	-6.2
PSGI in CDEL	-0.8	-0.2	-0.2	-0.1	0.0	-1.1

Summary of changes to the expenditure forecast since March

4.118 Table 4.17 shows the main reasons for the changes in our forecast of public sector expenditure since March. Tables 4.18 and 4.19 show the detailed spending forecasts and the changes in these forecasts since the March *EFO*. These are explained in more detail in the subsequent sections. In summary the main drivers of changes since the March forecast are:

- changes to the economic determinants. In particular, a lower RPI inflation forecast has reduced debt interest payments from 2014-15 onwards, the higher claimant count unemployment forecast increases social security

payments, and our lower average earnings forecast reduces state pension payments;

- our decision to include estimates of underspends against departments' DELs for the current year and the remaining years of the Spending Review. This reduces our TME forecast by £7.5 billion in 2012-13, £4.5 billion in 2013-14 and £3.5 billion in 2014-15. Further details are set out in the DEL section below;
- the inclusion of B&B and NRAM, which increases spending across the forecast period by around £1.5 billion each year, and the expectation of a small transfer to the APF in 2017-18;
- lower GDP deflators, which reduce spending by £1.6 billion in 2015-16 and £3.4 billion in 2016-17;
- changes expected in the classification of two sets of transactions, which result in offsetting changes to our forecasts of both current spending and current receipts from 2012-13 onwards. These increase AME spending by £4.5 billion by 2016-17. These changes are explained in the social security and tax credits sections below; and
- the policy changes announced in the Autumn Statement, which are summarised in Table 4.3 and set out in full in Annex A.

Table 4.17: Changes to the spending forecast since March

	£ billion				
	Forecast				
	2012-13	2013-14	2014-15	2015-16	2016-17
March forecast	683.4	720.0	733.5	744.0	756.3
December forecast	674.3	719.9	731.0	744.7	755.1
Total change in spending	**-9.1**	**-0.1**	**-2.5**	**0.7**	**-1.2**
of which:					
Economic determinants	**0.4**	**1.5**	**0.7**	**-0.8**	**-1.0**
Inflation	0.6	1.4	0.0	-1.2	-1.1
Unemployment	-0.2	0.5	1.3	2.0	2.3
State pension uprating	0.0	-0.2	-0.4	-1.5	-2.0
Average earnings	-0.1	-0.2	-0.1	-0.2	-0.1
Market assumptions	**-0.1**	**-0.7**	**-1.8**	**-3.0**	**-3.9**
Gilt rates	-0.1	-0.7	-1.4	-2.1	-2.8
Short rates	0.0	0.0	-0.3	-0.8	-1.1
Other assumptions/changes	**-4.6**	**-2.0**	**0.0**	**4.5**	**3.7**
Underspend assumptions	-7.5	-4.5	-3.5	-	-
CGNCR impact on debt interest	0.4	0.2	0.5	1.3	2.5
GDP deflator	-	-	-	-1.6	-3.4
Inclusion of B&B and NRAM	1.8	1.4	1.4	1.6	1.7
Reclassifications between current receipts and AME spending [1]	0.3	1.2	1.9	3.3	4.5
Other	0.4	-0.4	-0.3	-0.2	-1.6
Autumn Statement measures	**-4.8**	**1.1**	**-1.5**	**0.0**	**0.0**

[1] Includes reclassifications from current receipts to AME spending as a result of the introduction of universal credit, and from AME spending to current receipts of most of the savings from the removal of child benefit from higher income tax payers.

Table 4.18: Total managed expenditure

	£ billion						
	Outturn			Forecast			
	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Public sector current expenditure (PSCE)							
PSCE in RDEL [1]	**322.6**	**322.4**	**321.1**	**317.6**	**318.7**	**313.7**	**306.7**
PSCE in Annually Managed Expenditure	**320.5**	**338.3**	**350.8**	**363.9**	**378.6**	**393.2**	**409.5**
of which:							
Social security benefits	174.9	182.6	179.8	183.5	187.9	192.3	196.6
Tax credits	27.2	27.8	27.9	28.6	30.5	32.5	34.1
Net public service pension payments	8.0	11.0	11.3	12.8	14.0	15.0	16.3
of which: CG unfunded pension schemes	*6.7*	*9.4*	*9.7*	*11.1*	*12.1*	*13.1*	*14.2*
LG police and fire pension schemes	*1.4*	*1.6*	*1.6*	*1.7*	*1.8*	*1.9*	*2.0*
National lottery current grants	1.1	1.1	1.2	1.2	1.3	1.3	1.3
BBC domestic services current expenditure	3.8	3.6	3.4	3.7	3.7	3.8	3.9
Fees associated with financial interventions	-2.0	-0.6	-0.3	-0.2	0.0	0.0	0.0
Other PSCE items in departmental AME	0.1	1.7	1.3	1.2	1.2	1.2	1.2
Expenditure transfers to EU institutions	5.9	7.3	6.6	7.3	6.6	5.8	6.0
Locally-financed current expenditure	21.6	23.2	36.0	37.8	39.2	40.6	42.7
Central government gross debt interest	47.1	47.1	48.6	51.8	56.6	61.6	67.1
Depreciation	16.0	17.0	17.7	18.4	19.1	19.8	20.5
Current VAT refunds	11.8	11.7	12.5	12.5	12.5	12.3	12.0
Single use military expenditure	5.5	5.0	4.7	4.7	4.7	4.8	5.0
Environmental levies	0.5	1.3	1.7	2.1	2.8	3.6	4.3
Other National Accounts adjustments	-1.1	-1.4	-1.6	-1.5	-1.4	-1.3	-1.5
Total public sector current expenditure	**643.1**	**660.7**	**671.9**	**681.5**	**697.4**	**706.9**	**716.2**
Public sector gross investment (PSGI)							
PSGI in CDEL [1,2]	**34.8**	**2.3**	**34.3**	**36.2**	**33.8**	**34.3**	**35.2**
PSGI in Annually Managed Expenditure	**13.0**	**11.3**	**13.7**	**13.3**	**13.6**	**13.9**	**14.1**
of which:							
National lottery capital grants	0.4	0.5	0.5	0.6	0.6	0.6	0.6
Other PSGI items in departmental AME	-7.6	-1.5	1.1	1.1	0.9	0.8	1.1
Locally-financed capital expenditure	16.0	6.2	4.8	4.9	5.3	5.6	5.4
Public corporations capital expenditure	6.8	7.8	7.3	6.9	6.8	6.9	6.9
Other National Accounts adjustments	-2.5	-1.7	-0.1	-0.1	-0.1	0.0	0.0
Total public sector gross investment	**47.8**	**13.7**	**48.0**	**49.5**	**47.3**	**48.3**	**49.2**
Less depreciation	-21.1	-22.2	-23.1	-23.9	-24.7	-25.5	-26.4
Public sector net investment	**26.7**	**-8.5**	**24.9**	**25.6**	**22.6**	**22.7**	**22.9**
Total managed expenditure	**690.9**	**674.3**	**719.9**	**731.0**	**744.7**	**755.1**	**765.5**

1 Implied DEL numbers for 2015-16, 2016-17 and 2017-18. Calculated as the difference between PSCE and PSCE in AME in the case of PSCE in RDEL, and between PSGI and PSGI in AME in the case of PSGI in CDEL.

2 2012-13 PSGI in CDEL includes £28 billion receipt from the transferral of assets from the Royal Mail pension fund, which at Budget 2012 was classified as AME.

Table 4.19: Changes to total managed expenditure since March

	£ billion					
	Outturn			Forecast		
	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Public sector current expenditure (PSCE)						
PSCE in RDEL [1]	**-0.3**	**-5.7**	**-9.1**	**-11.0**	**-4.2**	**-6.6**
PSCE in Annually Managed Expenditure	**-3.9**	**1.7**	**7.5**	**6.0**	**4.2**	**4.8**
of which:						
Social security benefits	0.2	0.8	-2.8	-2.2	-5.2	-7.1
Tax credits	0.3	0.4	0.0	0.1	1.4	2.8
Net public service pension payments	-0.3	-0.6	-0.9	-0.3	-0.3	-0.4
of which: CG unfunded pension schemes	*-0.3*	*-0.7*	*-0.9*	*-0.3*	*-0.3*	*-0.4*
LG police and fire pension schemes	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
National lottery current grants	0.2	0.2	0.2	0.3	0.3	0.2
BBC domestic services current expenditure	0.1	0.1	0.0	0.0	0.1	0.1
Fees associated with financial interventions	0.0	0.0	0.0	0.0	0.0	0.0
Other PSCE items in departmental AME	-0.2	0.7	0.7	0.7	0.7	0.7
Expenditure transfers to EU institutions	-0.3	1.5	-0.3	-0.5	-0.5	-0.5
Locally-financed current expenditure	-4.4	-3.5	7.9	8.6	9.2	9.5
Central government gross debt interest	-0.3	2.4	2.5	-1.4	-3.1	-2.4
Depreciation	-0.1	0.1	0.1	0.1	0.0	0.0
Current VAT refunds	-0.2	-0.9	-0.2	0.0	0.5	0.5
Single use military expenditure	0.0	-0.8	-1.0	-0.5	-0.3	-0.3
Environmental levies	-0.5	-0.4	-0.4	-0.4	-0.2	-0.1
Other National Accounts adjustments	1.6	1.7	1.5	1.6	1.5	1.6
Total public sector current expenditure	**-4.2**	**-4.0**	**-1.7**	**-5.0**	**-0.1**	**-1.8**
Public sector gross investment (PSGI)						
PSGI in CDEL [1,2]	**-0.2**	**-33.4**	**0.4**	**1.1**	**-0.4**	**-0.6**
PSGI in Annually Managed Expenditure [2]	**-1.1**	**28.3**	**1.1**	**1.3**	**1.2**	**1.2**
of which:						
National lottery capital grants	-0.1	-0.1	0.0	0.0	0.0	0.0
Other PSGI items in departmental AME	0.2	28.7	0.7	0.6	0.5	0.4
Locally-financed capital expenditure	2.3	1.0	-0.1	0.1	0.0	0.0
Public corporations capital expenditure	-0.3	0.8	0.9	0.9	1.0	1.1
Other National Accounts adjustments	-3.2	-2.2	-0.3	-0.3	-0.3	-0.3
Total public sector gross investment	**-1.3**	**-5.1**	**1.5**	**2.4**	**0.8**	**0.6**
Less depreciation	0.1	0.0	0.0	0.0	0.0	0.1
Public sector net investment	**-1.1**	**-5.1**	**1.5**	**2.4**	**0.8**	**0.7**
Total managed expenditure	**-5.5**	**-9.1**	**-0.1**	**-2.5**	**0.7**	**-1.2**

[1] Implied DEL numbers for 2015-16, 2016-17 and 2017-18. Calculated as the difference between PSCE and PSCE in AME in the case of PSCE in RDEL, and between PSGI and PSGI in AME in the case of PSGI in CDEL.

2 2012-13 PSGI in CDEL includes £28 billion receipt from the transferral of assets from the Royal Mail pension fund, which at Budget 2012 was classified as AME.

Expenditure in 2012-13

4.119 Compared to the March *EFO*, we have reduced our forecast for TME in 2012-13 by £9.1 billion, reflecting our decision to include an expected underspend in DEL of £7.5 billion, and reductions in our latest AME forecasts. Broken down by sector, we have reduced our spending forecasts by £8.8 billion for central government, £0.7 billion for local government, and increased our forecast for public corporations by £0.3 billion. Detailed breakdowns by sector are shown in the supplementary fiscal tables on our website.

4.120 Monthly outturn information is only available for central government spending. Table 4.20 shows the increases in spending so far in the first seven months of 2012-13, compared with the same period in 2011-12, and compares these increases with the overall growth that we are forecasting for 2012-13. Our forecast for net social benefits spending in 2012-13 implies lower growth in the next five months compared to the growth seen in the first seven months, but this reflects changes in the profile of spending. Debt interest spending is forecast to stay flat for 2012-13 overall, unchanged from the level in 2011-12, but spending profiles differ through the year because of changes in the monthly path of RPI, which affects debt interest on index-linked gilts. Growth in 'other' current spending is forecast to fall over the rest of the year, reflecting our forecast of higher underspends in 2012-13 compared to 2011-12. The profile of spending on net investment varies from year to year because monthly investment spending is volatile. The comparisons are also effected by two large one-off receipts explained in the footnote to Table 4.20.

Table 4.20: Central government spending in 2012-13

	Spending in 2012-13			Percentage change on 2011-12		
	Outturn	Forecast		Outturn	Forecast	
	Apr-Oct	Nov-Mar	Full Year	Apr-Oct	Nov-Mar	Full Year
Total current expenditure	**364.5**	**268.9**	**633.4**	**2.3**	**3.0**	**2.6**
of which:						
Net social benefits	111.4	80.3	191.6	5.9	5.1	5.6
Debt interest	27.1	20.0	47.1	-6.2	9.8	0.0
Other	226.0	168.6	394.6	1.7	1.2	1.5
Total net investment [1]	**-15.8**	**10.1**	**-5.6**	**-217.7**	**12.3**	**-125.1**
Depreciation	**4.6**	**3.4**	**8.0**	**4.7**	**10.0**	**6.9**
Total central government expenditure in TME	**353.4**	**282.4**	**635.8**	**-5.5**	**3.3**	**-1.8**
[1] Large one off receipts for Royal Mail (£28 billion) in April 2012 and HRA reform (£8.1 billion) in March 2012 distort the net investment comparison above. Removing these receipts gives the following results:						
Total net investment	*12.2*	*10.1*	*22.4*	*-8.4*	*-40.8*	*-26.6*

Departmental expenditure limits (DELs)

4.121 Table 4.21 summarises the changes in our forecasts for PSCE in RDEL and PSGI in CDEL since March. They include minor changes in departments' DELs that were included in *Public Expenditure Statistical Analyses (PESA)* 2012 and the measures announced in the Autumn Statement. They also include switches between DEL and AME arising from the transfer of Royal Mail pension fund assets, and for business rates retention and council tax benefit localisation policies, which are explained further in Box 4.2.

4.122 In this forecast we have decided to assume significant departmental underspending against budget plans in 2012-13 and the remaining years of the 2010 Spending Review. This is on the basis of the following evidence:

- as we set out in our recent Forecast evaluation report, the latest outturn suggests departments underspent by £7.8bn[8] in 2011-12, despite this being the first year in which most departments have faced tighter budgets under the 2010 Spending Review plans;

- spending outturns to date in 2012-13 are lower against plans than they were at this stage in 2011-12. The Treasury have advised us that they are not aware of any major differences in the monthly timing of spending compared to last year that would lead us to expect this to unwind over the rest of the year;

- over recent months, departments have consistently forecast greater underspends for the year as a whole than they were forecasting at the same stage last year; and

- the Treasury's advice is that the Budget Exchange facility, which allows departments to carry forward declared underspends, is expected to be used in 2012-13 so that significantly more spending will be carried forward into 2013-14 for both PSCE in RDEL and PSGI in CDEL, than was the case last year. Based on the 2011-12 outturns, we would then expect departments to continue to underspend against their reduced final plans adjusted for these changes.

[8] £1.4 billion of this underspend happened because the classification of expenditure was corrected to record it as outside capital spending as measured in the National Accounts.

4.123 In the light of this evidence, we have decided to forecast underspends of £4.5 billion for PSCE in RDEL and £1.7 billion for PSGI in CDEL in 2012-13. As set out in Table 4.21 we have also assumed shortfalls in 2013-14 and 2014-15, although at lower levels than the past two years, reflecting the tighter budgets facing most departments in these years under the 2010 Spending Review plans.

4.124 We have also assumed some additional shortfalls against Single Use Military Expenditure (SUME), which is part of CDEL but is included in current expenditure in the National Accounts. Our SUME forecast now includes shortfalls against DEL plans of £1.3 billion in 2012-13, £1 billion in 2013-14, and £0.5 billion in 2014-15.

Table 4.21: Key changes to DEL since March

	£ billion				
	Forecast			Implied DEL	
	2012-13	2013-14	2014-15	2015-16	2016-17
PSCE in RDEL					
March forecast	328.1	330.3	328.6	323.0	320.2
December forecast	322.4	321.1	317.6	318.7	313.7
Change	**-5.7**	**-9.1**	**-11.0**	**-4.2**	**-6.6**
of which:					
Switches with AME [1]	0.0	-6.5	-7.0		
Underspend assumptions	-4.5	-2.0	-1.5		
Autumn Statement measures	-1.4	-0.7	-2.6		
Other changes to plans	0.2	0.1	0.1		
PSGI in CDEL					
March forecast	35.7	33.9	35.1	34.1	34.9
December forecast	2.3	34.3	36.2	33.8	34.3
Change	**-33.4**	**0.4**	**1.1**	**-0.4**	**-0.6**
of which:					
Receipt of Royal Mail pension funds assets	-28.0	-	-		
Underspend assumptions	-1.7	-1.5	-1.5		
Autumn Statement measures	-3.5	2.2	2.9		
Other changes to plans	-0.2	-0.3	-0.3		

[1] Switches with AME include business rates retention and council tax benefit, which are explained fully in Box 4.2, and some smaller switches.

4.125 Table 4.21 shows the changes in the implied DEL plans in the years after 2014-15 that result from applying the Government's spending growth assumption. The implied RDEL envelope has been reduced by £4.2 billion in 2015-16 and by £6.6 billion in 2016-17. And the implied CDEL envelope has been reduced by £0.4 billion and £0.6 billion in 2015-16 and 2016-17 respectively. This reflects the overall changes to TME in the 2014-15 baseline shown in Table 4.19, and the lower GDP deflators and the slightly less negative spending growth assumption, as discussed in paragraph 4.114 above. The spending growth assumption is not applied to the Autumn Statement measures or the DEL underspends, so that these reductions in spending are not rolled forward to 2015-16 or later years. By 2016-17, the effect of the lower GDP deflator predominates, so that TME is reduced by £1.2 billion, compared to the budget forecast. The figures for PSCE in RDEL and PSGI in CDEL from 2015-16 onwards are then derived by residual, by subtracting the forecasts for PSCE in AME from PSCE, and PSGI in AME from PSGI, as shown in Table 4.19.

Box 4.2: Switches between DEL and AME affecting local authorities

In this forecast there have been two switches between DEL and AME, from 2013-14 onwards, for two policies that affect local authority finances.

Table D: DEL and AME switches for business rates and council tax benefit

	£ billion				
	Forecast		Implied DEL		
	2013-14	2014-15	2015-16	2016-17	2017-18
Transfer from DEL to AME for business rates retention policy	10.8	11.1	11.4	11.8	12.7
Transfer from AME to DEL for localised council tax reduction schemes	4.3	4.3	4.3	4.3	4.3
Net transfer from DEL to AME	**6.5**	**6.8**	**7.1**	**7.5**	**8.4**

Local authorities in England currently transfer all the business rates that they collect in their area to the Department for Communities and Local Government, which then gives the money back to local authorities as grants in DEL, based on local authorities' relative requirements. Under the new policy, from next year local authorities will retain around half of the business rates that they collect, with an ongoing redistribution to ensure that no local authority will gain or lose from the change, at least initially.

As a result of this policy measure, the amount of DEL grant to local authorities will be reduced by the amounts shown in the table above, but our forecast for overall local authority spending is unchanged because the spending from grants is replaced by an increase in self-financed spending in AME funded by the retained business rates. The DEL to AME transfer is calculated as half of the Estimated Business Rates Amount (EBRA), This is consistent with the England element of the business rates forecast in this *EFO*, adjusted to remove components that are not covered by this policy.[a]

Local authorities currently administer the payment of council tax benefit, with DWP paying them a grant within AME to cover most of the payments they make. From next year, local authorities will set up their own localised council tax benefit reduction schemes. In 2013-14 and 2014-15, the previous DWP demand-led grants to local authorities in AME will be replaced by additional DEL grants, as shown in the AME to DEL transfers in Table D above. A 10 per cent reduction in council tax benefit spending has been included in the social security forecast since it was announced in the 2010 Spending Review and the increases in DEL grants in 2013-14 and 2014-15 are based on our council tax benefit forecasts in this *EFO*, including this reduction.

The forecast for council tax benefit in this *EFO* has been produced by DWP[b] and quality assured by OBR in the usual way. The forecast includes estimates of the impacts of the measures in the Autumn Statement.

[a] Further details of the costing for this policy are contained in the document Autumn Statement 2012 policy costings, which includes the OBR's comments in certifying this policy costing

[b] DWP described their methods and assumptions for their forecast in their recent article: Council Tax Benefit: Forecasts and Assumptions

Annually managed expenditure

4.126 Table 4.18 sets out our latest central projections of AME spending to 2017-18, based on our economic forecast, the latest estimates of agreed policy commitments, and the measures announced in the Autumn Statement.

Social security

4.127 Expenditure on social security as a percentage of GDP is shown in Table 4.15. It is forecast to fall from 11.4 per cent to 10.1 per cent over the forecast period, as the economy recovers and unemployment falls, and as measures announced in the Autumn Statement and in recent fiscal events take effect. A breakdown showing forecasts for the main components of social security is included in the supplementary fiscal tables available on our website.

4.128 Social security spending is expected to be lower than we forecast in March from 2013-14 onwards, with the difference reaching £7.1 billion by 2016-17, as shown in Table 4.19. This difference includes the effect of two fiscally neutral classification changes. Most council tax benefit has been switched from AME spending to DEL (see Box 4.2). And, in the opposite direction, some of the savings from the removal of child benefit from higher income tax payers have been switched from social security spending to income tax (see paragraph 4.70).

4.129 Although considerable uncertainties remain, we have now been able to include more robust estimates of the cost of universal credit than in our March forecast. Box 4.3 provides more details. The forecast also now includes revised estimates of the impact of replacing disability living allowance (DLA) for people of working age with personal independence payments (PIP) from April 2013.

4.130 Table 4.22 also shows the changes to the social security forecast driven by OBR economic determinants:

- the increase in our claimant count unemployment forecast increases benefit payments from 2013-14, by a maximum of £2.3 billion in 2016-17;
- our forecast of CPI from 2014-15 onwards is slightly higher. Before taking account of measures announced in the Autumn Statement, this higher CPI increases social security spending by £0.7 billion in 2015-16 and 2016-17; and
- the state retirement pension is uprated in line with the 'triple guarantee', i.e. the higher of 2.5 per cent, average earnings, and the CPI. Our lower forecast for average earnings growth reduces state pension costs by £2 billion in 2016-17. Lower average earnings also reduce other social security spending by a maximum of £0.8 billion by 2016-17.

4.131 There are also some significant changes as a result of new estimates of new awards for DLA and PIP, attendance allowance (AA) and housing benefit, mainly reflecting the use of latest administrative and related survey data:

- DLA and AA changes have reduced expenditure by £0.6 billion by 2016-17 (excluding the additional impacts of the PIP). Administrative data suggest that inflows to DLA and PIP will be lower than previously assumed; and

- higher housing benefit caseloads increase spending by £0.7 billion in 2013-14, falling to £0.4 billion in 2016-17. Recent survey information suggests that the proportion of people in work who are eligible for housing benefit continues to grow, which pushes caseloads higher.

Table 4.22: Key changes to social security since March

	£ billion				
	Forecast				
	2012-13	2013-14	2014-15	2015-16	2016-17
March forecast	181.8	182.6	185.7	193.1	199.3
December forecast	182.6	179.8	183.5	187.9	192.3
Change [1]	**0.8**	**-2.8**	**-2.2**	**-5.2**	**-7.1**
of which:					
CPI	0.0	-0.3	0.4	0.7	0.7
Claimant count unemployment	-0.2	0.5	1.3	2.0	2.3
State pension uprating	0.0	-0.2	-0.4	-1.5	-2.0
Average earnings	0.0	-0.2	-0.4	-0.6	-0.8
Council tax benefit switch to DEL	-	-4.3	-4.3	-4.3	-4.3
Reclassification of child benefit measure	0.3	1.2	1.3	1.4	1.4
Revised Universal Credit costing	-	-	-	-0.9	-0.7
DLA and AA modelling	-0.2	-0.4	-0.5	-0.6	-0.6
Housing benefit modelling	0.6	0.7	0.6	0.5	0.4
Autumn Statement measures [2]	0.0	-0.1	-0.8	-2.1	-2.7
Other	0.3	0.4	0.5	0.2	-0.8

[1] For 2011-12 to 2014-15, child allowances in income support and jobseekers' allowance have been included in tax credits and excluded from social security benefits.

[2] Autumn Statement measures are shown in annex A and include reductions to all disregards in universal credit and changes to the uprating of universal credit and other benefits.

Tax credits

4.132 Tax credit expenditure falls as a share of GDP over the forecast period, largely because of the policy measure in the Autumn Statement, which uprates the main elements by less than CPI inflation in the medium term. Compared to our March forecast, expenditure on tax credits is around £0.6 billion lower by 2016-17. This is largely due to changes to the economic determinants and Autumn Statement measures.

4.133 Our March forecast also included an assumption that the increase in the working hours requirement would reduce total tax credit costs by up to £0.6 billion a year. However, this estimate was based on inaccurately recorded working hours and the latest administrative data suggest the caseload has not been reduced by as much as previously expected. This increases tax credit AME spending by £0.4 billion each year, relative to our March forecast.

4.134 There has also been a switch from negative tax to AME as a result of the introduction of universal credit. The forecast for tax credits spending in AME now includes the tax credits which are currently classified as negative tax receipts in the National Accounts, but which we expect will be classified as AME spending when this tax credits spending is migrated to universal credit. Our estimates of the tax credits that will shift across in each year are consistent with the assumed transition to universal credit within the universal credit policy costing. This switch is included in the negative tax and AME numbers shown in the footnote of Table 4.23.

Table 4.23: Key changes to tax credits since March

	£ billion				
	Forecast				
	2012-13	2013-14	2014-15	2015-16	2016-17
March forecast	31.6	32.1	32.7	33.3	33.9
December forecast	31.7	31.7	31.8	32.3	33.3
Change [1, 2]	**0.1**	**-0.4**	**-1.0**	**-1.0**	**-0.6**
of which:					
CPI	0.0	-0.1	0.1	0.3	0.3
Average earnings growth	-0.1	0.0	0.2	0.5	0.6
Revised costing for change in working hours requirement	0.4	0.4	0.4	0.4	0.4
2012-13 in-year expenditure estimate	-0.7	-0.7	-0.7	-0.7	-0.7
Autumn Statement measures	0.0	-0.4	-1.4	-1.7	-1.6
Other	0.4	0.4	0.4	0.2	0.4

[1] This table shows changes to total tax credits, which are split between current receipts (shown in table 4.7) and AME current spending (shown in table 4.18). This split is shown below. The large switch from negative tax to AME spending explained in the paragraph above is worth £0.6bn in 2014-15, £2.0bn in 2015-16, and £3.1bn in 2016-17.

Changes to tax credits treated as AME spending	0.4	0.0	0.1	1.4	2.8
Changes to tax credits treated as negative tax	-0.3	-0.4	-1.1	-2.4	-3.4

[2] For 2011-12 to 2014-15, child allowances in income support and jobseekers' allowance have been included in tax credits and excluded from social security benefits.

[3] Autumn Statement measures are shown in annex A and include changes to the uprating of tax credits.

Box 4.3: Universal credit

In March we included provisional estimates of £1.8 billion in 2015-16 and £2.5 billion in 2016-17 for the additional costs of universal credit. With many of the policy parameters still to be decided, the 2015-16 figure was based on our provisional analysis in the July 2011 *Fiscal sustainability report,* and the 2016-17 figure was a ceiling on the additional costs agreed by the Treasury and the Department of Work and Pensions (DWP) at the time of the last Budget.

The policy design for universal credit is now much firmer and we have been working with DWP, HMRC and others to produce a more robust bottom-up estimate of the costs. Table E shows our latest estimate and the change since the estimates and assumptions we made in March. Further details are provided in the policy costings document published by HM Treasury alongside the Autumn Statement. A number of factors have contributed to this change, including:

- changes in OBR's economic assumptions;
- policies announced in Budget 2012, which changed the baseline social security and tax system forecast onto which the additional costs of universal credit have to be added. Some of these also had knock-on effects on the incremental costs of universal credit;
- a number of policy parameters within universal credit which have been finalised since March and are now included in our forecasts; and
- refinements to the methodology and assumptions used for the universal credit forecasts.

The Government has announced a number of other welfare policy decisions in this Autumn Statement, and the impact of these policy decisions are estimated on a baseline which includes our estimate of the costs of universal credit.

Although the latest estimate is more robust, there remain a number of significant uncertainties. This is a very complex policy change which affects virtually all working age benefit recipients. Particular uncertainties include:

- any further changes to policy parameters. If these change when the policy is implemented then they will affect the costs. For example any further changes to the assumed timing of transitions from existing benefits to universal credit would affect the costs for the transitional protection component of the policy. We will update the costing at future events as these policies are finalised;
- the behavioural responses of social security recipients. For example, the single taper rate within universal credit could have an unexpected effect on

individuals' choices of working hours;

- the scale of the policy change. It is particularly difficult to draw lessons from previous policy costings, as the structure of universal credit represents a significant departure from the existing social security system. Assumptions on certain factors, including take-up and inflows, are based on the behaviour and characteristics of existing social security recipients who will migrate to universal credit in the future; and

- error and fraud savings. These are subject to significant uncertainty, particularly during the transition period. It is inherently difficult to anticipate new opportunities for fraud and error that a policy change of this scale may create. We believe the estimated savings are reasonable on the basis of DWP's view that the new Real Time Information system can be delivered on time and is immediately effective. If this was not achieved then substantial savings would probably be lost.

The additional costs of universal credit for 2015-16 onwards are currently included within our forecast for social security in AME. For 2013-14 and 2014-15, these costs will be met from DWP's DEL, and are therefore included within our forecast for PSCE in RDEL.[a] Table A shows the total movement in the estimate of the additional costs of universal credit. The costs shown here were those agreed before the further policy changes announced in this Autumn Statement.

Table E: Additional costs of universal credit, excluding financial transactions

	£ billion				
	Forecast				
	2013-14	2014-15	2015-16	2016-17	2017-18
March forecast	-	-	1.8	2.5	-
December forecast	-0.1	0.1	1.0	1.8	2.2

[a] In due course we expect that HM Treasury will adjust DWP's DEL to move these costs from DEL to AME, and we will then reflect the final costs of universal credit in our social security forecast for all years.

Public service pensions

4.135 The net public service pensions expenditure forecast is prepared on a National Accounts basis and measures benefits paid less employer and employee contributions received. It includes central government pay-as-you go public service pension schemes and locally administered police and fire-fighters'

pension schemes.[9] A breakdown for the major schemes covered is included in the supplementary tables on our website. Table 4.24 shows the main changes since the March *EFO*.

Table 4.24: Key changes to public service pensions since March

	£ billion				
	Forecast				
	2012-13	2013-14	2014-15	2015-16	2016-17
Net public service pensions					
March forecast	11.6	12.2	13.2	14.3	15.4
December forecast	11.0	11.3	12.8	14.0	15.0
Change	**-0.6**	**-0.9**	**-0.3**	**-0.3**	**-0.4**
Expenditure					
March forecast	35.9	37.7	39.2	41.0	43.0
December forecast	35.2	36.9	38.8	40.5	42.4
Change	**-0.7**	**-0.8**	**-0.5**	**-0.5**	**-0.6**
of which:					
CPI	0.0	-0.1	0.1	0.2	0.2
Other	-0.7	-0.7	-0.6	-0.7	-0.8
Income					
March forecast	-24.3	-25.5	-26.1	-26.7	-27.5
December forecast	-24.2	-25.6	-25.9	-26.5	-27.3
Change	**0.1**	**-0.1**	**0.2**	**0.2**	**0.2**
of which:					
Autumn Statement measure	0.0	0.0	0.2	0.1	0.0
Other	0.1	-0.1	0.0	0.1	0.2

4.136 Gross expenditure rises steadily across the forecast as the age profile of each scheme's membership changes and people live longer. The reduction in expenditure since the March forecast is largely from schemes reflecting latest outturn and in-year information, which feeds through to all later years.

4.137 The income of each pension scheme is almost entirely made up of employer and employee pension contributions, and is largely driven by the pensionable paybill. The Autumn Statement policy measure to reduce the pensions lifetime allowance is expected to lead to a reduction in pensions income as members near retirement opt to stop contributing. We have also reduced our pay growth assumption from 3.1 per cent to 3.0 per cent, which is applied in 2015-16 after the current spending review period ends.

[9] The police and firefighters' pension schemes are administered at a local level, however pensions in payment are funded from AME in the same way as other public service pension schemes so they are included in the pensions forecast.

4.138 The forecast does not take account of the Public Service Pensions Bill, which is currently passing through Parliament. We expect that changes to public service pension schemes as a result of this Bill will have minimal impact on income and expenditure over this forecast period.

EU contributions

4.139 The main component of the AME transfer to EU institutions is the UK's gross national income (GNI) contribution, minus the UK's abatement. The forecast for the GNI-based contribution depends mainly on the level of the agreed EU Budget and the relative GNI of each member state. The UK abatement is affected by the UK's share of EU VAT and the UK's share of EU receipts.[10]

4.140 The changes in our latest forecast for these expenditure transfers are shown in Table 4.19. The largest change is in 2012-13, where we have increased our forecast by £1.5 billion. This mainly reflects revised estimates of GNI and VAT bases for all EU countries in 2012 and 2013. Partly because of exchange rate changes these revisions increased the UK's relative share in both the GNI and VAT bases, particularly for 2012, and thus increased our GNI contribution. This increases our expenditure contributions in all future years, but the effects are partially offset by increases in the abatement after 2012-13. The expenditure transfers have also been increased in 2012-13 because of lower than expected surpluses carried forward in the EU budget from the outturn for 2011, and to reflect increases in amending budgets in 2012.

4.141 For 2013-14 and later years, although the changes in the GNI and VAT bases increase the forecast in later years, these increases are more than offset by the effects of changes to our sterling-euro exchange rate assumptions, leading to overall decreases in expenditure transfers of £0.3 to £0.5 billion per year.

4.142 The forecast is subject to risks depending on the outcome of the negotiations for the EU Budget for 2013, where we have assumed an increase of 2.8 per cent, and for the new EU budget envelope for 2014 to 2020, where we have assumed a small real terms increase.

Locally financed expenditure

4.143 Locally financed expenditure consists mainly of local authority self-financed expenditure (LASFE) – local expenditure that is not funded by grants from central government – and Scottish Government spending financed by local taxation.

[10] A further supplementary fiscal table on our website provides further details of UK transactions with the EU, including how all these various contributions score in the National Accounts and in this forecast.

4.144 The main changes to the forecast for locally financed expenditure are set out in Table 4.25 below. From 2013-14, the forecast for current LASFE includes the forecast of business rates that will be retained by local authorities under the new business rates retention policy. More details about the switch from DEL to AME associated with the business rates retention policy are given in Box 4.2.

4.145 The outturn for current LASFE was significantly lower than we expected in 2011-12, as we explained in our October 2012 *Forecast evaluation report*. The main reason for the forecast error was that, overall, authorities added £2.7 billion to their reserves, which reduced their spending, rather than drawing their reserves down as we had expected. As a result, local authorities underspent against their 2011-12 budgets.[11] And local authorities also financed more capital spending from their current budgets than we had assumed, which reduced current LASFE, with an offsetting increase in capital LASFE.

4.146 The outturn for English local authorities current spending on services in 2011-12 was also £4.5 billion below the levels forecast by local authorities in the in-year spending returns that the Department for Communities and Local Government (DCLG) collected from local authorities for the first time in 2011-12. We hope that the in-year quarterly outturn data will become more useful once the profile on in-year spending has become established. For this latest forecast, we have only been able to use in-year data covering the first quarter of 2012-13. We hope to be able to use data covering the first three quarters for our spring 2013 forecast.

4.147 In previous forecasts we had assumed that authorities would start to draw down their reserves because of the increased pressures on their budgets under the 2010 Spending Review settlement. However, English local authorities have now added to their current spending reserves for the last ten years. There is also some evidence to suggest that they are building-up buffers given uncertainties about the potential pressures created by new schemes such as business rates retention and localised council tax reduction. We have therefore revised our assessment and now expect local authorities to continue to build-up reserves in future years.

4.148 In our latest forecast we assume that local authorities will add £2.1 billion to their reserves and underspend their budgets by £3.4 in 2012-13. We have also assumed that they will continue to add to their reserves by some £2 billion in 2013-14, and £1 billion in 2014-15, and declining amounts in later years. We have also increased the transfers from current to capital expenditure, reflecting

[11] English local authorities underspent against their budgets by £4.1 billion for total expenditure on services using budgets data collected by DCLG.

local authorities use of these reserves to finance capital expenditure and so reduce their borrowing costs.

4.149 Our forecast for local authority capital LASFE has increased by £1 billion from 2012-13 onwards because we have increased our forecast for local authorities capital spending that is financed by transfers from local authorities current spending, as discussed above. However from 2013-14 these increases are offset by increases in adjustments that remove spending from capital LASFE, for the bodies that are treated as public corporations in the National Accounts. Further details are given in the section on public corporations capital spending below.

Table 4.25: Key changes to locally financed expenditure since March

	£ billion				
	Forecast				
	2012-13	2013-14	2014-15	2015-16	2016-17
Locally-financed current expenditure					
March forecast	26.7	28.1	29.2	30.1	31.1
December forecast	23.2	36.0	37.8	39.2	40.6
Change	**-3.5**	**7.9**	**8.6**	**9.2**	**9.5**
of which:					
Transfer from DEL for business rates retention	-	10.8	11.3	11.6	12.0
Council tax increase assumptions	-	-0.7	-0.9	-1.2	-1.5
Net use of current reserves	-2.7	-1.5	-1.0	-0.5	-0.5
Transfers from revenue account to finance capital expenditure	-1.1	-1.0	-1.2	-1.2	-1.2
Other	0.3	0.3	0.4	0.5	0.7
Locally-financed capital expenditure					
March forecast	5.3	4.9	4.8	5.2	5.6
December forecast	6.2	4.8	4.9	5.3	5.6
Change	**1.0**	**-0.1**	**0.1**	**0.0**	**0.0**
of which:					
Transfers from revenue account to finance capital expenditure	1.1	1.0	1.2	1.2	1.2
Adjustment to remove HRA and TTL net capital spending [1]	-0.8	-0.9	-0.8	-0.7	-0.6
Other	0.8	-0.3	-0.3	-0.5	-0.6

[1] The net capital spending of these two local authority subsidiary bodies, HRA and TTL (Transport Trading Ltd) are removed from LASFE and added to public corporations capital spending, reflecting the classification of these bodies in the National Accounts

4.150 We have also revised our assumptions for increases in council tax, which finances a large proportion of current LASFE. The forecast for 2013-14 now assumes that council tax increases will average 0.3 per cent in England, consistent with the funding available for local authorities who choose to freeze their levels of council tax. For 2014-15 onwards, following the Government's announcement that referenda would be triggered in England if councils set their council tax increases

at 2 per cent or above, we have now assumed that council tax increases in England rise in future in line with our CPI forecast. We also assume this applies in Wales from 2013-14 onwards, and in Scotland from 2016-17 onwards. Council Tax increases are assumed to be frozen until the end of the current Scottish Parliament. These assumptions are neutral for the overall fiscal aggregates as they are also applied to the council tax projections in our receipts forecast

4.151 There is a lot of uncertainty over the levels of council tax reductions that local authorities will offer after the new localised council tax reduction schemes come into operation in April 2013. We have assumed that, overall, the reductions will match the level of government funding, which is set at 90 per cent of the forecast for spending on the previous council tax benefit regime. There is some risk that local authorities will offer higher reductions than this, at least initially, which would reduce other LASFE. However we consider that our assumptions for local authorities' increases in their reserves covers all of the uncertainties on their LASFE current spending, whether from overall underspending, or increase in council tax reductions, or uncertainties on the levels of business rates that are made available to finance spending. Any differences in business rates or council tax reductions would be matched by differences in current receipts, and so would not affect the fiscal aggregates.

4.152 Further details on our council tax assumptions and all the components of our local authorities spending forecasts, including LASFE, are given in the supplementary tables to our fiscal forecast that are on our website.

Public corporations capital expenditure

4.153 Public corporations capital expenditure is higher in every year of the forecast period compared to the March *EFO*. The revision is mainly driven by new information on Transport Trading Limited Group's (TTL) subsidiaries and higher-than-expected Housing and Revenue Account (HRA) net capital expenditure.

4.154 As in the March *EFO*, we have used detailed information supplied by Transport for London, which has enabled us to reflect with more accuracy the timing and volume of capital spending by the TTL subsidiaries. We have also changed our forecast to reflect the reclassification of Rail for London into the public corporations sector of the National Accounts.

4.155 HRA net capital expenditure has increased in every year of the forecast. This is driven by the 2011-12 outturn for HRA net capital expenditure being £0.6 billion higher than we expected in our March forecast. This is carried forward in every subsequent year of the forecast.

4.156 The increase in our forecast of public corporations capital expenditure because of higher TTL and HRA net capital expenditure is offset within our forecast for capital

LASFE. This is because the finance for TTL and HRA net capital spending is initially included within the local authority sector but the final TTL and HRA spending is then switched into public corporations capital spending, reflecting the classification of TTL and HRA in the National Accounts.

Debt interest

4.157 Central government debt interest payments are broadly flat as a share of GDP between 2011-12 and 2013-14 as existing debt is refinanced at current lower interest rates and lower RPI inflation reduces the uplift on index-linked gilts. Payments then rise as a share of GDP over the remainder of the forecast period, reflecting expected increases in interest rates and RPI inflation, and the rising stock of debt.

4.158 Compared to March, lower market interest rates reduce payments over the entire forecast period. And although revisions to our RPI forecast increase debt interest in the near term, they also reduce it from 2014-15 onwards. These changes more than offset the cost of financing additional gilts.

4.159 Following the reclassification of B&B and NRAM into the central government sector, our forecasts now assume that the interest they pay on debt provided by the private sector increases central government debt interest payments. Other changes include lower spending on National Savings & Investment interest, and a new methodology for modelling the uplift on index-linked gilts, which increases the forecast, particularly for 2012-13.

Table 4.26: Key changes to debt interest since March

	£ billion				
	2012-13	2013-14	2014-15	2015-16	2016-17
March forecast	44.8	46.1	53.2	59.7	64.0
December forecast	47.1	48.6	51.8	56.6	61.6
Change	**2.4**	**2.5**	**-1.4**	**-3.1**	**-2.4**
of which:					
CGNCR	0.4	0.2	0.5	1.3	2.5
Gilt rates	-0.1	-0.7	-1.4	-2.1	-2.8
Short rates	0.0	0.0	-0.3	-0.8	-1.1
Inflation	0.6	2.0	-0.6	-2.3	-2.4
Inclusion of B&B and NRAM	0.4	0.3	0.4	0.6	0.7
IL uplift methodology change	1.4	0.7	0.3	0.6	0.9
Other	-0.4	0.0	-0.3	-0.4	-0.3

4.160 We breakdown the debt interest forecast by financing component in the supplementary fiscal tables on our website, including a distinction between debt

interest on conventional gilts for new and existing debt. Payments on the existing stock of conventional gilts are fixed for the lifetime of those gilts. With a long average maturity for UK conventional gilts, around half of the payments relate to static debt interest costs on existing conventional gilts. We also include a separate ready-reckoner table showing the approximate effect on debt interest of movements in interest rates, RPI inflation and the CGNCR.

Other AME spending

4.161 Expenditure from **National Lottery** grants is forecast to be around £0.2 billion higher each year compared with our March forecast. This is as a result of improved information from lottery distributors leading us to increase our lottery fund drawdown assumption.

4.162 Following the reclassification of B&B and NRAM into the central government sector, our forecast assumes an increase of £0.7 billion each year in **other PSCE items in departmental AME** as the banks running costs are included. We also assume an increase of between £0.4 billion and £0.7 billion each year in **other PSGI items in departmental AME** due to loan write offs. Box 4.1 gives full details.

4.163 Also in **other PSGI items in departmental AME**, there is an increase of £28 billion in 2012-13 because the one-off transfer of Royal Mail pension scheme assets to Government, which was provisionally treated as an AME receipt in the March forecast, has now been moved to capital DEL.

4.164 Income from **fees associated with financial interventions** are unchanged compared with our March forecast. The forecast of expenditure by the **BBC** is largely unchanged over the forecast period.

4.165 Table 4.18 shows a separate entry in PSCE in AME for **single-use military expenditure**. This expenditure is treated as capital DEL in the control framework, but is classified as current expenditure in the National Accounts. To align with National Accounts we therefore do not include this spending in PSGI in CDEL and we include it instead as a separate addition to PSCE within current AME expenditure. The reductions since our March forecast reflect the latest available departmental spending information and our revised assumptions on shortfalls explained in the DEL section.

4.166 **Environmental levies** include spending on DECC levy-funded policies such as the Renewables Obligation, Feed-In Tariffs and Warm Homes Discount. Most of these are fiscally-neutral as they are balanced by receipts, and the forecasts are explained in the receipts section. The Renewable Heat Incentive (RHI) policy is not balanced by receipts. Since March, the forecast of the RHI has increased each year, leading to additional expenditure of £0.2 billion by 2016-17. This is as a result of revised assumptions and modelling of inflation.

4.167 The change in our forecast of **VAT refunds** is explained fully in the paragraph 4.97 of the receipts section of this chapter.

Accounting adjustments

4.168 The AME forecast includes forecasts for the further adjustments that are included in the National Accounts definitions for PSCE and PSGI.[12] Explanations and the background to all the National Accounts adjustments are given in Annex D to PESA 2012.[13]

4.169 Table 4.19 shows that our forecasts for current accounting adjustments have increased by around £1.5 billion each year. This is as a result of three changes in local authority accounting adjustments. First, we have added £0.7 billion each year because we expect that ONS may increase their outturn statistics to include additional spending by Scottish local authorities for payments including net payments for police and fire pensions. Second, local authority to central government debt interest payments are forecast to decrease by around £0.5 billion each year, which because they are consolidated out of PSCE has the effect of increasing accounting adjustments. Finally, we have lined our forecast up with ONS treatment of outturn by including £0.4 billion of spending on housing benefit by local authorities each year, over and above their housing benefit spending which is financed by grants from DWP.

4.170 Our forecasts for capital accounting adjustments have decreased by £0.3 billion in each year of the forecast with the exception of 2012-13, where there has been a reduction of £2.2 billion. The transfer of the Royal Mail pension scheme to the public sector, and its subsequent switch from AME to DEL, means the ONS now include a new accounting adjustment of minus £2 billion to remove the net lending component of this from PSGI in CDEL.

Loans and other financial transactions

4.171 Public sector net borrowing (PSNB) is the difference between total public sector receipts and expenditure each year measured on an accrued basis. As we show in Table 4.27, and as we explain in greater detail in the next section, we forecast that PSNB will fall from £80 billion in 2012-13 to £31 billion in 2017-18.

4.172 But the public sector's fiscal position also depends on the flow of financial transactions, which are mainly loans and repayments between Government and

[12] Further details and data for these National Accounts adjustments are provided in the supplementary fiscal tables on our website.

[13] See HM Treasury, July 2012, Public Expenditure Statistical Analyses 2012.

the private sector. Generally these do not directly affect PSNB, but they do lead to changes in the Government's cash flow position and stock of debt.

4.173 The public sector net cash requirement (PSNCR)[14] is the widest measure of the public sector's cash flow position in each year. It drives the forecast of public sector net debt (PSND), which is largely a cash measure. Estimating the PSNCR also allows us to estimate the central government net cash requirement (CGNCR), which in turn largely determines the Government's net financing requirement – the amount it needs to raise from treasury bills, gilt issues and National Savings.

4.174 Differences between the PSNCR and PSNB can be split into the following categories:

- **Loans and repayments:** loans that the public sector make to the private sector and that it expects to be repaid do not directly affect PSNB, but the cash flows do affect the PSNCR;
- **Cash flow timing effects:** PSNB is an accruals measure of the budget deficit in which, where possible, spending and receipts are attributed to the year that they relate to. In contrast PSNCR is a cash measure in which spending and receipts are attributed to the year in which the cash flow takes place;
- **Transactions in company securities:** the public sector may buy or sell company securities, such as corporate bonds or equities. As a consequence it swaps one asset for an equivalent cash asset and so the transaction does not affect PSNB, but the associated cash flow will affect PSNCR; and
- **Other**: this category includes one-off financial transactions that do not fall into the categories above and some other adjustments.

4.175 Table 4.27 shows the steps from PSNB to PSNCR while Table 4.28 highlights the changes since our March forecast.

[14] Consistent with the measures of debt and deficit used in this forecast, PSNCR excludes the temporary effects of financial sector interventions.

Table 4.27: Reconciliation of PSNB and PSNCR

	Forecast					
	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Public sector net borrowing	**80**	**99**	**88**	**73**	**49**	**31**
Loans and repayments	11.5	12.4	12.5	12.3	12.1	12.1
of which:						
Student loans[1, 2]	5.8	7.4	8.9	9.8	10.1	10.2
Financial sector interventions[3]	-1.3	0.0	0.0	0.0	0.0	0.0
DfID	1.0	1.2	1.1	1.1	1.1	1.1
Ireland	1.6	0.4	0.0	0.0	0.0	0.0
Green Investment Bank	0.8	1.0	0.0	0.0	0.0	0.0
Business Finance Partnership	0.3	0.5	0.4	0.1	0.0	0.0
Autumn Statement measures	0.0	0.5	0.9	0.6	0.1	0.0
Other	3.4	1.5	1.3	0.7	0.8	0.8
Cash flow timing effects	-2.7	14.6	-3.1	-3.9	6.3	3.4
of which:						
Asset Purchase Facility proceeds	0.0	4.1	-0.5	-0.6	-1.4	-3.0
Student loan interest[2]	0.8	1.1	1.5	2.3	3.2	4.1
PAYE income tax and NICs	0.8	2.2	0.8	1.8	1.9	2.0
Indirect taxes	0.9	0.8	1.0	1.1	0.9	1.2
Other receipts	0.5	0.4	0.6	0.4	0.4	0.4
Index-linked gilts[3]	-9.1	2.5	-10.2	-12.7	-2.1	-5.2
Conventional gilts	2.9	3.0	3.1	3.3	3.1	3.5
Other expenditure	0.5	0.5	0.5	0.5	0.4	0.4
Transactions in company securities	-9.1	-1.0	0.0	0.0	0.0	0.0
of which:						
Northern Rock plc	-0.1	0.0	0.0	0.0	0.0	0.0
Royal Mail pension asset disposal	-9.0	-1.0	0.0	0.0	0.0	0.0
Other	23.7	-23.5	0.3	0.3	0.3	0.3
of which:						
Royal Mail transfer	23.5	0.0	0.0	0.0	0.0	0.0
Asset Purchase Facility proceeds	0.0	-23.8	0.0	0.0	0.0	0.0
Public sector net cash requirement	**104**	**102**	**98**	**82**	**68**	**47**

A breakdown based on ONS classifications is available on our website.

[1] The table shows the net flow of student loans and repayments. This can be split out as follows:

Cash spending on new loans	7.7	9.7	11.5	12.8	13.5	14.0
Cash repayments	2.0	2.3	2.6	3.0	3.4	3.8

[2] Cash payments of interest on student loans are included within 'Loans and repayments' as we cannot easily separate them from repayments of principal. To prevent double counting the 'Student loan interest' timing effect therefore simply removes accrued interest.

[3] These reconciliations to the net cash requirement do not affect public sector net debt (ex).

Table 4.28: Changes in the reconciliation of PSNB and PSNCR since March

	Forecast				
	2012-13	2013-14	2014-15	2015-16	2016-17
Public sector net borrowing	**-11**	**2**	**13**	**21**	**28**
Loans and repayments	2.1	2.6	5.9	5.1	4.0
of which:					
Student loans[1, 2]	-0.1	-0.1	0.3	0.5	0.7
Financial sector interventions[3]	0.1	2.2	4.2	4.1	3.2
DfID	0.0	0.1	-0.1	-0.1	0.0
Ireland	0.0	-0.4	0.0	0.0	0.0
Green Investment Bank	0.0	0.0	0.0	0.0	0.0
Business Finance Partnership	0.0	0.0	0.0	0.0	0.0
Autumn Statement measures	0.0	0.5	0.9	0.6	0.1
Other	2.1	0.3	0.5	0.0	0.0
Cash flow timing effects	-3.0	7.4	0.5	2.4	2.7
of which:					
Asset Purchase Facility proceeds	0.0	4.1	-0.5	-0.6	-1.4
Student loan interest[2]	0.0	0.0	-0.1	-0.4	-0.9
PAYE income tax and NICs	-2.2	0.6	-0.8	-0.3	-0.4
Indirect taxes	-0.3	-0.5	-0.1	-0.1	-0.3
Other receipts	0.7	0.0	0.2	0.0	0.0
Index-linked gilts[3]	-1.8	2.1	0.3	1.5	3.8
Conventional gilts	0.8	1.7	2.0	2.4	2.4
Other expenditure	-0.2	-0.6	-0.5	-0.1	-0.4
Transactions in company securities	-4.5	3.5	0.0	0.0	0.0
of which:					
Northern Rock plc	0.0	0.0	0.0	0.0	0.0
Royal Mail pension asset disposal	-4.5	3.5	0.0	0.0	0.0
Other	-0.1	-23.8	0.0	0.0	0.0
of which:					
Royal Mail transfer	0.0	0.0	0.0	0.0	0.0
Asset Purchase Facility proceeds	0.0	-23.8	0.0	0.0	0.0
Public sector net cash requirement	**-17**	**-8**	**19**	**29**	**35**

A breakdown based on ONS classifications is available on our website.

[1] The table shows the net flow of student loans and repayments. This can be split out as follows:

Cash spending on new loans	0.0	0.0	0.3	0.5	0.6
Cash repayments	0.0	0.0	-0.1	-0.1	-0.1

[2] Cash payments of interest on student loans are included within 'Loans and repayments' as we cannot easily separate them from repayments of principal. To prevent double counting the 'Student loan interest' timing effect therefore simply removes accrued interest.

[3] These reconciliations to the net cash requirement do not affect public sector net debt (ex).

Loans and repayments

4.176 PSNCR is higher than PSNB in each year of our forecast, which largely reflects net lending by the Government to the private sector, in particular for student loans.

The recent student loan reforms have increased the size of upfront loans, with repayments being made over a more prolonged period. In our July 2012 *Fiscal sustainability report* we showed that on current policy settings we might expect the difference between new loans and repayments to peak around 2030 and then fall away.

4.177 For the English scheme, we assume that the initial average loan per student for tuition fees will be £7,000. The Office for Fair Access released figures in December 2011 implying an average fee per student of around £8,500. However the average loan will be lower than that figure after accounting for deductions and the fact that some students will have chosen not to take a loan, whilst others will have taken out less than the full amount. We also assume that the average maintenance loan will be £3,300. We will review both assumptions for our spring 2013 forecast as firmer data on the first cohort of students under the new system becomes available.

4.178 Our current forecast takes into account the latest data on average loans for pre-2012 students and estimates for the number of such students in future years, as well as the proportion of entrants likely to be eligible for fee loans under the new system. These increase expected outlays over the forecast horizon, but are partially offset in the near term by fewer students than expected enrolling in the current year. Repayments are also slightly lower due to lower earnings growth.

4.179 The forecast also allows for bank repayments of loans provided as part of the previous Government's financial sector interventions. As Bradford & Bingley plc (B&B) and Northern Rock (Asset Management) (NRAM) have been reclassified into central government, loan repayments by these banks to the Exchequer will no longer affect PSNCR (see Box 4.1).

4.180 Other loans include lending through the Green Investment Bank and the Department for International Development's (DfID) contributions to multilateral development banks, as well as loans to Ireland and a range of other schemes. These include the latest Autumn Statement announcements (see Table 4.3) and an additional £1.3 billion of funding for the European Infrastructure Bank in 2012-13.

Cash flow timing effects

4.181 As discussed above, to move from PSNB to PSNCR it is necessary to make an adjustment for the likely impact of timing differences between cash flows and accruals. If receipts are forecast to rise over time, the cash received in any given year will generally be lower than the accrued tax receipts, and the difference increases over time.

4.182 A large component of the receipts timing adjustment relates to the interest on student loans. This is notionally included in the accrued measure of public sector current receipts as soon as the loan is issued. However, cash repayments are not actually received until the point at which students earn sufficient income. As a result of a modelling change, student loan interest accrues more gradually over the forecast period.

4.183 Similar timing adjustments are made for expenditure. The largest adjustment is for the timing of payments on index-linked gilts. These adjustments are very sensitive to RPI inflation, as well as to the profile of redemptions, which is not smooth. Positive RPI inflation raises the amount the Government is committed to pay on index-linked gilts, and this commitment is recognised in PSNB each year. But the actual cash payments will not occur until redemption of the gilt which may be many years in the future. Lower RPI inflation in the medium term reduces the size of the necessary accruals adjustments.

4.184 There are also lags due to the timing of cash payments through the year, which affect conventional gilts. For gilts sold at a premium, the cash payments to cover coupons will be larger than the amounts accrued in debt interest. As we now expect gilts to be sold at a premium for a longer period of time, the corresponding accruals effects are significantly larger than in our March forecast.

4.185 Timing effects relating to other elements of cash spending are much more difficult to forecast and the figures are subject to large revisions. We therefore assume that the adjustment over the forecast period is equal to the historical average.

Transactions in company securities

4.186 Consistent with the *Charter for Budget Responsibility*, and our wider approach to policy announcements, we only include the impact of financial asset sales or purchases once firm details are available that allow the effects to be quantified with reasonable accuracy. The Government intends to sell the non-gilt liquid assets that it received in April alongside the transfer of Royal Mail's historic pension liabilities within two years. Disposals of assets appear to have been more frontloaded then we assumed in March and are expected to be around £1 billion larger in total. We do not make any assumptions for the sales of illiquid assets as it is not possible to do so with reasonable accuracy.

Other factors

4.187 The transfer of the Royal Mail pension fund assets reduced PSNB by £28 billion in April 2013. However, only £4.5 billion was liquid cash that reduced PSNCR, so the initial transfer reduced net borrowing by £23.5 billion more than it reduced PSNCR.

4.188 The £23.8 billion of cash accumulated in the Asset Purchase Facility up to the end of 2011-12 is expected to be transferred to the Exchequer over 2013-14. We assume that this will be treated as a withdrawal of equity and so not affect PSNB, but it will reduce the net cash requirement. There will also be some accruals effects relating to the APF, as transfers will be made a short period of time after the quarter they relate to.

Central government net cash requirement

4.189 The other important cash measure is the central government net cash requirement (CGNCR). The inclusion of B&B and NRAM in the central government sector means that this is no longer simply a measure of the cash required by the Exchequer to fund its operations, which forms the basis for the Government's net financing requirement.[15] We separate out transactions involving B&B and NRAM in Table 4.29.

4.190 The table also shows how CGNCR relates to PSNCR and Table 4.30 sets out the changes in this relationship since the March forecast. The CGNCR is derived by adding and removing transactions that are associated with local authorities and public corporations from the PSNCR. Excluding B&B and NRAM, changes in the CGNCR forecast broadly follow changes to our PSNCR forecast. We expect local authorities and public corporations to be marginal net lenders from 2013-14 onwards.

Table 4.29: Reconciliation of PSNCR and CGNCR

	£ billion						
	Outturn	Forecast					
	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Public sector net cash requirement	**124**	**104**	**102**	**98**	**82**	**68**	**47**
of which:							
Local authorities and public corporations NCR	7	0	-2	-2	-2	-2	-2
Central government NCR own account	118	104	103	100	84	70	49
CGNCR own account	118	104	103	100	84	70	49
Net lending within the public sector	9	2	2	2	2	2	2
Central government net cash requirement	**127**	**106**	**105**	**102**	**86**	**72**	**51**
of which B&B and NRAM		-3	-3	-3	-2	-1	-3
CGNCR excl. B&B and NRAM	**127**	**104**	**103**	**99**	**83**	**70**	**48**

[15] The Government is publishing a revised financing remit for 2012-13 alongside this forecast. The OBR provides the Government with the forecast of the CGNCR for this purpose, but plays no further role in the derivation of the net financing requirement.

Table 4.30: Changes in the reconciliation of PSNCR and CGNCR since March

	£ billion					
	Outturn	Forecast				
	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Public sector net cash requirement	**-8**	**-17**	**-8**	**19**	**29**	**35**
of which:						
Local authorities and public corporations NCR	-5	-2	-1	-1	-1	0
Central government NCR own account	-3	-15	-7	20	30	35
CGNCR own account	-3	-15	-7	20	30	35
Net lending within the public sector	-1	0	0	0	0	0
Central government net cash requirement	**-3**	**-15**	**-7**	**21**	**30**	**35**
of which: B&B and NRAM		-3	-3	-3	-2	-1
CGNCR excl. B&B and NRAM	**-3**	**-17**	**-9**	**18**	**27**	**33**

Box 4.4: Fiscal impact of the financial interventions

We have certified the Treasury's approach for calculating the net cost or benefit to the taxpayer of the interventions to stabilise the financial sector. In particular, these are:

- equity injections into RBS, Lloyds (LBG) and Northern Rock plc;
- the Asset Protection Scheme (APS);
- bank financing support through the Special Liquidity Scheme (SLS) and Credit Guarantee Scheme (CGS);
- holdings in Bradford & Bingley (B&B) and Northern Rock (Asset Management) (NRAM); and
- other loans through the Financial Services Compensation Scheme (FSCS) and various wholesale and depositor guarantees.

The APS, SLS and CGS have all now closed, with net gains to the Exchequer of £5 billion, £2.3 billion and £4.3 billion respectively. These figures have already been captured in public sector net borrowing.

Changes in the market prices of the Government's shareholdings in RBS and LBG are not reflected in PSNB and PSND. There will be impacts on PSND (and possibly PSNB) when the shares are sold, but the eventual cost or benefit is highly uncertain. The Treasury uses market prices to value these shares. On the basis of the latest volume weighted average market prices this implies a loss of £28.1 billion on these investments, relative to an implied loss of £25.6 billion reported in the March *EFO*.

The Treasury continue to assume that the other interventions, including holdings in B&B and NRAM will not materially affect the aggregate cost or benefit. Although the Exchequer is expected to recover its support for B&B and NRAM in cash terms, there may be a net present value cost once risk and the delay in proceeds are considered.

Overall, their approach implies an estimated direct loss to the taxpayer on the financial interventions of £16.5 billion. This is bigger than the March estimate of a loss of £14.3 billion, since when RBS' and Lloyds' equity values have increased (£1.9 billion) and further receipts relating to the CGS have been received (£0.3 billion).

If all interventions were financed through debt, the Treasury estimate that additional debt interest costs would have totalled £13.4 billion over the 51 months to date.

The key fiscal aggregates

4.191 Our central forecast for the key fiscal aggregates is presented in Table 4.32. These incorporate the forecasts for receipts, expenditure and financial transactions which we have set out earlier in this chapter. In this section we explain the changes in four key fiscal aggregates:

- **public sector net borrowing**: the difference between total public sector receipts and expenditure on an accrued basis each year. As the widest measure of borrowing it is a key indicator of the fiscal position and useful for illustrating the reasons for changes since the previous forecast;

- the **current budget**: the difference between public sector current expenditure and receipts each year. In other words this is public sector net borrowing excluding borrowing to finance investment;

- the **cyclically-adjusted current budget**: the surplus on the current budget adjusted to remove the estimated effect of the economic cycle. It represents an estimate of the underlying or 'structural' surplus on the current budget, in other words the current budget we would see if the output gap was zero. It is used as the target measure for the Government's fiscal mandate; and

- **public sector net debt**: a stock measure of the public sector's net liability position i.e. its liabilities minus its liquid assets. It is broadly the stock equivalent of public sector net borrowing, but measured on a cash rather than an accrued basis. It is also the fiscal measure used for the Government's supplementary fiscal target

Public sector net borrowing

Public sector net borrowing in 2012-13

4.192 Our new forecast for public sector net borrowing in 2012-13 is £80 billion or 5.1 per cent of GDP. Excluding the transfer of Royal Mail pension assets into the public sector this year, PSNB would be £108 billion, or 6.9 per cent of GDP. Measured on this basis, PSNB is now expected to fall by £13 billion between 2011-12 and 2012-13.

4.193 Our latest forecast is £11 billion lower than the estimate we made in March. As shown in Table 4.31 policy decisions by the Government and reclassifications have reduced PSNB this year by £16 billion, more than offsetting forecast changes which overall have pushed borrowing up £4 billion:

- measures included in the Autumn Statement policy decision table reduce PSNB in 2012-13 by £4.0 billion, of which the estimated proceeds from the spectrum auction contribute £3.5 billion;

- the Government's decision to change the treatment of the proceeds from the Asset Purchase Facility is expected to reduce borrowing in 2012-13 by a further £11.5 billion, as set out above;

- the reclassification of Bradford and Bingley and Northern Rock (Asset Management) increases receipts in 2012-13 by £2.1 billion and raises expenditure by £1.8 billion, so overall reducing PSNB by £0.4 billion;

- other changes to our receipts forecast increase PSNB in 2012-13 by £11 billion. In particular, largely reflecting weak receipts so far this year, we have reduced our forecast for offshore corporation tax by £2.8 billion, onshore corporation tax by £2.1 billion, and VAT by £0.9 billion. We have also reduced our forecast for income tax and NICS by £2.3 billion; and

- other changes to the expenditure forecast reduce PSNB in 2012-13 by £5 billion. This is primarily due to our assumption that there will be significant underspends by central government departments and that local government will again add to reserves, as discussed in the spending section above.

4.194 Our in-year forecast for PSNB remains uncertain, even with seven months of outturn data to draw upon. The final quarter of the financial year is particularly important for receipts from self-assessed income tax, capital gains tax and taxes related to bonus payments, which have been particularly volatile in recent years. Whilst we have taken into account the likelihood of reverse forestalling as a result of the change to the 50 per cent top rate of income tax in the forecast, there remains significant uncertainty over the extent to which this will actually occur. In addition, central government and local authority spending data is often revised significantly after the end of the financial year, as more data becomes available.

Public sector net borrowing from 2013-14

4.195 Table 4.31 shows that we expect PSNB to decline from £108 billion or 6.9 per cent of GDP this year (excluding the effect of the Royal Mail transfer), to £31 billion or 1.6 per cent of GDP in 2017-18. Chart 4.5 shows that this fall in borrowing as a share of GDP is driven by falling public sector expenditure, largely as a result of lower departmental spending under the Government's fiscal consolidation plan, with public sector receipts expected to be broadly flat as a share of GDP.

4.196 Our latest forecast is that PSNB will be £1.8 billion higher in 2013-14 than we expected in March rising to £28 billion higher in 2016-17. Table 4.31 splits out the change in our medium-term PSNB forecast into the following factors:

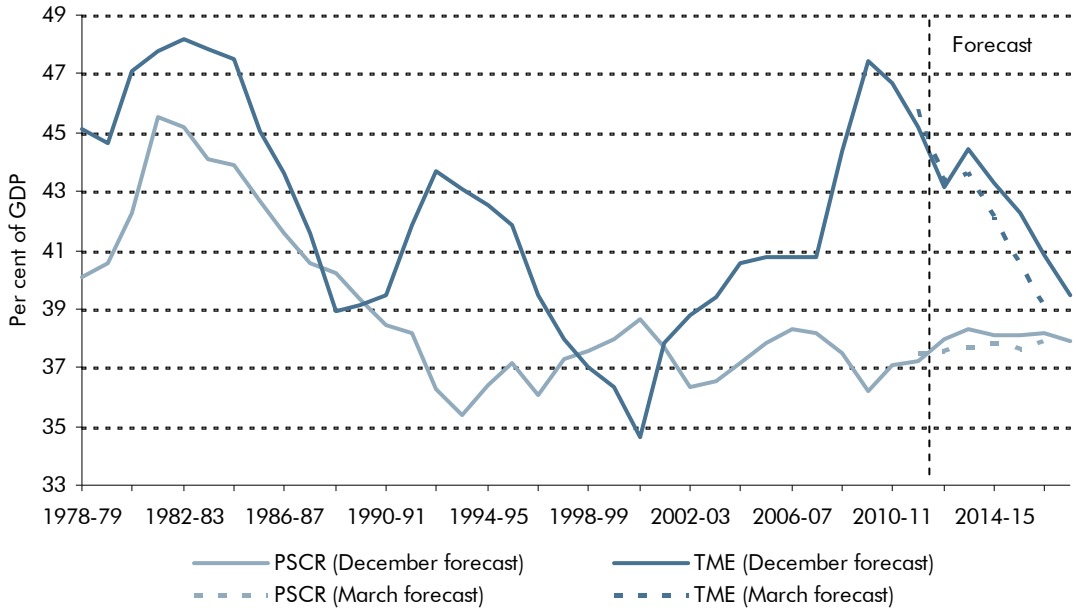
- policy measures on the Treasury's Autumn Statement policy decisions table add to borrowing by around £1 billion in each year from 2013-14 to 2015-16 and are broadly neutral in 2016-17;
- the decision to change the treatment of the proceeds of the Asset Purchase Facility reduces PSNB significantly up to 2016-17. As set out earlier this decision will lead to higher borrowing in the years beyond our forecast horizon;
- the reclassification of Bradford & Bingley plc and Northern Rock (Asset Management) reduces borrowing by up to around £1 billion by 2016-17, as described in Box 4.1; and
- other forecasting changes increase borrowing by £36 billion in 2016-17. This is primarily driven by lower expected receipts, due to our weaker economic forecast.

4.197 All fiscal forecasts are subject to significant uncertainty. Chart 4.6 shows our median (central) forecast for PSNB with successive pairs of shaded areas around it representing 20 per cent probability bands. These bands illustrate the probability of different outcomes if errors in past official forecasts are a reasonable guide to the likelihood of errors in this forecast.

Table 4.31: Changes to public sector net borrowing since March

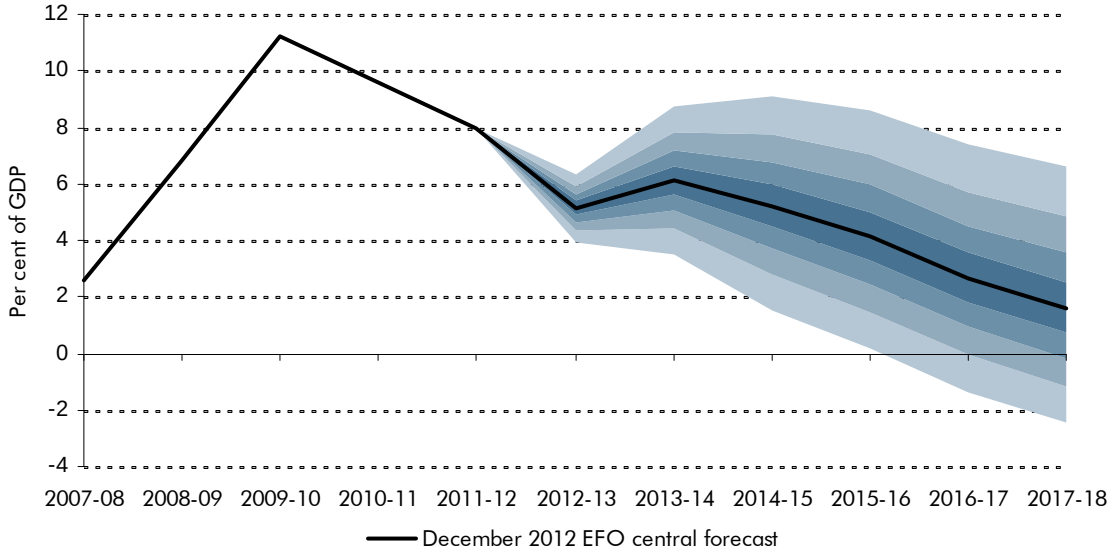
	£ billion					
	Outturn	Forecast				
	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
March forecast	126.0	91.9	98	75	52	21
December forecast	121.4	80.5	99	88	73	49
Change	-4.6	-11.4	1.8	12.9	21.3	27.9
of which:						
Forecast changes	*-4.6*	*4.4*	*13.6*	*23.0*	*29.1*	*36.0*
Policy measures	*0.0*	*-4.0*	*0.9*	*0.9*	*0.9*	*-0.3*
APF transfers	*0.0*	*-11.5*	*-12.3*	*-10.6*	*-8.0*	*-6.6*
B&B/NRAM classification	*-*	*-0.4*	*-0.5*	*-0.4*	*-0.8*	*-1.1*
Memo: March EFO PSNB ex Royal Mail	*126.0*	*119.9*	*97.5*	*75.0*	*52.0*	*21.1*
Memo: PSNB excluding Royal Mail	*121.4*	*108.5*	*99.3*	*87.9*	*73.3*	*49.0*
Memo: PSNB ex Royal Mail and APF	*121.4*	*119.9*	*111.6*	*98.6*	*81.2*	*55.6*
Memo: PSNB ex RM, B&B, NRAM and APF	*-*	*120.3*	*112.1*	*99.0*	*82.0*	*56.7*

Chart 4.5: Total public sector spending and receipts



Source: ONS, OBR

Chart 4.6: Public sector net borrowing fan chart



Current budget

4.198 The current budget is forecast to move from a deficit of £89 billion, or 6.3 per cent of GDP this year, to a deficit of £8 billion, or 0.4 per cent of GDP in 2017-18. The improvement is less sharp than for the PSNB as it excludes the reduction in capital spending planned over this period.

4.199 Compared to our March forecast, the deterioration in the current budget throughout the medium-term is similar to that for PSNB, as overall changes to investment spending are relatively minor. The ongoing transfers from the APF to the Exchequer reduce both PSNB and the current budget in the forecast, as we expect them to be classified as current receipts. We currently assume that transfers from the Exchequer to the APF to cover losses would be classified as capital transfers, which would affect PSNB but not the current budget. However, this is subject to a classification decision from the ONS.

Cyclically-adjusted current budget

4.200 The cyclically-adjusted current budget (CACB) is the current budget adjusted to remove the estimated effect of our position in the economic cycle. It therefore represents an estimate of the underlying structural element of the current budget that does not change with fluctuations in the economic cycle. The CACB is used as the target measure for the Government's fiscal mandate. Our forecast is for a deficit in the CACB of 3.6 per cent of GDP in 2012-13 before returning to a surplus of 0.9 per cent of GDP in 2017-18.

4.201 The CACB in 2012-13 has improved by 0.6 per cent of GDP since our March forecast. This reflects improvements in the headline current budget in 2012-13, largely driven by Government policy decisions, and the fact that the output gap is wider than in our March forecast, meaning more of the deficit is assumed to be cyclical. The medium-term forecast for the CACB is only slightly worse than in March, with no material difference as a share of GDP in 2016-17. While the headline current budget has deteriorated by 1.5 per cent of GDP in 2016-17, we also expect the output gap to be 2.0 per cent of GDP wider in that year than we forecast in March. Our forecast judgement is that much of the additional weakness in the economy compared to March is cyclical rather than structural and therefore does not affect our assessment of the CACB.

4.202 Our forecast does assume that the level of potential output in 2016-17 is 1.3 per cent of GDP lower than we expected in March, which other things being equal would lead to a deterioration in the structural deficit. However, this has been largely offset by other forecast and policy changes such as the proceeds from the APF transfers and the reclassification of Bradford and Bingley plc and Northern Rock (Asset Management). Chapter 5 describes the changes in our forecast of the CACB in more detail.

Table 4.32: Fiscal aggregates

	Per cent of GDP						
	Outturn	Forecast					
	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Receipts and expenditure							
Public sector current receipts (*a*)	37.3	38.0	38.3	38.1	38.1	38.2	37.9
Total managed expenditure (*b*)	45.2	43.1	44.4	43.3	42.2	40.9	39.5
of which:							
Public sector current expenditure (c)	42.1	42.3	41.5	40.4	39.5	38.2	36.9
Public sector net investment (*d*)	1.7	-0.5	1.5	1.5	1.3	1.2	1.2
Depreciation (e)	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Deficit							
Public sector net borrowing (*b-a*)	7.9	5.1	6.1	5.2	4.2	2.6	1.6
Surplus on current budget (*a-c-e*)	-6.2	-5.7	-4.6	-3.7	-2.9	-1.4	-0.4
Cyclically-adjusted net borrowing	6.0	3.0	3.8	2.9	2.0	0.9	0.3
Primary balance	-5.0	-3.2	-4.2	-3.1	-1.8	-0.2	1.2
Cyclically-adjusted primary balance	-3.1	-1.1	-1.8	-0.8	0.3	1.6	2.6
Fiscal mandate and supplementary target							
Cyclically-adjusted surplus on current budget	-4.3	-3.6	-2.2	-1.4	-0.8	0.4	0.9
Public sector net debt[1]	66.4	74.7	76.8	79.0	79.9	79.2	77.3
Financing							
Central government net cash requirement	8.3	6.8	6.5	6.0	4.9	3.9	2.6
Public sector net cash requirement	8.1	6.6	6.3	5.8	4.6	3.7	2.4
Stability and Growth Pact							
Treaty deficit[3]	7.7	5.2	6.2	5.3	4.3	2.8	1.8
Cyclically-adjusted Treaty deficit[2]	5.8	3.1	3.9	3.0	2.2	1.0	0.4
Treaty debt ratio[3]	85.8	90.3	93.5	96.3	97.4	96.6	94.4
	£ billion						
Surplus on current budget	-95	-89	-74	-62	-51	-26	-8
Net investment	27	-9	25	26	23	23	23
Public sector net borrowing	121	80	99	88	73	49	31
Central government net cash requirement	127	106	105	102	86	72	51
Public sector net debt	1025	1186	1270	1362	1442	1498	1534
Memo: PSNB ex. Royal Mail transfer	*121.4*	*108.5*	*99.3*	*87.9*	*73.3*	*49.0*	*31.2*
Memo: PSNB ex. Royal Mail transfer (per cent of GDP)	*7.9*	*6.9*	*6.1*	*5.2*	*4.2*	*2.6*	*1.6*
Memo: Cyclically-adjusted PSNB ex. Royal Mail transfer (per cent of GDP)	*6.0*	*4.8*	*3.8*	*2.9*	*2.0*	*0.9*	*0.3*
Memo: Output gap (per cent of GDP)	*-2.7*	*-3.2*	*-3.5*	*-3.3*	*-2.9*	*-2.4*	*-1.7*

[1] Debt at end March; GDP centred on end March

[2] General government net borrowing on a Maastricht basis

[3] General government gross debt on a Maastricht basis

Net debt

4.203 The Government's supplementary fiscal target is for public sector net debt (PSND) to be falling as a share of GDP in 2015-16. In our latest forecast, PSND rises as a share of GDP in each year up to and including 2015-16, peaking at 79.9 per cent of GDP, before falling to 79.2 per cent of GDP in 2016-17 and than 77.3 per cent of GDP in 2017-18.

4.204 PSND in 2016-17 is now expected to be around 4.9 per cent of GDP higher than we forecast in March. Table 4.33 breaks down the components of this change:

- the level of nominal GDP over the past year has been slightly lower than we forecast in March, and we expect lower nominal GDP growth in the future. Simply by reducing the denominator for calculating PSND as a share of GDP, this increases PSND by 3.9 per cent of GDP in 2016-17;

- our forecast for PSND in cash terms in 2016-17 is also higher than in March, by £19 billion or 1 per cent of GDP. This is the result of a number of offsetting factors shown in the bottom half of Table 4.33:

  - the reclassification of Bradford & Bingley and Northern Rock (Asset Management) raises the stock of debt by £68 billion in 2012-13. The stock of liabilities falls as they wind down their mortgage books, reducing the total addition to PSND to £42 billion by 2016-17;

  - the transfers from the APF reduce PSND over this forecast period (see above from paragraph 4.32). The reduction increases over most of this period as transfers flow from the APF to the Exchequer. From 2017-18 and further beyond the forecast horizon we would expect transfers to flow from the Exchequer to the APF, and consequently the reduction in PSND would partially diminish;

  - other forecasting changes lead to an increase in PSND of £105 billion by 2016-17. This is largely the consequence of the weaker economic forecast leading to higher net borrowing;

  - for the purposes of calculating net debt, gilts are valued at their nominal value rather than their market value. In the past, the Debt Management Office (DMO) has typically sold gilts at close to their nominal value. However, with gilt rates at such low rates in the past couple of years, the DMO has been issuing at a premium to market value. Our recent *Forecast Evaluation Report* identified this as a significant explanation for recent errors in forecasting net debt. Therefore, given that gilt rates are expected to remain low, we have

revised our forecast to reflect the likelihood that the DMO will continue to issue gilts at a premium, although we expect this effect to diminish over time as gilt rates rise. This reduces our forecast of PSND by £39 billion by 2016-17; and

- finally, changes to our financial transactions forecasts and a lower starting level of debt lead to a fall in PSND of £17 billion by 2016-17.

Table 4.33: Changes to net debt since March

	Per cent of GDP					
	Outturn	Forecast				
	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
March forecast	67.3	71.9	75.0	76.3	76.0	74.3
December forecast	66.4	74.7	76.8	79.0	79.9	79.2
Change	**-0.9**	**2.8**	**1.8**	**2.6**	**3.9**	**4.9**
of which:						
Change in nominal GDP[1]	0.0	1.1	1.9	2.8	3.6	3.9
Change in cash level of net debt	-0.9	1.7	-0.1	-0.2	0.3	1.0
	£ billion					
March forecast	1039	1159	1272	1365	1437	1479
December forecast	1025	1186	1270	1362	1442	1498
Change in cash level of net debt	**-13**	**27**	**-2**	**-3**	**5**	**19**
of which:						
Reclassification of B&B and NRAM		68	62	56	50	42
Inclusion of APF transfers		-11	-43	-55	-63	-71
Other changes in net borrowing	-5	-4	11	36	67	105
Auction price effects		-12	-20	-28	-34	-39
Financial transactions and other	-9	-14	-11	-12	-14	-17

[1] Non-seasonally-adjusted GDP centred end-March.

Table 4.34: Changes to the fiscal forecast

	£ billion						
	Outturn	Forecast					
	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Surplus on current budget							
June 2010 forecast	-88	-65	-40	-17	0		
March 2012 forecast	-98	-95	-74	-52	-30	1	
Change	*3*	*6*	*0*	*-10*	*-20*	*-27*	
December 2012 forecast	-95	-89	-74	-62	-51	-26	-8
Net investment							
June 2010 forecast	27	24	20	21	21		
March 2012 forecast	28	-3	23	23	22	22	
Change	*-1*	*-5*	*2*	*2*	*1*	*1*	
December 2012 forecast	27	-9	25	26	23	23	23
Net borrowing							
June 2010 forecast	116	89	60	37	20		
March 2012 forecast	126	92	98	75	52	21	
Change	*-5*	*-11*	*2*	*13*	*21*	*28*	
December 2012 forecast	121	80	99	88	73	49	31
	Per cent of GDP						
Net borrowing							
June 2010 forecast	7.5	5.5	3.5	2.1	1.1		
March 2012 forecast	8.3	5.8	5.9	4.3	2.8	1.1	
Change	*-0.3*	*-0.7*	*0.2*	*0.9*	*1.3*	*1.6*	
December 2012 forecast	7.9	5.1	6.1	5.2	4.2	2.6	1.6
Cyclically-adjusted surplus on current budget							
June 2010 forecast	-3.2	-1.9	-0.7	0.3	0.8		
March 2012 forecast	-4.6	-4.2	-2.7	-1.5	-0.7	0.5	
Change	*0.3*	*0.6*	*0.5*	*0.2*	*-0.1*	*-0.1*	
December 2012 forecast	-4.3	-3.6	-2.2	-1.4	-0.8	0.4	0.9
Cyclically-adjusted net borrowing							
June 2010 forecast	5.0	3.4	1.8	0.8	0.3		
March 2012 forecast	6.4	4.0	4.1	2.9	1.9	0.7	
Change	*-0.4*	*-1.0*	*-0.4*	*0.0*	*0.1*	*0.2*	
December 2012 forecast	6.0	3.0	3.8	2.9	2.0	0.9	0.3
Net debt[1]							
June 2010 forecast	67.2	69.8	70.3	69.4	67.4		
March 2012 forecast	67.3	71.9	75.0	76.3	76.0	74.3	
Change	*-0.9*	*2.8*	*1.8*	*2.6*	*3.9*	*4.9*	
December 2012 forecast	66.4	74.7	76.8	79.0	79.9	79.2	77.3

[1] Debt at end March; GDP centred on end March.

International comparisons

4.205 International organisations such as the European Commission, the IMF and the OECD all provide comparisons of deficit and debt levels between countries. These are on a general government basis and also on a calendar year basis. To facilitate international comparisons, Tables 4.35 and 4.36 provide UK forecasts

on comparable definitions and on a calendar year basis. With both modelling and reporting of much tax and spend done primarily on a financial year basis only, the calendar year forecasts are illustrative and have been generated simply by weighting the financial year forecasts appropriately and adjusting for APF dividend flows.

4.206 Table 4.35 compares our December forecasts for Treaty deficit and debt against the latest forecasts from the European Commission, published in November. The UK's Treaty deficit in 2013 remains high relative to the main European countries. The UK's Treaty debt to GDP ratio in 2013 is expected to be close to the euro area average. Prior to the economic downturn, the UK's Treaty debt ratio was over 20 per cent of GDP below the euro area average. Table 4.36 compares our forecasts with the latest IMF projections. This shows that UK government borrowing in 2013 is expected to be above several other main European countries but below the projected deficits of Japan and the U.S.

Table 4.35: Comparison with European Commission forecasts

	Per cent of GDP					
	Treaty Deficit			Treaty Debt		
	2012	2013	2014	2012	2013	2014
UK (December EFO)	6.4	5.5	5.6	89.3	92.8	95.7
UK (EC)	6.2	7.2	5.9	88.7	93.2	95.1
Germany	0.2	0.2	0.0	81.7	80.8	78.4
France	4.5	3.5	3.5	90.0	92.7	93.8
Italy	2.9	2.1	2.1	126.5	127.6	126.5
Spain	8.0	6.0	6.4	86.1	92.7	93.8
Euro area	3.3	2.6	2.5	92.9	94.5	94.3

Source: OBR, European Commission, European Economic Forecast, Autumn 2012

Table 4.36: Comparison with IMF forecasts

	Per cent of GDP					
	General Government Net Borrowing			General Government Net Debt		
	2012	2013	2017	2012	2013	2017
UK (December EFO)	6.4	5.5	2.0	80.1	83.9	87.1
UK (IMF)	8.2	7.3	1.7	83.7	88.2	88.7
Germany	0.4	0.4	0.0	58.4	57.5	56.2
France	4.7	3.5	0.0	83.7	85.9	80.2
Italy	2.7	1.8	0.7	103.1	103.9	98.7
Japan	10.0	9.1	5.8	135.4	144.7	158.7
U.S.	8.7	7.3	4.4	83.8	87.7	89.4

Source: OBR, IMF World Economic Outlook, October 2012

5 Performance against the Government's fiscal targets

Introduction

5.1 This chapter:

- sets out the Government's medium-term fiscal targets (from paragraph 5.2);
- examines whether the Government has a better than 50 per cent chance of meeting them, given our central forecast (from paragraph 5.5); and
- assesses how robust this judgement is to the uncertainties inherent in any fiscal forecast, by looking at: past forecast errors; sensitivity to key parameters of the forecast; and alternative economic scenarios (from paragraph 5.12).

The fiscal mandate and the supplementary target

5.2 In the June 2010 Budget, the Government set itself two medium-term fiscal targets for the current Parliament: the fiscal mandate and a supplementary target. The OBR is required to judge whether the Government has a greater then 50 per cent probability of hitting these targets under existing policy.

5.3 The *Charter for Budget Responsibility* defines the fiscal mandate as "a forward-looking target to achieve cyclically-adjusted current balance by the end of the rolling, five-year forecast period". This means that total public sector receipts need to at least equal total public sector spending (minus spending on net investment) in five years time, after adjusting for the impact of any remaining spare capacity in the economy. For the purposes of this forecast and the spring 2013 *EFO*, the five-year horizon ends in 2017-18.

5.4 The *Charter* says that the supplementary target requires "public sector net debt as a percentage of GDP to be falling at a fixed date of 2015-16, ensuring the public finances are restored to a sustainable path." The target refers to public sector net debt (PSND) excluding the temporary effects of financial interventions.

The implications of our central forecast

5.5 Table 5.1 shows our central forecasts for the cyclically-adjusted current budget (CACB) and PSND in each year to 2017-18, as set out in Chapter 4. These are median forecasts, which means that we believe it is equally likely that the eventual outturns will come in above them as below them.

Table 5.1: Performance against the Government's fiscal targets

	Per cent of GDP						
	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Cyclically-adjusted current budget							
March forecast	-4.6	-4.2	-2.7	-1.5	-0.7	0.5	
December forecast excluding Autumn Statement measures[1]	-4.3	-3.6	-2.3	-1.5	-0.7	0.3	0.7
December forecast also excluding other announcements and reclassifications[2]	-4.3	-4.4	-3.1	-2.2	-1.2	-0.1	0.6
December forecast	-4.3	-3.6	-2.2	-1.4	-0.8	0.4	0.9
Public sector net debt							
March forecast	67.3	71.9	75.0	76.3	76.0	74.3	
December forecast excluding Autumn Statement measures[1]	66.4	75.0	77.0	79.0	79.9	79.1	77.5
December forecast also excluding other announcements and reclassifications[2]	66.4	72.8	77.2	80.3	81.9	81.9	80.7
December forecast	66.4	74.7	76.8	79.0	79.9	79.2	77.3

[1] These remove the direct effect of measures announced in the Autumn Statement. No account is taken of indirect effects, including the impact on debt interest payments.

[2] These remove the direct effect of: Autumn Statement measures; the transfer of Royal Mail's historic pension deficit and subsequent asset sales; proceeds from the Asset Purchase Facility; and the reclassification of Bradford & Bingley plc and Northern Rock (Asset Management). No account is taken of indirect effects, including the impact on debt interest payments, nor the impact of reclassifications on 2011-12 figures.

5.6 Table 5.1 shows that our central forecast is for the CACB to be in surplus by 0.9 per cent of GDP in 2017-18. This means that there is a greater than 50 per cent chance of the Government achieving balance on this measure in that year and as a result it is on course to achieve the mandate. The Government is on course to meet the mandate because it has chosen to continue cutting non-investment spending as a share of GDP into 2017-18. This improves the CACB by 1.1 per cent of GDP in that year. The Government's 'unchanged policy' baseline delivers 0.8 percentage points of this reduction as the forecast rolls on an extra year, with 0.3 percentage points being defined by the Treasury as an explicit policy decision in its table of Autumn Statement policy measures.

5.7 Table 5.1 also shows that in the absence of any explicit Autumn Statement policy measures, but including the baseline tightening in spending, our central forecast would show the CACB in surplus by 0.7 per cent of GDP in 2017-18. Excluding

the Chancellor's additional decision to transfer the excess cash held in the Asset Purchase Facility (APF) to the Exchequer – as well as the impact of the ONS' reclassification of Bradford & Bingley plc (B&B) and Northern Rock (Asset Management) (NRAM) into central government – the surplus would be 0.6 per cent of GDP.

5.8 In our March *EFO*, the relevant year for assessing the fiscal mandate was 2016-17. Our central forecast shows that the surplus on the CACB is marginally lower in that year than expected in March at 0.4 per cent of GDP. In the absence of the APF proceeds, reclassifications and the Autumn Statement measures, the CACB would now show a small deficit in 2016-17.

5.9 Table 5.2 decomposes the changes in our forecasts of the CACB since March.[1] The decomposition shows that:

- although much of the downward revision to our GDP forecasts since March is assumed to be cyclical and temporary, some is assumed to be structural and persistent. Our assessment of the current output gap and future trend growth reduces the level of potential output by 1.3 per cent of GDP by 2016-17, worsening the CACB by 0.9 per cent of GDP;

- transfers from the APF to the Exchequer boost receipts and thereby improve the CACB up to 2016-17. But these transfers diminish and turn negative by 2017-18. We assume that flows to the APF will be treated as capital grants, not subsidies. So they do not affect the current budget and therefore the Government's performance against the fiscal mandate;

- the reclassification of B&B and NRAM improves the CACB slightly in each year;

- other forecasting changes to receipts and spending improve the CACB by around 0.3 per cent of GDP from 2015-16. These include a small reduction in debt interest costs arising from the APF decision;

- rolling forward an assumption of a real freeze for total spending in 2017-18 (which the Treasury treats as 'unchanged policy' and which does not therefore appear in its scorecard of policy measures) reduces structural non-

[1] We did not produce a forecast for the CACB in 2017-18 in our March *EFO*. But as a measure of the underlying structural position, it is reasonable to assume that the CACB, absent policy measures, would not move over relatively short time frames. We therefore assume that the CACB would otherwise have been unchanged between 2016-17 and 2017-18.

investment spending by 0.8 per cent of GDP in that year and improves the CACB by the same amount; and

- measures appearing in the Treasury's Autumn Statement decisions table have a relatively small impact up to and including 2016-17. Measures in 2017-18, mainly the extension of the real spending cuts pencilled in for 2015-16 and 2016-17, improve the CACB by 0.3 per cent of GDP in that year.

Table 5.2: Changes to the cyclically-adjusted current budget since March

	Per cent of GDP						
	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18[1]
March forecast	-4.6	-4.2	-2.7	-1.5	-0.7	0.5	0.5
December forecast	-4.3	-3.6	-2.2	-1.4	-0.8	0.4	0.9
Change	**0.3**	**0.6**	**0.5**	**0.2**	**-0.1**	**-0.1**	**0.5**
of which:							
Judgement on potential output	-0.1	-0.2	-0.4	-0.6	-0.8	-0.9	-0.9
Inclusion of APF transfers	0.0	0.7	0.8	0.6	0.5	0.4	0.0
Reclassification of B&B and NRAM	0.0	0.1	0.1	0.1	0.1	0.1	0.1
Baseline spending assumption	0.0	0.0	0.0	0.0	0.0	0.0	0.8
Autumn Statement measures	0.0	0.0	0.1	0.1	-0.1	0.0	0.3
Other forecasting changes	0.4	0.0	0.0	0.0	0.3	0.3	0.3

[1] We did not produce a forecast for the CACB in 2017-18 in our March *EFO* . The table shows the differences once rolling forward our forecast for 2016-17 one year ahead.

5.10 The supplementary target requires PSND to fall as a share of GDP between 2014-15 and 2015-16, and this target year remains fixed. As Table 5.1 shows, our March forecast showed PSND falling by 0.3 per cent of GDP in that year. But we now expect PSND to continue rising in 2015-16 by 1 per cent of GDP, so that the Government is no longer on course to meet its supplementary target. We expect PSND to fall as a share of GDP in 2016-17, although it would be stable in that year before falling in 2017-18 if the impact of the reclassification of B&B and NRAM and the new treatment of the APF transfers were excluded.

5.11 Table 5.3 shows a decomposition of changes in the profile of net debt as a share of GDP. This shows:

- our forecasts for nominal GDP growth have been revised down over this period, due to a weaker outlook for real GDP and lower whole economy inflation. Simply by reducing the denominator we use to calculate PSND as a share of GDP, this increases PSND by 0.8 per cent of GDP between 2014-15 and 2015-16. This alone would be sufficient to push the Government off course as regards meeting its supplementary target;

- the reclassification of B&B and NRAM increases net debt in absolute terms, by around £68 billion in 2012-13 (see Box 4.1). But the stock of liabilities falls as they wind down their mortgage books, reducing net debt by around 0.5 per cent of GDP each year;

- proceeds from the APF also reduce net debt each year up to 2016-17, and by declining amounts as a share of GDP. Flows from the APF recede over time and we expect net transfers from the Exchequer to the APF in later years;

- net borrowing is higher in each year of the forecast horizon, largely as a consequence of the weaker economic outlook. As borrowing now falls more gradually, these extra additions raise debt as a share of GDP relative to our March forecast; and

- other changes mean that net debt falls by an additional 0.3 to 0.4 per cent of GDP each year. This mainly reflects our judgement that the Debt Management Office will continue to issue gilts at a premium to their nominal value. This puts downward pressure on PSND as it is calculated using the nominal value of debt rather than its market value, a factor that we have not taken sufficient account of in recent forecasts (see our 2012 *Forecast evaluation report*).

Table 5.3: Decomposition of changes in the profile of net debt since March

	Change in PSND on a year earlier (per cent of GDP)			
	2013-14	2014-15	2015-16	2016-17
March forecast	3.1	1.3	-0.3	-1.8
December forecast	2.1	2.2	1.0	-0.8
Change	**-1.0**	**0.9**	**1.3**	**1.0**
of which:				
Nominal GDP	0.8	0.9	0.8	0.3
Inclusion of APF transfers	-1.9	-0.5	-0.3	-0.3
Reclassification of B&B and NRAM	-0.5	-0.5	-0.5	-0.5
Other changes in net borrowing	0.9	1.4	1.6	1.8
Other	-0.3	-0.4	-0.3	-0.3

Recognising uncertainty

5.12 Past experience and common sense suggest there are significant upside and downside risks to our central forecasts for the public finances. These reflect uncertainty both about the outlook for the economy and about the level of receipts and spending in any given state of the economy.

5.13 Given these uncertainties, it is important to stress-test our judgements that the Government is on course to meet the mandate in 2017-18, but no longer on course to meet the supplementary target in 2015-16. We do this in three ways:

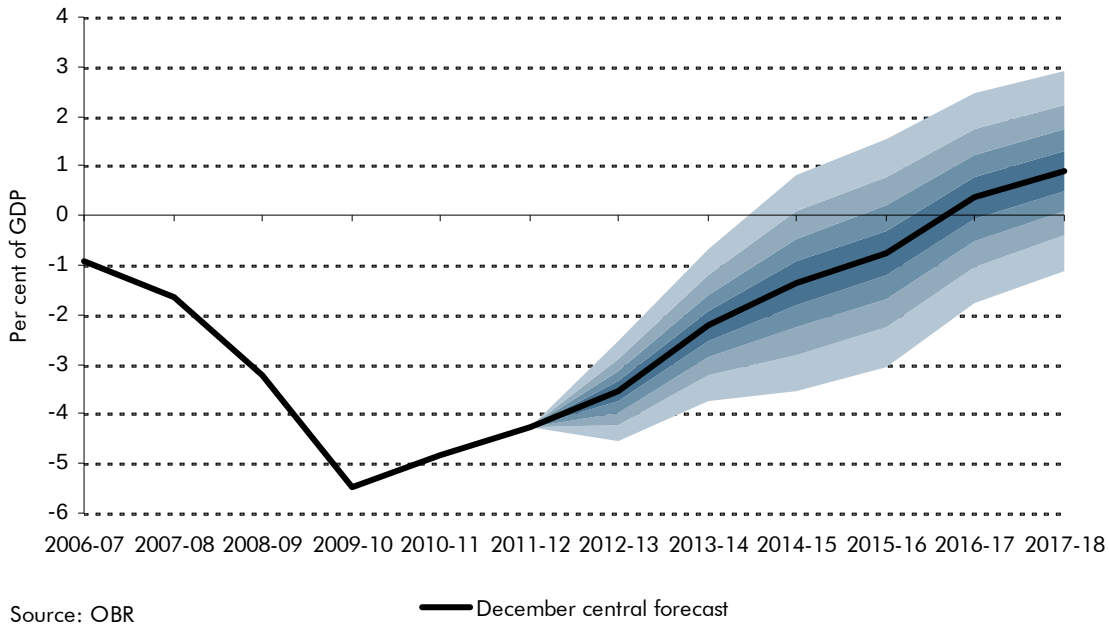
- by looking at the lessons from past forecast errors;
- by seeing how our central forecast would change if we altered some of the key judgements that underpin it; and
- by looking at alternative economic scenarios.

Past performance

5.14 One relatively simple way to illustrate the uncertainty around our central forecast is to draw lessons from the accuracy of previous official public finance forecasts. This can be illustrated through the use of fan charts like those we presented for GDP growth in Chapter 3 and public sector net borrowing (PSNB) in Chapter 4. These fan charts do not represent our assessment of specific risks to the central forecast. Instead they show the outcomes that someone might anticipate if they believed, rightly or wrongly, that errors in the past offered a reasonable guide to errors in the future.

5.15 In this spirit, Chart 5.1 shows the probability distribution around our central forecast for the CACB, based on past official forecasting errors (which usually tend to be dominated by errors in the fiscal forecast rather than the underlying economic forecast). The solid black line shows the median forecast, with the successive pairs of lighter shaded areas around it representing 20 per cent probability bands. This implies that, based on current policy, there would be an 80 per cent probability of the outturn lying within the shaded bands.

Chart 5.1: Cyclically-adjusted current budget fan chart



Source: OBR

5.16 We can see from the chart that, given past forecasting performance, the margin between the Government meeting and missing its fiscal mandate is small relative to the uncertainty that surrounds the public finance forecast over that time horizon. A direct reading of the chart would imply that the Government currently has a roughly 70 per cent probability of achieving a surplus on the CACB in 2017-18 and thereby meeting the mandate. The probability of achieving a cyclically-adjusted surplus in earlier years is lower at around 60 per cent for 2016-17 and 30 per cent for 2015-16.

5.17 Unfortunately, one cannot estimate the probability of achieving the supplementary target, given that we do not have a joint distribution that would allow us to apply the same technique. That said our central median forecast shows PSND rising as a percentage of GDP in 2015-16.

Sensitivity analysis

5.18 It is very difficult to produce a full subjective probability distribution for the Government's target fiscal variables because they are affected by a huge variety of economic and non-economic determinants. However, to recognise the uncertainty in our forecast we can go further than using the lessons of past forecasting errors, by quantifying roughly how sensitive our central forecast is to certain key economic parameters.

5.19 In thinking about the evolution of the public finances over the medium term, there are several parameters that have a particularly important bearing on the forecast. In this section we focus on four:

- the level of potential output, captured by the size of the output gap;
- the speed with which the output gap closes (i.e. the pace of the recovery);
- the interest rates that the Government has to pay on its debt; and
- possible errors on our cyclical adjustment coefficients.

5.20 Our central forecast is based on a judgement that the economy was running around 2.7 per cent below potential in the third quarter of 2012, that the output gap will widen in 2013, and that there will be above-trend GDP growth from 2015.

5.21 Our assumptions and forecasts for the level of economic potential and headline growth imply that the negative output gap will close in 2020-21. But neither the level of potential, nor the pace of recovery, are possible to estimate with confidence, not least because the former is not a variable that we can observe directly in the economic data. So what if the medium-term level of potential was higher or lower than our central estimate, and what if the output gap closed earlier or later than our central estimates?

5.22 Tables 5.4 and 5.5 present illustrative estimates of the impact on:

- the level of the cyclically-adjusted current budget in 2016-17; and
- the change in PSND between 2014-15 and 2015-16.

5.23 For practical reasons, we have not undertaken complete forecast runs for each variant, but have instead used ready-reckoners and simplifying assumptions to generate illustrative estimates. We assume that a lower or higher level of potential is reflected in our starting output gap, rather than errors in forecasting trend growth rates further forward.

5.24 The cyclical adjustment ready-reckoner assumes that a 1 per cent change in GDP will result in a 0.7 per cent of GDP change in PSNB and the current budget after two years. The actual change in the public finances would depend on many other factors, including the composition of growth, inflation and labour market response. Later in this chapter we construct two alternative scenarios for the output gap closing within five years. These are produced in a bottom-up way rather than top-down, and highlight the sensitivities to some of these other

factors. While we recognise the limitations of this top-down approach, applying these ready-reckoners yields the results shown in the tables below.

Table 5.4: Cyclically-adjusted current budget in 2017-18

Per cent of GDP		Output gap closes				
		2016-17	2018-19	2020-21	2022-23	2024-25
Output gap in 2012 Q3	-0.7	-0.5	-0.5	-0.5	-0.5	-0.5
	-1.7	0.2	0.2	0.2	0.2	0.2
	-2.7	1.0	0.9	0.9	0.9	0.9
	-3.7	1.7	1.7	1.6	1.6	1.6
	-4.7	2.5	2.4	2.4	2.3	2.3

Table 5.5: Change in PSND between 2014-15 and 2015-16

Per cent of GDP		Output gap closes				
		2016-17	2018-19	2020-21	2022-23	2024-25
Output gap in 2012 Q3	-0.7	0.5	1.4	1.7	1.8	2.0
	-1.7	-0.3	0.9	1.3	1.6	1.8
	-2.7	-1.0	0.4	1.0	1.3	1.5
	-3.7	-1.7	-0.1	0.6	1.0	1.3
	-4.7	-2.5	-0.5	0.3	0.7	1.1

5.25 Table 5.4 shows that the level of potential output has a strong effect on the size of the cyclically-adjusted current budget balance in 2017-18. The lower potential output is, and therefore the smaller the output gap, the larger the proportion of the deficit that is structural (and therefore impervious to economic recovery) and the less margin the Government has against its fiscal mandate. Conversely if potential is higher, less of the deficit is structural and the Government has more margin against its mandate.

5.26 Closing the output gap at a different pace will typically result in a change in cyclical borrowing, but have little effect on the structural balance. For example, closing the output gap more slowly will result in a lower growth path, leading to more cyclical borrowing but a broadly similar level of structural borrowing.

5.27 Roughly speaking, the output gap would have to be about 1¼ per cent of potential output narrower than our central estimate (or rather the level of potential output would need to be 1¼ per cent lower in 2017-18 than in our central forecast) to make it more likely than not that the mandate would be missed. As we saw in Chapter 3, projections of potential output vary considerably, and this is well within the margins of uncertainty. Indeed, it is roughly the size of the adjustment we have made between our March forecast and this one.

5.28 Table 5.5 shows that the Government would continue to miss its supplementary target unless the output gap was materially wider than in our central forecast, or closed significantly quicker. The former would imply less structural borrowing, whereas the latter would suggest less cyclical borrowing.

5.29 A third potential source of departure from our central forecast is variation in the interest rates that the Government has to pay on future borrowing and some existing debt. As set out in Chapter 4 our central forecast assumes that gilt rates for future borrowing move in line with market expectations. But what if the central forecast of gilt rates were to suffer a shock? We examine the implications of a negative shock of 50 basis points, making debt cheaper, and increases of 50, 100 and 150 basis points, making debt more expensive. We assume the shock occurs in 2013-14 and does not affect any other part of the forecast, including exchange rates and shorter-term interest rates. Table 5.6 shows the level of the CACB in 2017-18 and the change in PSND between 2014-15 and 2015-16 under these variants, constructed using a ready-reckoner.

Table 5.6: Fiscal target variables under different gilt rate assumptions

Per cent of GDP	Change in gilt rate (bps)				
	-50	0	50	100	150
Cyclically-adjusted current budget balance in 2017–18	1.1	0.9	0.7	0.5	0.3
Change in public sector net debt between 2014–15 and 2015–16	0.8	1.0	1.1	1.2	1.3

5.30 Table 5.6 shows that these illustrative shocks to gilt rates have a relatively small impact on the chances of meeting the mandate and supplementary target. This is because an increase in rates only applies to new debt issuance, and the UK has a relatively long average debt maturity for conventional gilts, and because new issuance is projected to fall as borrowing declines. Therefore over a short horizon, such as our five-year forecasting period, the impact of a shock to the average nominal rate on gilts is relatively small.

5.31 Gilt rates will also affect transfers between the Exchequer and the APF as gilts are sold. If gilt rates were higher, prices would be lower and therefore capital losses greater. But as gilts are assumed to be sold from the middle of 2016, a gilt rate shock would not affect our assessment of the supplementary target through this channel and as transfers to the APF are assumed not to affect the CACB, neither would it affect our assessment of the fiscal mandate.

5.32 All else equal, a sustained shock would lower the margin against the Government meeting its fiscal mandate, and reduce yet further the likelihood of it meeting its supplementary target. However if short-term interest rates moved in line with gilt rates, there would also be a direct offsetting impact on the public

finances through an increase in interest receipts and tax on corporate and household savings. In the November 2011 *EFO* we showed that potentially this could offset around 60 per cent of the direct impact on debt interest payments, though this would depend on the precise change in interest rates at different maturities.

5.33 Our last sensitivity analysis concerns the uncertainty around our cyclical adjustment coefficients. Cyclical adjustment attempts to remove the effect of the economic cycle from forecasts of the public finances. This is done by adjusting a given fiscal aggregate, such as PSNB, for the size of the output gap in the current and previous years, using cyclical adjustment coefficients.[2] We set out our approach to cyclical adjustment in the summer working paper *Cyclically adjusting the public finances* and apply coefficients of 0.2 for the previous year's output gap, and 0.5 for the current year's gap.[3]

5.34 The coefficients are derived by analysing the past relationship between the output gap and the fiscal position. They are highly uncertain for a number of reasons:

- the output gap is not directly observable, so there is no historical 'fact' from which to estimate the coefficients;
- the number of observations on which to base coefficient estimates is limited;
- the fiscal position is affected by events that do not necessarily move in line with the cycle, such as one-off fiscal policy adjustments and movements in commodity and asset prices; and
- insofar as the current economic cycle differs from the average cycle, the relationship between the public finances and the output gap over the course of that cycle will not be captured in the coefficients.

5.35 Given these uncertainties, it is useful to consider how sensitive our central forecast is to variations in the coefficients. If the coefficient on the current year's output gap was 0.4, rather than our estimate of 0.5, the CACB would be 0.17 per cent of GDP lower in 2017-18. If the coefficient on the previous year's output gap was also 0.1 rather than 0.2, the CACB would be 0.41 per cent of GDP lower in 2017-18. Equally, higher coefficients would result in a smaller deficit or larger

[2] For example, the cyclically-adjusted current budget is calculated as: $CACB_t = CB_t - \alpha \cdot (OG_{t-1}) - \beta \cdot (OG_t)$, where *OG* is the output gap in a given fiscal year *t*, α and β are cyclical adjustment coefficients, and the current budget is expressed as a percentage of GDP.

[3] Helgadottir et al, 2012, Working Paper No. 4: *Cyclically adjusting the public finances*.

surplus on the current budget and lower net borrowing, on a cyclically-adjusted basis.

5.36 This analysis should be seen in the context of the uncertainty surrounding the size of the coefficients. The European Central Bank (ECB) assumes a coefficient of 0.65 and the OECD a lower figure of 0.45. Compared with our estimates, the lower ECB and OECD coefficients would imply reductions in the cyclically-adjusted current budget in 2017-18 of 0.22 and 0.56 per cent of GDP respectively.[4] Using these coefficients the fiscal mandate would still be met, but with less margin for error than in our central forecast.

Scenario analysis

5.37 The variants discussed above focus on a narrow set of factors and therefore only offer a partial assessment of potential uncertainty. In this section we set out the fiscal implications of two broader illustrative alternative economic scenarios, designed to test how dependent our conclusions are on key judgements that are subject to debate in the forecasting community. We stress that these scenarios are not intended to capture all possible ways in which the economy might deviate from the central forecast and we do not attempt to attach particular probabilities to their occurrence.

5.38 A key assumption in our economic forecast is that the output gap remains significantly negative at the end of the forecast horizon. If instead we were to assume the output gap closes in our forecast, without changing our assumption of the current size of the output gap, this could happen in two ways:

- a 'weaker supply' scenario, where the output gap closes earlier due to a slower rate of trend growth than our forecast; and
- a 'stronger demand' scenario where the output gap closes earlier due to stronger private investment.

Scenario one: weaker supply scenario

5.39 Although we assume that potential output growth slowed following the onset of the financial crisis, we also assume it picks up in our forecast, returning to growth rates close to its long-run average over the medium term. But what if potential output growth remains permanently lower?

[4] These estimated effects assume that the ECB and OECD coefficients apply to the current year's output gap, so the coefficient on the previous year's output gap is zero.

5.40 In this scenario we consider the implications of long-run potential output growth of 1.5 per cent rather than our assumption of 2.3 per cent. We assume this slower path is purely explained by lower potential productivity growth, but we have not tailored the scenario for any one explanation. The key assumptions and implications of this scenario are:

- actual growth rates are unchanged over the near term, so the output gap is narrower and closes faster than in our central forecast. As headline growth rates are unaffected, net borrowing is also close to our central forecast over the initial years;

- lower productivity growth implies lower average earnings, offset by higher employment as the output gap narrows. As income tax and NICs are more geared towards earnings than employment, receipts are lower. But this is outweighed by lower benefits spending, and the net consequences for borrowing are relatively small;

- a narrower output gap puts upward pressure on inflation which leads to an earlier and steeper rise in Bank rate. This slows growth in the final years of the scenario as actual output converges to the lower level of potential output;

- in later years tax receipts fall in line with this weaker path of GDP and spending growth is also higher, as it is linked to general economy inflation beyond the current Spending Review period; and

- the deficit in the final year is slightly higher than in our central forecast and would mainly be structural, so that the Government would no longer be on course to meet its fiscal mandate.

Scenario two: stronger demand scenario

5.41 The second way the output gap could close in our forecast is through stronger actual growth. In this scenario we assume higher growth comes from stronger growth in private investment. There are upside, as well as downside risks, to our forecast for private investment. The latest data suggest the corporate surplus remains large by historical standards, although it is possible that the strength of corporate assets has been overstated in the National Accounts. This suggests business investment could pick up more strongly than in our forecast if confidence improves more quickly than we expect. The key assumptions and implications of this scenario are:

- private investment growth picks up strongly from mid-2013. Aside from imports, which we adjust by the import intensity of investment, we leave other expenditure components unchanged. This means a large increase in private investment growth is needed to close the output gap by the end of the

forecast, with private investment 2 percentage points higher as a share of GDP at the end of the scenario than in our central forecast;

- higher nominal business investment reduces corporation tax payments as capital allowances rise. This effect is more than offset by the indirect effects of higher receipts through higher incomes. But overall this composition of growth leads to receipts being lower as a share of GDP relative to our central forecast;

- stronger employment growth reduces spending on benefits and tax credits. A quicker narrowing of the output gap leads to higher inflation from 2014 onwards, and a further tightening of monetary policy. Higher inflation and interest rates increase debt interest costs and inflation also increases overall spending from 2015-16, which is linked to the general inflation in the economy; and

- stronger nominal GDP growth in 2015-16 and lower borrowing result in net debt falling slightly as a share of GDP. But the composition of growth is less tax rich, and spending is higher beyond the current Spending Review period, due to higher inflation, so that the CACB improves more gradually than in our central forecast. However, it is still in surplus in 2017-18 but with less margin that in our central forecast. So under this scenario, the Government would narrowly be on course to meet both of its fiscal targets.

5.42 Table 5.7 summarises the economic assumptions we have made, as well as the fiscal consequences of these alternative scenarios. It shows that under the weaker supply scenario the fiscal mandate and the supplementary target would both be breached. Under the stronger demand scenario the fiscal mandate would be met (although with less margin for error than in the central forecast) and the supplementary target would be achieved rather than breached.

Table 5.7: Key economic and fiscal aggregates under alternative scenarios

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Central forecast						
Economic assumptions						
GDP (percentage change)	0.1	1.5	2.1	2.4	2.7	2.8
CPI inflation (Q3)	2.4	2.6	2.2	2.0	2.0	2.0
ILO unemployment (% rate)	8.0	8.2	8.2	7.9	7.5	7.0
Output gap	-3.2	-3.5	-3.3	-2.9	-2.4	-1.7
Fiscal impact (per cent of GDP)						
Public sector net borrowing	5.1	6.1	5.2	4.2	2.6	1.6
Cyclically-adjusted current budget	-3.6	-2.2	-1.4	-0.8	0.4	0.9
Public sector net debt	74.7	76.8	79.0	79.9	79.2	77.3
Weaker supply scenario						
Economic assumptions						
GDP (percentage change)	0.1	1.5	2.1	2.4	2.5	1.8
CPI inflation (Q3)	2.4	2.6	2.2	2.2	2.2	2.2
ILO unemployment (% rate)	7.9	8.0	7.7	7.2	6.5	6.2
Output gap	-3.1	-2.9	-2.2	-1.3	-0.4	0.0
Fiscal impact (per cent of GDP)						
Public sector net borrowing	5.1	6.1	5.2	4.2	2.7	2.0
Cyclically-adjusted current budget	-3.6	-2.5	-1.9	-1.8	-1.1	-0.7
Public sector net debt	74.7	76.8	78.8	79.7	79.3	78.4
Stronger demand scenario						
Economic assumptions						
GDP (percentage change)	0.1	1.9	3.0	3.1	2.9	2.5
CPI inflation (Q3)	2.4	2.7	2.5	2.4	2.4	2.3
ILO unemployment (% rate)	7.8	8.0	7.6	7.0	6.5	6.2
Output gap	-2.8	-3.0	-1.9	-1.0	-0.4	-0.1
Fiscal impact (per cent of GDP)						
Public sector net borrowing	5.1	6.0	4.7	3.6	2.0	1.1
Cyclically-adjusted current budget	-3.7	-2.4	-1.7	-1.4	-0.4	0.2
Public sector net debt	74.6	76.1	77.0	76.8	75.3	73.2

A Autumn Statement 2012 policy measures

A.1 The *Economic and fiscal outlook* incorporates the Government's costings of policy decisions announced in the Autumn Statement 2012 or since the March 2012 Budget. The OBR has certified all of the costings of tax and AME measures as being reasonable central estimates. This Annex reproduces HM Treasury's table of policy decisions. Chapter 4 of this report and the OBR's annex in the Treasury's Autumn Statement 2012 policy costings document sets out further details.

Table A.1: Autumn Statement 2012 policy decisions

			£million					
		Head	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Departmental Spending and Future Consolidation								
1	Reduction in departmental spending in 2013-14 and 2014-15	Spend	0	+980	+2,400	*+2,400*	*+2,400*	*+2,400*
2	Special Reserve	Spend	+650	0	0	*0*	*0*	*0*
3	Official Development Assistance: adjusting to meet 0.7 per cent GNI target	Spend	+215	+250	+430	*+515*	*+615*	*+870*
4	Council tax: freeze	Spend	0	-270	-270	*0*	*0*	*0*
5	Fiscal consolidation in 2017-18	Spend	0	0	0	*0*	*0*	*+4,635*
6	Capital spending package	Spend	-70	-2,340	-3,045	*-*	*-*	*-*
Growth and Enterprise								
7	4G spectrum sale	Spend	+3,500	0	0	*0*	*0*	*0*
8	Corporation tax: decrease main rate to 21% from 2014-15	Tax	0	-10	-415	-785	-875	-875
9	Annual investment allowance: 2 year temporary increase to £250,000	Tax	-305	-670	-910	-400	+300	+235
10	Business rates: empty property relief	Tax	0	-10	-55	-50	-30	-5
11	Business rates: small business relief	Tax	0	-475	+50	0	0	0
12	Cash basis for small businesses	Tax	0	0	-165	+25	-5	*
13	North Sea oil and gas	Tax	-10	-60	-120	-175	-145	-75
14	Capital gains tax relief: employee shareholder status	Tax	0	0	0	*	-20	-80
15	High end television: tax relief	Spend	0	-5	-25	*-45*	*-60*	*-70*
Personal Allowance								
16	Personal allowance: increase by £235 to £9,440 in 2013-14, with equal gains to higher rate taxpayers	Tax	0	-1,000	-1,110	-1,110	-660	-580
Motoring								
17	Fuel duty: cancel January 2013 increase deferred from 2012 and delay future increases to September	Tax	-890	-1,640	-1,625	-1,715	-1,420	-1,465
18	Funding from underspends in 2012-13 through reduced reserve	Spend	+555	0	0	*0*	*0*	*0*
1 per cent Uprating								
19	Working age discretionary benefits and tax credits: increase by 1% for three years from 2013-14	Spend	0	+505	+1,430	*+2,280*	*+2,445*	*+2,555*
20	Child Benefit: increase by 1% for two years from 2014-15	Spend	0	0	+175	*+285*	*+310*	*+330*
21	Housing Benefit: increase Local Housing Allowance by 1% for two years from 2014-15 with provision for high rent areas	Spend	0	0	+105	*+225*	*+245*	*+260*
22	Universal credit: finalise disregards and increase by 1% for two years from 2014-15	Spend	0	0	+170	*+640*	*+1,000*	*+1,235*
23	Higher rate threshold: index by 1% for two years from 2014-15	Tax	0	0	+295	+875	+1,105	+1,085
24	Inheritance tax: increase nil rate threshold by 1% in 2015-16	Tax	0	0	0	+15	+30	+35
25	Capital gains tax: increase annual exempt amount by 1% for two years from 2014-15	Tax	0	0	0	+5	+5	+5

Other welfare								
26	Support for Mortgage Interest: extension	Spend	-10	-95	-90	*-20*	*0*	*0*
27	New enterprise allowance: day one access	Spend	+5	-10	0	*0*	*0*	*0*
28	Tax Credits: error and fraud	Spend	0	0	+315	*+185*	*+85*	*
29	Tax Credits: recovering debt	Spend	+5	+80	+205	*+125*	*+105*	*+90*
Avoidance								
30	Tax repatriation from Switzerland	Tax	+330	+3,120	+610	+920	+180	+150
31	HMRC: anti avoidance	Tax	+15	+200	+95	+330	+385	+355
32	HMRC investment	Spend	-10	-80	-25	*0*	*0*	*0*
Other tax								
33	Pensions: restrict tax relief	Tax	+50	+200	+300	+600	+1,000	+1,125
34	Bank Levy	Tax	0	+515	+545	+540	+545	+545
35	VAT: amendments	Tax	-35	-65	-70	-70	-80	-80
36	Carbon reduction commitment	Tax	-25	-25	-25	0	+30	+65
37	Gift Aid small donation scheme: amendments	Spend	0	-10	-15	*-10*	*-20*	*-30*
38	Amendments to cap on income tax reliefs	Tax	0	0	-80	-60	-65	-65
	TOTAL POLICY DECISIONS		**+3,970**	**-910**	**-920**	**-905**	**+295**	**+4,940**
Total spending policy decisions			+4,840	-1,090	+1,465	0	0	+4,635
	of which current spending	Spend	+1,360	+1,170	+4,415	*+6,435*	*+7,100*	*+7,705*
	of which welfare[3]	Spend	0	+430	+2,165	*+3,635*	*+4,175*	*+4,500*
	of which changes to capital spending[4]	Spend	+3,480	-2,260	-2,950	-	-	-
Total tax policy decisions		Tax	-870	+180	-2,385	-905	+295	+305

[*] *Negligible.*

- Capital spending measures do not affect borrowing in 2015-16, 2016-17 and 2017-18 as they fall within the Total Managed Expenditure assumption.

[1] *Costings reflect the OBR's latest economic and fiscal determinants.*

[2] *Italicised spending numbers do not affect borrowing in 2015-16, 2016-17 and 2017-18 as they fall within the Total Managed Expenditure assumption.*

[3] *There is a tax element of the welfare package that is not included in these numbers, for example on child benefit and tax credits.*

[4] *4G spectrum sale will be a capital receipt*

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ISBN 978-0-10-184812-1
9 780101 848121